

Discussion of Stavrakeva and Tang,  
“The Dollar During the Great Recession:  
US Monetary Policy Signaling and the Flight to Safety”

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CEBRA IFM Conference  
Sveriges Riksbank (online)  
October 1, 2020

# Summary of Paper

- Empirical fact: puzzling exchange rate behavior from 2008:Q4 – 2012:Q2
- Signaling (“Fed Information Effect”) model explains the empirical puzzle

## Preview of My Comments:

- Question the empirical fact:
  - Only present in low-frequency regressions
  - “Great Recession” sample is somewhat arbitrary
- Provide an alternate explanation:
  - “Fed Response to News” channel (Bauer and Swanson, 2020)

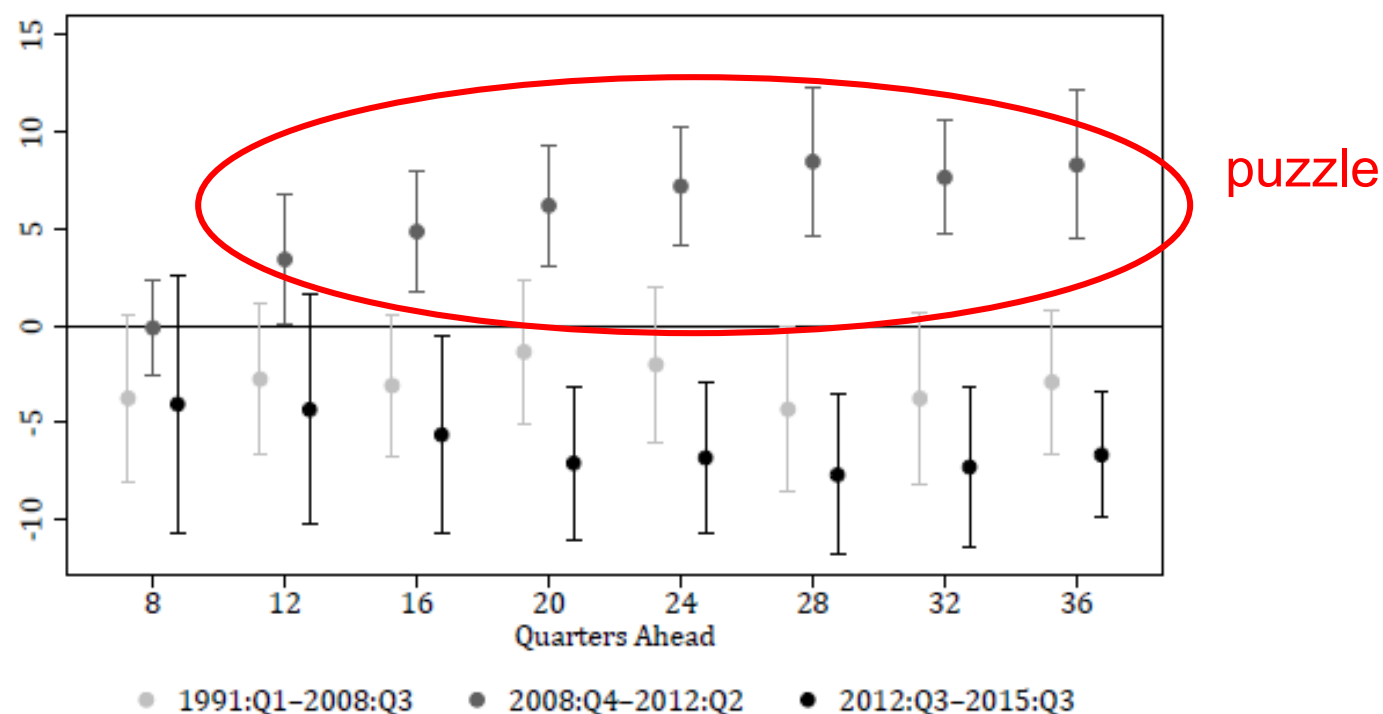
# Comment #1: Empirical Fact Only Present at Low Frequency

S-T regression specification is for **quarterly** exchange rate changes:

$$\Delta s_{t+1} = \alpha_n^s + \beta_n^{\Delta s_{t+1}} \Delta \tilde{f}_{t+1}^n + error_{t+1},$$

results:

