#### ESTIMATING THE EFFECTS OF POLITICAL PRESSURE ON THE FED: A NARRATIVE APPROACH WITH NEW DATA

Thomas Drechsel

University of Maryland, NBER, CEPR

November 2024

## MOTIVATION

Renewed attention to political dimension of U.S. monetary policy

Trump's pressure to ease affected markets (Bianchi et al., 2023)

## MOTIVATION

Renewed attention to political dimension of U.S. monetary policy

- Trump's pressure to ease affected markets (Bianchi et al., 2023)
- Empirical research:
  - Cross-country, e.g. Alesina and Summers (1993)
  - Estimated regime-switching models, e.g. Bianchi and Ilut (2017)

# MOTIVATION

Renewed attention to political dimension of U.S. monetary policy

- Trump's pressure to ease affected markets (Bianchi et al., 2023)
- Empirical research:
  - Cross-country, e.g. Alesina and Summers (1993)
  - Estimated regime-switching models, e.g. Bianchi and Ilut (2017)

# ► This paper:

- Identifies shocks to political pressure on the Fed over time
- Quantifies effects on inflation and other macro variables

### THIS PAPER

#### Newly collected archival data

- ▶ Personal interactions between U.S. Presidents and Fed Officials 1933–2016
- Amount, length, type of interactions  $\rightarrow$  construct long time series

#### Narrative identification

- Exploit variation from Nixon and Johnson administrations
- ▶ SVAR with narrative sign restrictions → "political pressure shocks"

When the President pressures the Fed to ease monetary policy ....

- 1. Inflation and inflation expectations increase gradually and strongly
- 2. Little to no effect on other macro variables ( $\approx$  'inflation bias')
- 3. Transmission is different from typical monetary policy expansion

When the President pressures the Fed to ease monetary policy ....

- 1. Inflation and inflation expectations increase gradually and strongly
- 2. Little to no effect on other macro variables ( $\approx$  'inflation bias')
- 3. Transmission is different from typical monetary policy expansion

50% as much pressure as Nixon, for six months, raises U.S. price level by 8%

### DATA CONSTRUCTION AND DESCRIPTIVE EVIDENCE

- ▶ Daily calendars of U.S. Presidents provided by *Presidential Libraries*
- Available online or on site quality varies
- ▶ With RAs, collect all interactions of Presidents with Fed Officials 1933-2016

# EXAMPLE OF PRESIDENTIAL SCHEDULE

| HEWHITE                        | CUSE               | THE DAILY DIARY OF PRESIDENT JIMMY CARTER  |   |  |
|--------------------------------|--------------------|--|---|--|
| OCATION<br>HE WHIT<br>ASHINGTO | E HOUSE<br>N, D.C. |  | DATE: MOLDAY, Yr.:<br>JULY 19, 1980<br>TIME DAY<br>5:30 a.m. SATURDAY |  |
| TIS<br>From                    | tE<br>To           | ACTIMITY   |   |  |
| 5:30                           |                    | R The President received a wake up call from signal board operator.  | the White House   |  |
| 6:06                           |                    | The President went to the Oval Office.   |   |  |
| 8:00                           | 8:01               | P The President talked with the First Lady.  |   |  |
| 8:08                           |                    | The President returned to the second floor   | Residence.  |  |
| 8:15                           |                    | The President and the First Lady had breakfa   | st.   |  |
| 8:31                           |                    | The President returned to the Oval Office.   |   |  |
| 9:10                           | 9112               | The President participated in a photo opport<br>Mes, Carol Anderson, Plains, Georg<br>3111 Anderson, daughter<br>His. Tim (Neggie) Lawson<br>Mes. Tim (Neggie) Lawson<br>Menil Lawson, daughter<br>Keeli Lawson, daughter<br>Lorri Lawson, daughter  | tunity with:<br>a   |  |
| 9:12                           |                    | The President went to the South Grounds.   |   |  |
| 9:13                           | 9:20               | The.President motored from the South Grounds<br>Hotel.   | to the Shoreham   |  |
| 9120                           |                    | The President was greated by:<br>Clifford L. Alexander, Secretary of<br>Robert McIntosh, General Manager, S  |   |  |
|                                |                    | The President, escorted by Secretary Alexand<br>VIP Room.  | er, went to the   |  |
| 9:22                           | 9:29               | The Fresidant net with:<br>Bercetary Alexander<br>Mrs. Clifford L. (Adale) Alexander<br>Gen. Bhard C. Myur, Chief of Stal<br>Mrs. Bhard C. (Zurol) Heyer<br>LL Col., Metr Uban, J.J. Amy and<br>Mrs. Nett, Janniel Uthan<br>Jennier Uthan, daughter<br>Rris Johnson, daughter<br>No. Sphile Rockenil, governes |   |  |
| 9:29                           | 9:49               | The President participated in a ceremony to<br>of Honor to Lt. Col. Urban.<br>Nembers of the press   | present the Medal   |  |

