

Discussion of Swanson (2017)  
Measuring the Effects of Federal Reserve  
Forward Guidance and Asset Purchases  
on Financial Markets

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<sup>1</sup>The views expressed herein are solely mine and do not necessarily reflect the ones of the Federal Reserve Bank of San Francisco or the Federal Reserve System.

# Objective and Identification Issues

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→ Identifying the effects of forward guidance (FG) and LSAPs

## **Identification Issues**

1) Anticipation / Surprise

→ Changes in future prices and yields around policy announcements

2) Disentangling the different policies within statements

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# Identification

$$X = F\Lambda + \epsilon$$

- $X$ : 30-minute responses for different assets
  - 1st and 3rd Federal funds futures,
  - 2nd, 3rd, 4th Eurodollar futures,
  - 2-,5-,10-year Treasury yields
- $F$ : Unobserved factors
- $\Lambda$ : Matrix of loadings of asset price responses on factors

Primary Identification: Rotation of 3 Factors

- 1 LSAPs and FG have no effect on current federal funds rate
- 2 Minimize sum of squared residuals for LSAPs factor during pre-ZLB period

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# Results

- FG and LSAPs had highly statistically significant effects on ...
  - ... medium-term Treasury yields,
    - short-term yields:  $FG > LSAPs$
    - long-term yields:  $FG < LSAPs$
  - ... stock prices,
  - ... exchange rates,
  - ... corporate yields (not FG during ZLB),
  - ... spreads (against theory)
- Effects of LSAPs persistent (sensitive to QE1; Wallace (1981)?!), FG less so
- LSAPs more effective at reducing interest rate uncertainty

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# Comments

# Major Comment

Monetary Policy Surprises  $\neq$  Monetary Policy Shocks

Release of Views and Information of the Central Bank  
(Campbell et al., 2012; Nakamura and Steinsson, 2017; Paul, 2017)

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## Test for Information Release

$$\Delta \text{Output Forecast}_{k+\epsilon|k-\epsilon} = \alpha + \beta \cdot \text{Factor}_k + u_k$$

# Private Sector Forecast Revisions

## 1991 M8–2015 M10

$\Delta$ GDP Forecast	FFR-Factor	FG-Factor	LSAP-Factor	Observations
Current quarter	0.067	0.084	-0.011	168
Next quarter	0.066***	0.029	-0.012	168
2 quarters ahead	0.028	0.019	0.003	168
3 quarters ahead	0.004	0.011	-0.003	168
4 quarters ahead	0.007	-0.006	-0.003	168
5 quarters ahead	0.001	-0.031	0.079	123
6 quarters ahead	0.008	0.015**	-0.012	77
7 quarters ahead	0.004	0.010	-0.003	38
over next year	0.034*	0.027	-0.005	168

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

# Private Sector Forecast Revisions 2009 M1–2015 M10

$\Delta$ GDP Forecast	FFR-Factor	FG-Factor	LSAP-Factor	Observations
Current quarter	0.079	0.044	0.037	50
Next quarter	-0.011	0.027	0.047	50
2 quarters ahead	-0.051	0.003	0.034*	50
3 quarters ahead	0.033	0.004	0.024*	50
4 quarters ahead	-0.013	0.002	0.005	50
5 quarters ahead	-0.016	-0.014	0.010	40
6 quarters ahead	-0.132	0.022	-0.005	27
7 quarters ahead	0.031	0.001	-0.002	14
over next year	0.007	0.016	0.029	50

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

# Minor Comments

- LSAPs heterogeneous (MBS, Long-term Treasuries)
- Effects of LSAPs state-dependent  
(Del Negro, Eggertsson, Ferrero, and Kiyotaki, 2017)
- Difference between scheduled and unscheduled meetings  
(Paul, 2017; Caldara and Herbst, 2016)
- Effects on the macroeconomy  
(Gertler and Karadi, 2015; Paul, 2017; Caldara and Herbst, 2016)
- Identification only works if effects of FG not time-varying

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# Conclusion

- Very nice paper
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# References

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