Figure 1: Panel Response of Exchange Rate Changes to US Monetary Policy Surprises for All Currencies (2SLS)



# Comment #1: Empirical Fact Only Present at Low Frequency

## *High-frequency* regression results from Swanson (2020):

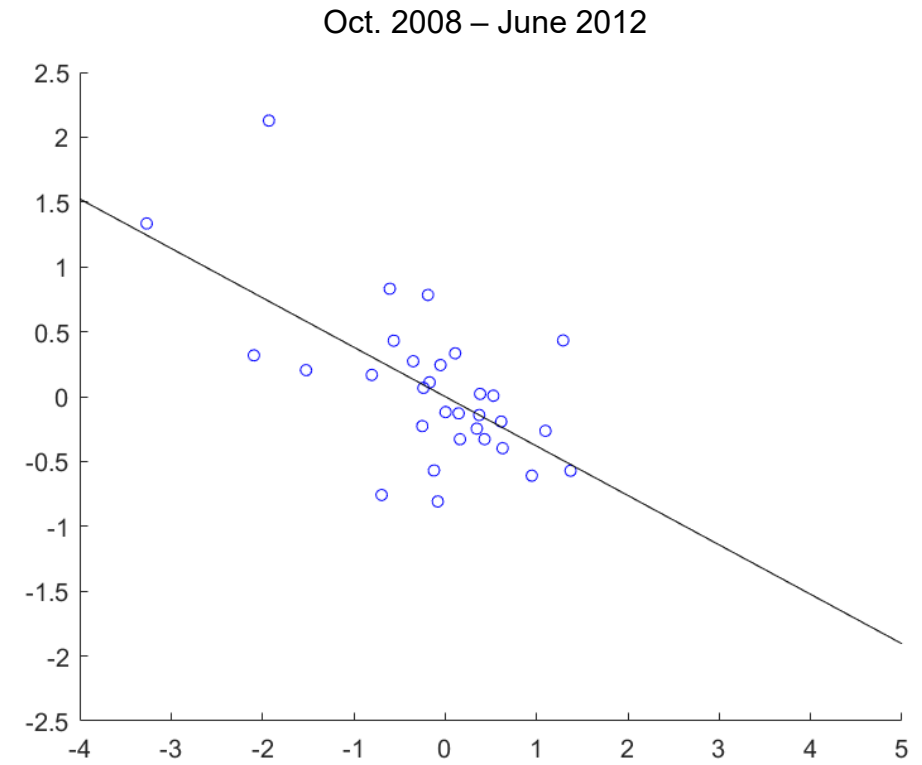
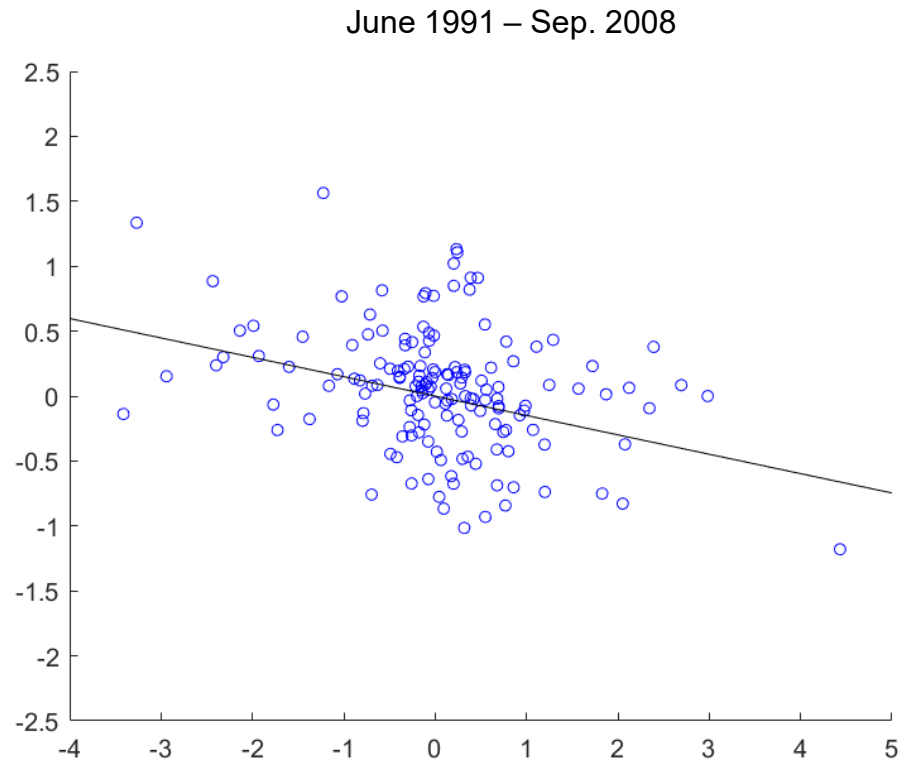
TABLE 5: ESTIMATED EFFECTS OF CHANGES IN THE FEDERAL FUNDS RATE, FORWARD GUIDANCE, AND LSAPs ON STOCK PRICES AND EXCHANGE RATES