| LOCATION<br>SHOREHAN<br>MASHINGTO          | HOTEL                                     |   | DATE:Max 2007.11<br>JULY 19, 1980<br>TIME UAT<br>9:29 a.m. SATURDA  |  |  |
|--|---|---|---|--|--|
| TIME 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |   | - | ACTIVITY  |  |  |
|  |   |   | The President went to the offstage announcement area.   |  |  |
| 9:30                                       |   |   | The President went to the podium inside the Regency Ballroom.   |  |  |
| 9:32                                       | 9:38                                      |   | The President addressed approximately 1,200 guests attending the presentation.  |  |  |
| 9:44                                       |   |   | The President presented the Medal of Honor to Lt. Col. Urban.   |  |  |
|  | 1   |   | The President returned to his motorcade. He was escorted by<br>Secretary Alexander.   |  |  |
| 9149                                       | 9153                                      |   | The President motored from the Shoreham Hotel to the South<br>Grounds of the White House.   |  |  |
| 9:54                                       |   |   | The President returned to the Oval Office.  |  |  |
| 10:15                                      | 10:35                                     |   | The President met with Chairman of the Board of Governors of<br>the Federal Reserve System, Paul A, Volcker,  |  |  |
| 10:37                                      | 10:38                                     | р | The Fresident talked with the First Lady.   |  |  |
| 10:40                                      |   | Р | The President telephoned his daughter, Javy Carter. The call was not completed.   |  |  |
| 10:44                                      |   |   | The President went to the doctor's office.  |  |  |
| 10:52                                      | 10:57                                     | n | The President talked with Amy Carter.   |  |  |
| 10:59                                      |   |   | The Fresident returned to the Oval Office. Enroute, be<br>greated:<br>Hichard 1. Queen, released J.B. Rostage<br>Barold Queen, fabru, resident of Lincolaville Beach,<br>Naine<br>Mrs. Barold (Jearne) Queen<br>Alexander Queen, brother<br>Warren N. Christopher, Døvid Scretary of State. |  |  |
| 11:02                                      |   |   | The Presidential party went to the Oval Office.   |  |  |
| 11:02<br>\$1:02<br>11:02<br>11:02<br>11:13 | 11:50<br>11:50<br>11:50<br>11:50<br>11:50 |   | The Freeident set with:<br>Ner, and Mrs. Harold Queen<br>Ner, Alazander Queen<br>Deputy Secretary Christopher<br>The First Lady   |  |  |

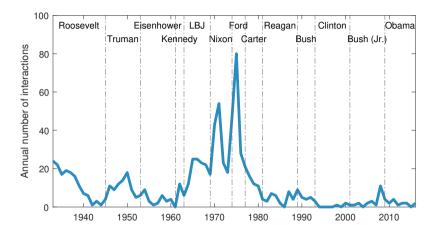
# EXAMPLE OF PRESIDENTIAL SCHEDULE (ZOOMED IN)