	S&P500	\$/euro	\$/yen
(B) <b>pre-ZLB sample</b> , Jul. 1991–Dec. 2008 (157 observations)			
change in federal funds rate	−0.39***	−0.11***	−0.14***
(std. err.)	(.042)	(.038)	(.039)
[ <i>t</i> -stat.]	[−9.29]	[−2.95]	[−3.58]
change in forward guidance	−0.09**	−0.15***	−0.13***
(std. err.)	(.044)	(.052)	(.047)
[ <i>t</i> -stat.]	[−2.13]	[−2.92]	[−2.68]
(C) <b>ZLB sample</b> , Jan. 2009–Nov. 2015 (55 observations)			
change in forward guidance	−0.25**	−0.36***	−0.24***
(std. err.)	(.101)	(.103)	(.075)
[ <i>t</i> -stat.]	[−2.50]	[−3.45]	[−3.18]
change in LSAPs	0.10	0.19***	0.28***
(std. err.)	(.080)	(.065)	(.071)
[ <i>t</i> -stat.]	[1.27]	[2.96]	[3.87]
(D) <b>post-ZLB sample</b> , Dec. 2015–Jun. 2019 (29 observations)			
change in federal funds rate	−0.37	−0.46**	−0.33**
(std. err.)	(.261)	(.197)	(.154)
[ <i>t</i> -stat.]	[−1.41]	[−2.35]	[−2.12]
change in forward guidance	−0.15**	−0.39***	−0.40***
(std. err.)	(.071)	(.107)	(.109)
[ <i>t</i> -stat.]	[−2.13]	[−3.61]	[−3.67]
change in LSAPs	−0.19	0.08	0.34***
(std. err.)	(.185)	(.138)	(.124)
[ <i>t</i> -stat.]	[−1.04]	[0.56]	[2.78]

# Comment #1: Empirical Fact Only Present at Low Frequency

**High-frequency** scatter plot for FOMC announcements, 2008Q4 – 2012Q2:

Effect of Forward Guidance on \$/euro Exchange Rate



## Comment #2: “Great Recession” Sample Is Somewhat Arbitrary

In Stavrakeva-Tang, “Great Recession” sample is 2008:Q4 – 2012:Q2

- Chosen to maximize fit (e.g., Bai-Perron, 1998)

But:

- NBER: Dec. 2007 – June 2009
- ZLB period: Jan. 2009 – Nov. 2015

S-T sample choice is not necessarily wrong, but keep in mind:

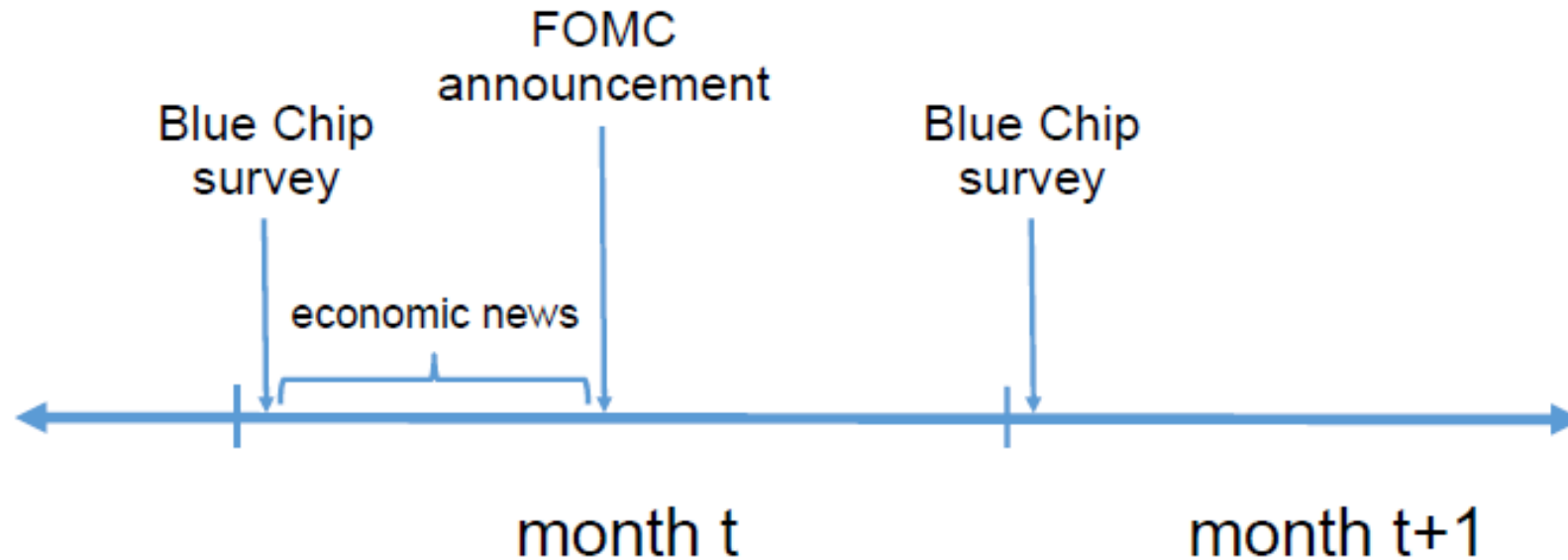
- the sample maximizes the empirical puzzle, by construction
- the empirical puzzle does not exist in high-frequency data

# Comment #3: Alternate Explanation for the Empirical Puzzle

Instead of a “Fed Information Effect”,

Bauer-Swanson (2020) present evidence of “Fed Response to News” channel

Figure 2: Illustration of the “Fed Response to News” Channel



## Comment #3: Alternate Explanation for the Empirical Puzzle

Fed sets interest rates according to policy rule:

$$i_t = f(X_t) + \varepsilon_t,$$

If financial markets don't know Fed's policy rule  $f$ , then economic news will be correlated with interest rate surprises, *even high-frequency surprises*

High-frequency monetary policy surprises can be due to:

- monetary policy shock  $\varepsilon$
- information about  $X$
- information about  $f$



# Comment #3: Alternate Explanation for the Empirical Puzzle

In fact, economic news predicts high-frequency monetary policy surprises:

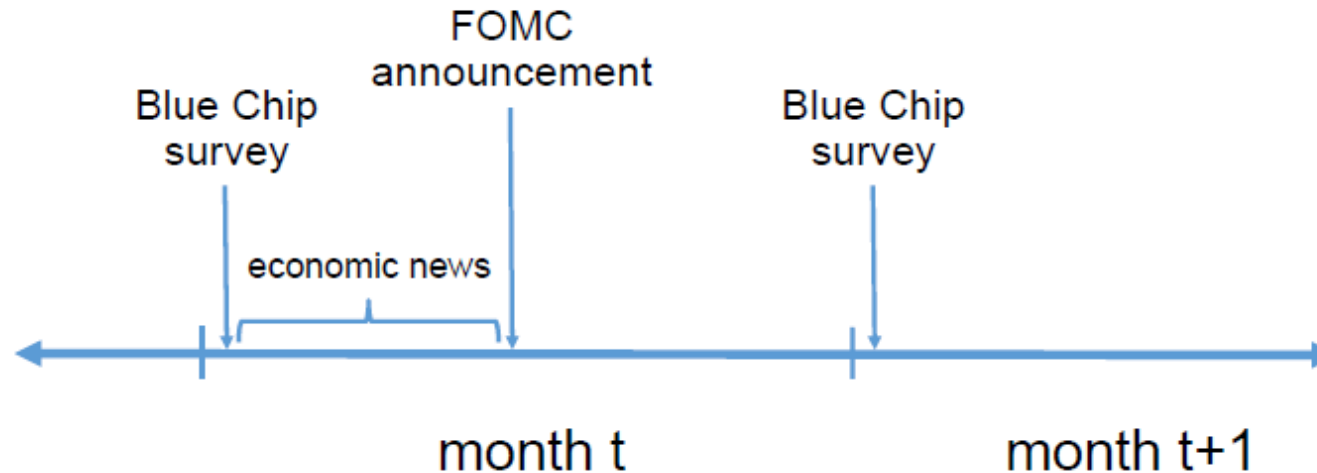
Table 3: Economic News Predicts High-Frequency Monetary Policy Surprises