| THE WHITE HOUSE THE DAILY DIARY OF PRESIDENT JIMMY CARTER |  |                   |   |  |  |  |
|---|--|-------------------|---|--|--|--|
| LOCATION  |  |                   | DATE (Mo., Day, Yr.)  |  |  |  |
| SHORFHAL  | M HOTEL                                      |                   | JULY 19, 1980   |  |  |  |
|   | ON, D.C.                                     |                   | TIME DAY  |  |  |  |
| 9:29 a.m. SATU  |  |                   |   |  |  |  |
|   |  | PHONE             |   |  |  |  |
| TIME 200  |  | PPlaced<br>RRec'd | ACTIVITY  |  |  |  |
| From  | To   | 2 4               |   |  |  |  |
|   |  |                   | The President went to the offstage announcement area.                                     |  |  |  |
| 9:30  |  |                   | The President went to the podium inside the Regency Ballroom.                             |  |  |  |
| 9 <b>:</b> 32   | 9:38   |                   | The President addressed approximately 1,200 guests attending the presentation.            |  |  |  |
| 9:44  |  |                   | The President presented the Medal of Honor to Lt. Col. Urban.                             |  |  |  |
|   | 1  |                   | The President returned to his motorcade. He was escorted by Secretary Alexander.          |  |  |  |
| 9:49  | 9:53   |                   | The President motored from the Shoreham Hotel to the South<br>Grounds of the White House. |  |  |  |
| 9:54  |  |                   | The President returned to the Oval Office.  |  |  |  |
| 10:15   | 10:35  |                   | The President met with Chairman of the Board of Governors of                              |  |  |  |
|   | the Federal Reserve System, Paul A. Volcker. |                   |   |  |  |  |
| 10:37   | 10:38  | Р                 | The President talked with the First Lady.   |  |  |  |
| 10:40   |  | P                 | The President telephoned his daughter, Amy Carter. The call was not completed.            |  |  |  |
| 10:44   |  |                   | The President went to the doctor's office.  |  |  |  |

### BASIC STATISTICS

- 857 personal interactions from 1933 to 2016
- Average length 53 minutes
- ▶ 92% with Fed chair, 8% with other Fed Officials
- ▶ 36% are 1-on-1 interactions
- ▶ 11% are on Saturdays or Sundays
- ▶ 16% happen in social settings, e.g. dinner
- Enormous variation through time...

## PRESIDENT-FED INTERACTION COUNT THROUGH TIME



Clinton: 6 interactions in 8 years; Nixon: 160 interactions in 5.5 years
 Second half of 1971: Nixon speaks with Burns on average every 5 days

## IDENTIFICATION STRATEGY

# NARRATIVE IDENTIFICATION

Challenge: personal interactions do not necessarily capture political pressure

Solution: find increases in President-Fed interactions that ...

... took place for political reasons only, i.e. is plausibly exogenous

... arguably impacted monetary policy

Exploit two historical episodes in SVAR

- Main specification: Nixon's pressure on Burns in 1971
- Additional variation: LBJ's pressure on Martin in 1967

# NIXON'S APPOINTMENT OF ARTHUR BURNS

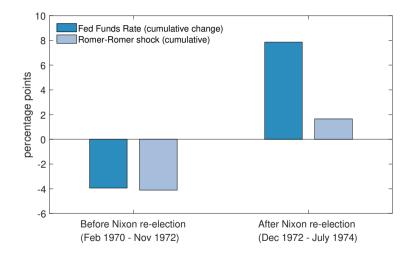


Nixon during Arthur Burns' swearing-in ceremony in 1970:
 "I respect his independence. However I hope that – *independently* – he will conclude that my views are the ones that should be followed."

# SOME QUOTES FROM ARTHUR BURNS' DIARY

- "I am convinced the President will do anything to be reelected." (March 1971)
- "I watched his face, as he spoke, with a feeling of dismay; for his features became twisted and what I saw was uncontrolled cruelty." (July 1971)
- "I got a stern letter from the President urging me start expanding the money supply and predicting disaster if this didn't happen." (Oct 1971)
- "President at this meeting again expressed his concern about the money supply. I reminded him that I was looking after that properly." (Nov 1971)

# NARRATIVE IDENTIFICATION: CORROBORATING EVIDENCE



## DEFINITION OF POLITICAL PRESSURE SHOCK

▶ Long quarterly data (Ramey and Zubairy, 2018) + President-Fed interactions

▶ Narrative sign restrictions (Antolin-Diaz and Rubio-Ramirez, 2018)