Monetary policy surprise measure	Economic news measure:		
	(1) Nonfarm payrolls	(2) BBK index	(3) $\Delta \log S\&P500$
(A) Replication sample: 1/1990–6/2007 for Campbell et al., 1/1995–3/2014 for NS ( $N = 129, 120$ )			
fed funds target factor	.158*** (.050)	.033*** (.011)	.179 (.128)
fwd guidance path factor	.032 (.038)	.017** (.0085)	.235*** (.088)
NS MP surprise	.041* (.022)	.013** (.0059)	.096* (.051)
(B) Full sample: 1/1990–6/2019, including unscheduled announcements ( $N = 217$ )			
fed funds target factor	.095*** (.035)	.017** (.0067)	.217*** (.084)
fwd guidance path factor	.024 (.024)	.013*** (.0046)	.187*** (.058)
NS MP surprise	.058*** (.020)	.014*** (.0039)	.188*** (.048)
(C) Full sample: 1/1990–6/2019, excluding unscheduled announcements ( $N = 206$ )			
fed funds target factor	.045** (.020)	.007* (.0039)	.065 (.051)
fwd guidance path factor	.027 (.024)	.017*** (.0045)	.254*** (.057)
NS MP surprise	.035** (.015)	.011*** (.0029)	.148*** (.037)

# Comment #3: Alternate Explanation for the Empirical Puzzle

Economic news predicts high-frequency monetary policy surprises:

Figure 2: Illustration of the “Fed Response to News” Channel



- Then IV approach in Stavrakeva-Tang is invalid:
  - instruments are correlated with economic news each quarter
  - economic news causes **both** the monetary policy surprise and exchange rate change
- Miranda-Agrippino-Ricco (2020): economic data needs to be projected out of high-frequency monetary policy surprises

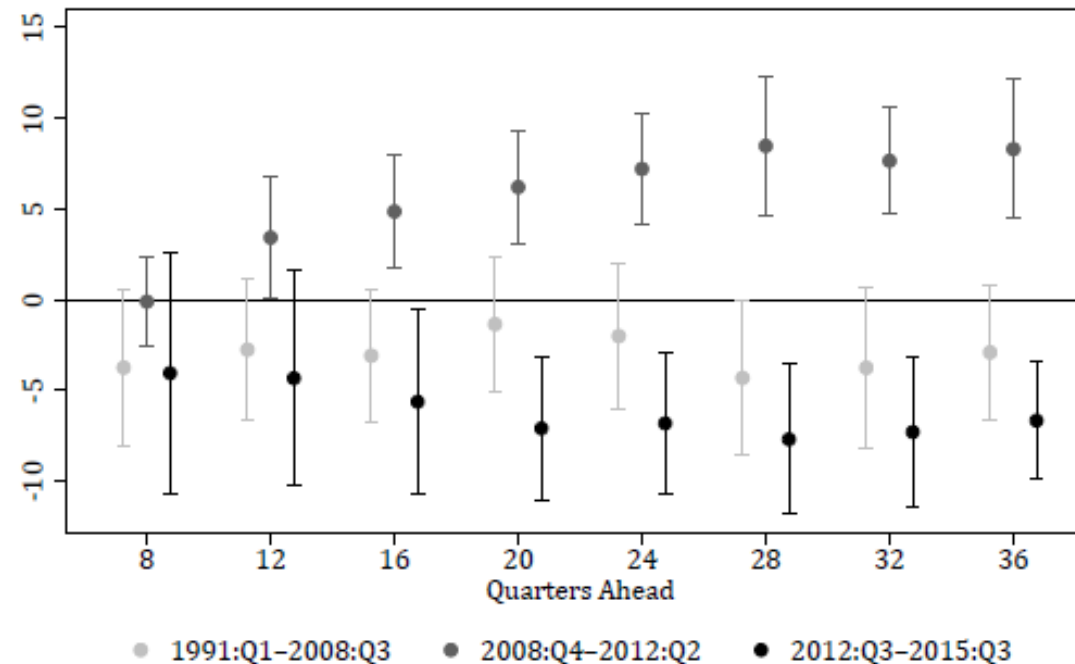
## Comment #3: Alternate Explanation for the Empirical Puzzle