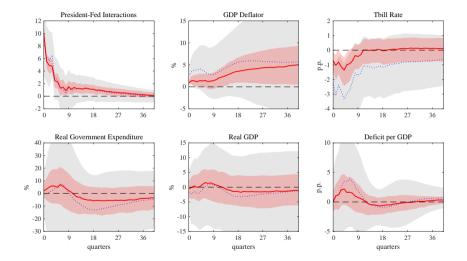
| Variable                        | Traditional sign restrictions | Narrative restrictions |
|---------------------------------|-------------------------------|------------------------|
| President-Fed interaction count | +                             | 1971:Q3, 1971:Q4       |
| Log GDP deflator                | +                             |                        |
| 3-month T-bill rate             | -                             |                        |
| Log real GDP                    |                               |                        |
| Log government expenditures     |                               |                        |
| Nom. Deficit / Nom. GDP         |                               |                        |

SVAR different from event study: can 'detect' shock anywhere in sample

pp vs. monetary shocks

# RESULTS

#### IMPULSE RESPONSE FUNCTIONS OTHER SAMPLES OTHER SHOCKS

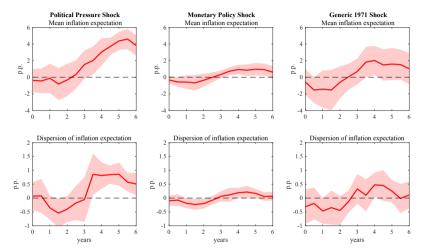


### HISTORICAL VARIANCE DECOMPOSITION (SHOCK SERIES)

10 8 6 Δ -2 Contribution of PP shock GDP Deflator, YoY log diff, % Jan-36 Jan-46 Jan-56 Jan-66 Jan-76 Jan-86 Jan-06 Jan-16 Jan-96

Evidence of political pressure shock affecting 1970s inflation, less elsewhere

## EFFECTS ON INFLATION EXPECTATIONS



Political pressure shock raises inflation expectations and disagreement

#### EFFECTS ON INFLATION EXPECTATIONS

#### INSIDE THE MARKET: Wall Street Fears Whiplash From Nixon-Burns Collision

Schonberger, Ernest A

Los Angeles Times (1923-1995): Feb 28, 1971: ProQuest Historical Newspapers: Los Angeles Times ng. 11

# INSIDE THE MARKET Wall Street Fears Whiplash From Nixon-Burns Collision

INVESTORS are suddenly casting a watchful eye for signs of just how serious a confrontation might be claiming the money supply would supply should be expanded more raserve Board and economic officials within the Nixon Administration. The issue: Just how rapidly should

the economy be pumped up?

Some expect a head-to-head fight. Others shrug it off.

Most agree there's little likelihood of an immediate blow to the stock market.

Fed Chairman Arthur F. Burns brought it into the open last week by refusing to pledge further expansion of the money supply in support. of President Nixon's goal of rapid economic growth for 1971. The Fed. although it sometimes acts hand-inglove with a presidential administration, is a completely independent, semigovernmental agency. Its policies determine the supply of money and credit

Administration officials have been

browing between the Federal Re- have to grow 6 to 9% this year to pidly. meet their economic target.

In testimony before the Joint Economic Committee of Congress Burns said rates above 5 or 6% have historically "intensified inflationary pressures" if continued "for a long period of time." He labeled the Administration's goal of a \$1.065 trillion Gross National Product for 1971 "optimistic."

"You would have to term it (Burns' testimony) something of a confrontation," says Richard B. Balley, a trustee for the \$2 billion Massachusetts Investors Trust mutual fund That would seem to be the case

Both John B. Connally, secretary of the Treasury, and Herbert Stein, 4 member of the President's Council of Economic Advisers, have already reacted to Burns' testimony contentiously. They insist that the money

#### BY ERNEST A. SCHONBERGER. Times Staff Writer

WALL STREETERS have been saying for a year that the Nixon Administration would pull all economic stops early enough to do some good for the 1972 elections. And the same observers have been saying that this is not in step with the generally conservative Fed whose members enjoy long term appointments and don't have to seek election.

Claude Rosenberg, president of Rosenberg Capital Management Co. of San Francisco and author of the book, "Stock Market Primer," says future developments between Burns and the Administration will be "very much a key to the stock market." He thinks a confrontation, although not a monumental one, is browing, Underlying this will prohably be the Administration's fear that unemployment won't come down, says the money manager.

Rosenberg notes that "business can improve on the order of 5 or 10%-without very much increase in employment." And the corollary to that would be little help for the unemployed.

For now, Rosenberg isn't letting the bassle alter his positive attitude toward the stock market and the \$60 million he manages in it.

BUT IT'S HIS feeling that if and when the Administration succeeds in gotting business rolling-"let's say in the fall"-the Fed will counteract by hitting the brakes on the money supply.

At that, juncture, investors may have to be quick on the trigger and move at least partly out of stocks and into cash, he feels.

William G. Wagner of Janus Management Co. of Los Angeles is less concerned about the ramifications of Burne' statements.

"I don't think there's any significant conflict," he says. "It's not important if they're going to push up the money supply greatly (5 or 6%) or very greatly (more than 6%). Who cares-so long as it's going up a large amount."

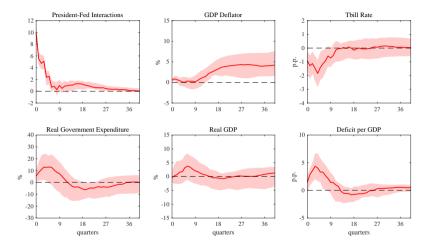
At any rate, that influences his stock market thinking for much of 1971 and into 1972. He recognizes that any money management errors are apt to be on the side of overexpansion. However, "after the election, we've got to watch out," he ROVE

Joseph F. Dorsey, president of Argus Research Co. in New York. thinks there's "no big dispute." As he sees it, the Fed has been working on conservative projections-"don't forget that the money supply grew very slowly in January." Therefore, the Fed has leeway to move more in the direction of the Administration's goals and still stay within the annual rate of 5 or 6%, he says.

Please Turn to Page 2, Col. 3

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# IRFS TO POL. PRESSURE SHOCK IDENTIFIED FROM NIXON + LBJ



Similar inflation response, tighter posterior bands

# CONCLUSION

### CONCLUSION

 $\blacktriangleright$  Novel data and narrative identification  $\rightarrow$  political pressure shocks

### Quantitative results

▶ President acts 50% as bad as Nixon for 6 months  $\Rightarrow$  price level rises by 8%

Benefits of central bank independence often highlighted using cross-country data; I provide supporting evidence for the US through time

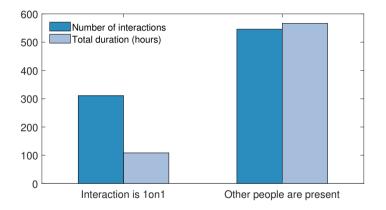
▶ I make the new data and estimated shocks available on my website

# REFERENCES I

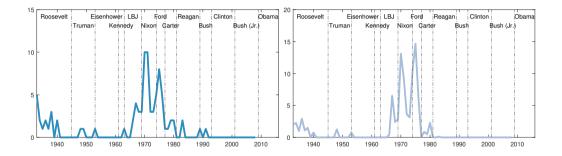
- ABRAMS, B. A. (2006): "How richard nixon pressured arthur burns: Evidence from the nixon tapes," Journal of Economic Perspectives, 20, 177–188.
- ALESINA, A. AND L. SUMMERS (1993): "Central bank independence and macroeconomic performance: some comparative evidence," Journal of Money, credit and Banking, 25, 151–162.
- ANTOLIN-DIAZ, J. AND J. F. RUBIO-RAMIREZ (2018): "Narrative Sign Restrictions for SVARs," American Economic Review, 108, 2802–29.
- BIANCHI, F., R. GOMEZ-CRAM, T. KIND, AND H. KUNG (2023): "Threats to central bank independence: High-frequency identification with Twitter," *Journal of Monetary Economics*.
- BIANCHI, F. AND C. ILUT (2017): "Monetary/fiscal policy mix and agents' beliefs," *Review of economic Dynamics*, 26, 113–139.
- DELONG, J. B. (1997): "America's peacetime inflation: the 1970s," in *Reducing inflation: Motivation and strategy*, University of Chicago Press, 247–280.
- HETZEL, R. L. (1998): "Arthur Burns and inflation," FRB Richmond Economic Quarterly, 84, 21-44.
- MELTZER, A. H. (2009): "A History of the Federal Reserve, Volume 2, Book 2, 1970-1986," Chicago/London.
- RAMEY, V. A. AND S. ZUBAIRY (2018): "Government spending multipliers in good times and in bad: evidence from US historical data," *Journal of political economy*, 126, 850–901.
- ROMER, C. D. AND D. H. ROMER (2004): "Choosing the Federal Reserve Chair: Lessons from History," Journal of Economic Perspectives, 18, 129–162.