See Bauer-Swanson (2020) for extensive evidence against Fed Information Effect and in favor of Fed Response to News channel:

- Including omitted economic news in standard Fed Information Effect regressions drives out the Fed Information Effect
- Direct survey of Blue Chip forecasters contradicts Fed Information Effect
- High-frequency stock market responses to FOMC announcements are strongly negative
- Blue Chip and Fed Greenbook forecasts of economy are very similar
- Extensive discussion and a model of Fed Response to News channel

# Comment #3: Alternate Explanation for the Empirical Puzzle

Figure 1: Panel Response of Exchange Rate Changes to US Monetary Policy Surprises for All Currencies (2SLS)

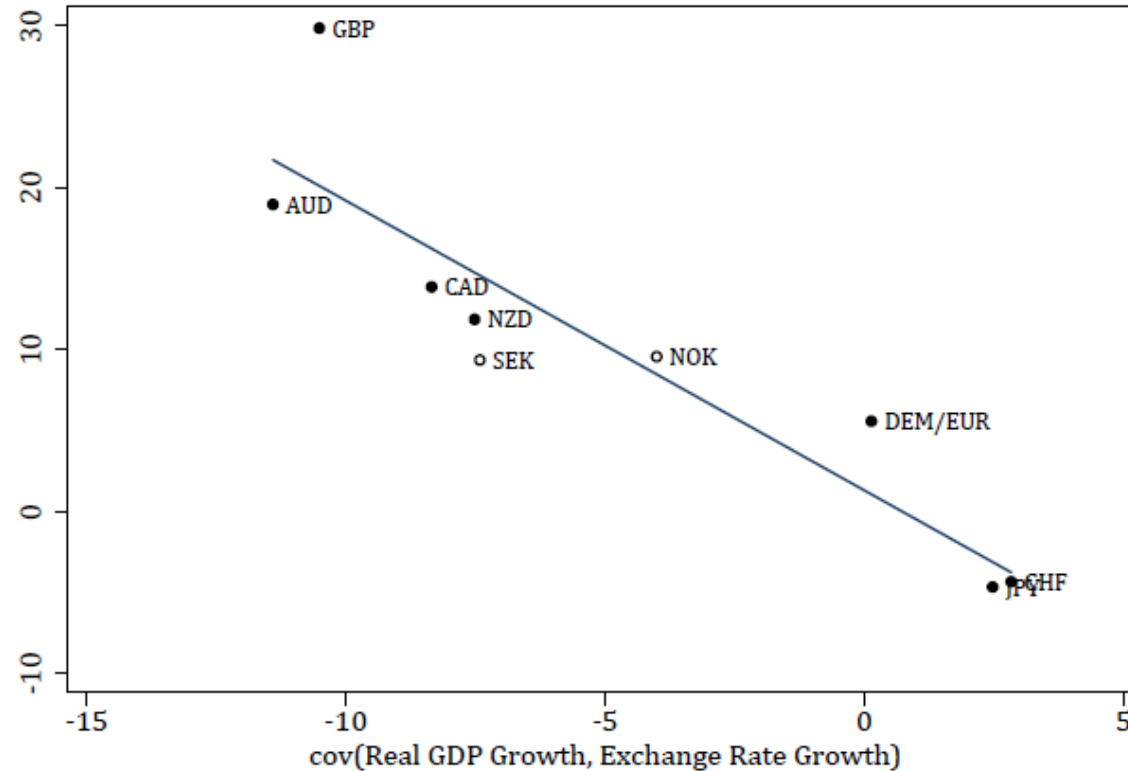


Fed Response to News explanation:

- A **lot** of economic news in 2008:Q4 – 2012:Q2
- Fed and exchange rates both responded strongly to that news

# Comment #3: Alternate Explanation for the Empirical Puzzle

Figure 2: Pair-Specific Response of Exchange Rate Changes to US Monetary Policy Surprises versus Hedging Properties of the Dollar (2SLS)



Fed Response to News explanation:

- Economic news in U.S. has **opposite** effects on hedging vs. non-hedging currencies

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