### APPENDIX SLIDES

# SUMMARY STATS: 10N1 VS OTHER

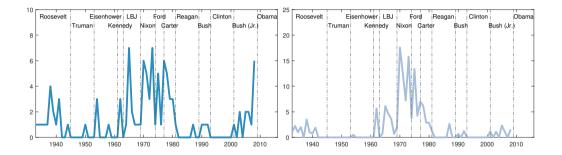


# WEEKEND INTERACTIONS: COUNT AND LENGTH (IN H)



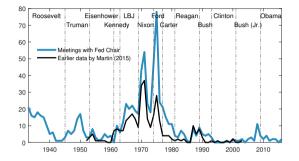
back

# SOCIAL INTERACTIONS: COUNT AND LENGTH (IN H)



back

# COMPARISON WITH MARTIN (2015 EER) (Back



- Cover longer time period and calendars that are only physically available (Bush)
- Include wider set of Fed Officials
- Collect interaction characteristics: length, social nature, weekday, etc.
- Going to higher than annual frequency
- Most importantly, use formally for identification

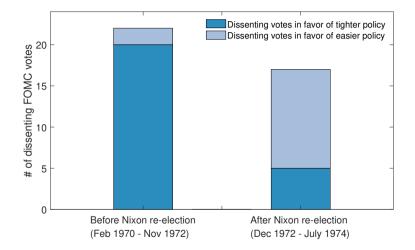
# MORE INFORMATION ABOUT BURNS' DIARY (BACK

- The diary only became public in 2008
- Entries cover meaningful interactions and/or when Burns was worried or angry
- For example, large gap in entries before November 1970; it is a good guess that pressures start around there
- Burns himself writes in 1973 that "August 15, 1971 was a definite and decisive turning point in the President's state of mind."
- Also, there is a big break between February and September 1972
- Burns stopped writing the diary altogether after Nixon resigned

# MORE QUOTES FROM BURNS' DIARY BACK

- "He was still the emperor, and I should therefore toe the mark." (July 1971)
- "There was little room for any doubt (...) that he was governed mainly, if not entirely, by a political motive; (...) that the kind of changes we were discussing (...) were essential for the campaign of 1972" (Aug 1971)
- "President called and asked me to come over within an hour. Hastily rearranged my schedule and spent an hour and quarter with him." (Sep 1971)
- "What a dangerous game RN is playing" (Nov 1971)
- "Clearly he wants power (...) but I don't think he has any positive idea at all as to what to do with this power." (Sep 1972)

# NARRATIVE IDENTIFICATION: CORROBORATING EVIDENCE



#### BURNS AND NIXON ACTIVELY DISCUSSED FED PERSONNEL

- "Some talk followed about the inadequacies of Hayes and Brimmer. And the President indicated he would do what he could to rid me of Brimmer." (Jan 1972)
  - Alfred Hayes: NY Fed President. Andrew Brimmer: Member of Federal Reserve Board.
- "We talked about personnel problem at Fed. President knew that Rogers would not have Brimmer for U.N. We talked about an ambassadorship; President thought that Sweden – preferably Austria – would be possibilities. I expressed strong doubt about Brimmer accepting an African post." (Feb 1972)

back

## DIFFERENT VIEWS ON WHETHER BURNS GAVE IN TO PRESSURE

Accounts that agree with the view I portray here:

Abrams (2006), Meltzer (2009)

Different, at at least more nuanced, views:

- ▶ DeLong (1997), Hetzel (1998), Romer and Romer (2004)
- Main argument is that Burns had a "nonmonetary view of inflation"
- These accounts were provided before Burns' diary was made public in 2008
- One has to acknowledge: 1970's *stagflation* was a pretty new challenge

#### back

## DIFFERENT VIEWS ON WHETHER BURNS GAVE IN TO PRESSURE

- FOMC voting behavior at least hard to reconcile with the "nonmonetary" view being the standard view of the time
- Romer-Romer easing shock: policy easing was nonsystematic!
- Burns' diary makes clear there was a multidimensional discussion between Burns and Nixon, touching on fiscal policy, restructuring the intl. monetary system, etc.
  - Burns cared deeply about some of those issues
  - Conceivable that increase in monetary supply was part of a "give and take"
- Even if Burns did not cave, expectations of economic agents could have been changed by Nixon's behavior to the degree that it was publicly observable
  - Burns' diary makes clear that Press was well aware of the pressures (see next slide)
  - See also Bianchi, Gomez-Cram, Kind, and Kung (2023)

#### POLITICAL PRESSURE VS. MONETARY POLICY SHOCKS

Assume one period;  $\pi$ : inflation, *i*: interest rates, *x*: President- Fed interactions

$$\pi = \phi_{\pi i}i + \phi_{\pi x}x + \varepsilon^{\pi}$$

$$i = \phi_{i\pi}\pi + \phi_{ix}x + \varepsilon^{i}$$

$$x = \phi_{x\pi}\pi + \phi_{xi}i + \varepsilon^{x}$$

► Rewrite second equation: 
$$i = \frac{\phi_{i\pi} + \phi_{ix}\phi_{x\pi}}{1 - \phi_{ix}\phi_{xi}}\pi + \frac{\phi_{ix}\varepsilon^x + \varepsilon^i}{1 - \phi_{ix}\phi_{xi}}$$

• "Romer-Romer": regress i on  $\pi$  and get residual  $\xi^m = \frac{\phi_{ix}\varepsilon^x + \varepsilon^i}{1 - \phi_{ix}\phi_{xi}}$ 

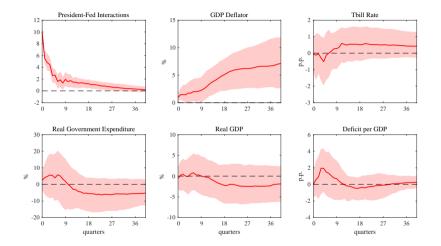
- $\blacktriangleright$  If President has no effect on Fed, then  $\phi_{ix}=0$  and  $\xi^m=\varepsilon^i$
- Goal is to separately uncover  $\varepsilon^x$  with data on x and appropriate restrictions
- Transmission is different from  $\varepsilon^i$ , in particular if  $\phi_{\pi x} \neq 0$

# PUBLIC KNOWLEDGE OF NIXON'S PRESSURE

Some quotes from Burns' diary about the public's perception

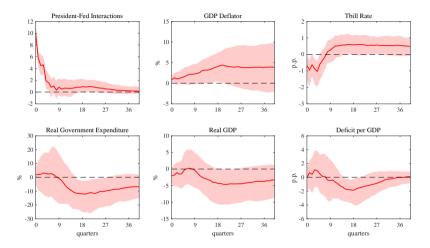
- "The confrontation reported or predicted by the Press did not come off."
- "(…) the White House children ought to stop the dangerous game of feeding gossip and fabrication to the Press."
- "Recently, a journalist came to see me and told me that some White House operatives (specifically, Haldeman and Shultz) had their bayonets out for me."

# IRFS OVER 1933-2016 SAMPLE, 'LIGHT' RESTRICTIONS CHARCE



Stronger effect when interest rate unrestricted  $\Rightarrow$  price level 7% higher after 10 years

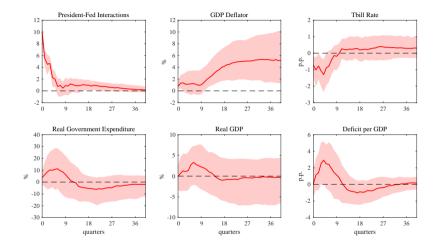
## IRFS OVER 1933-1987 SAMPLE BACK



▶ In pre-Greenspan sample: negative effect on activity, government spending and deficit

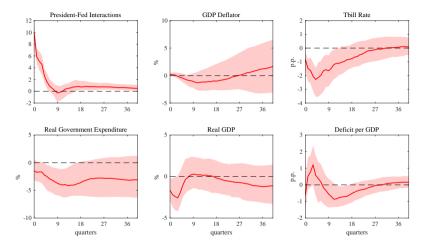
Political pressure not "successful"? popularity

## IRFS OVER 1933-2008 SAMPLE BACK



Stopping before 2008 gives similar to stopping in 2016

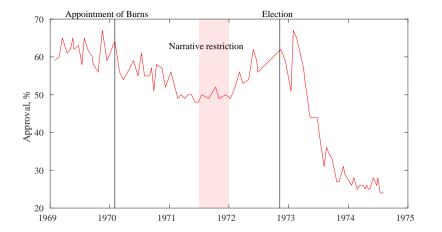
## IRFS OVER 1952-2016 SAMPLE BACK



Starting after 1952 gives different results

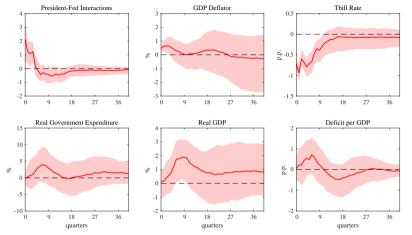
> Variation from before the Treasury-Fed accord appears to be important for the results

# NIXON'S POPULARITY BACK



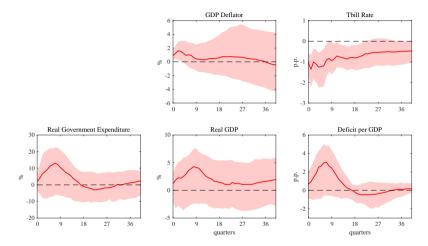
► Source: Gallup Polls

# IRFS TO 'STANDARD' MONETARY POLICY SHOCK 1933-1987 (BACK)



- ▶ In pre-Greenspan sample, monetary easing increases real activity
- Opposite of political pressure shock in same sample
- Confirms that the transmission of the two shocks is very different

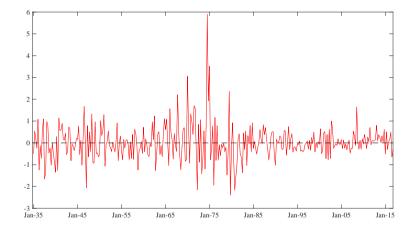
# IRFS TO GENERIC 1971 INFLATIONARY SHOCK (BACK)



Effect on price level smaller and much less persistent (for roughly similar rate reduction)

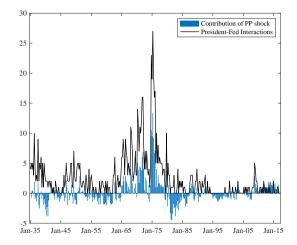
Highlights that personal interaction data key to my results

## ESTIMATED SHOCKS OVER 1933-2016 SAMPLE

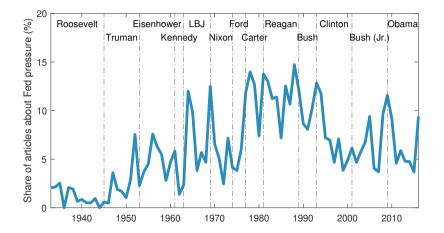


Huge spike in the 1970's, much less volatile after the mid-1980's

#### HISTORICAL VARIANCE DECOMPOSITION: INTERACTION VARIABLE



back



Systematic search of NY Times, Wash Post, WSJ