



Discussion of "*What Does Anticipated Monetary Policy Do?*" by D'Amico and King

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Usual disclaimer applies

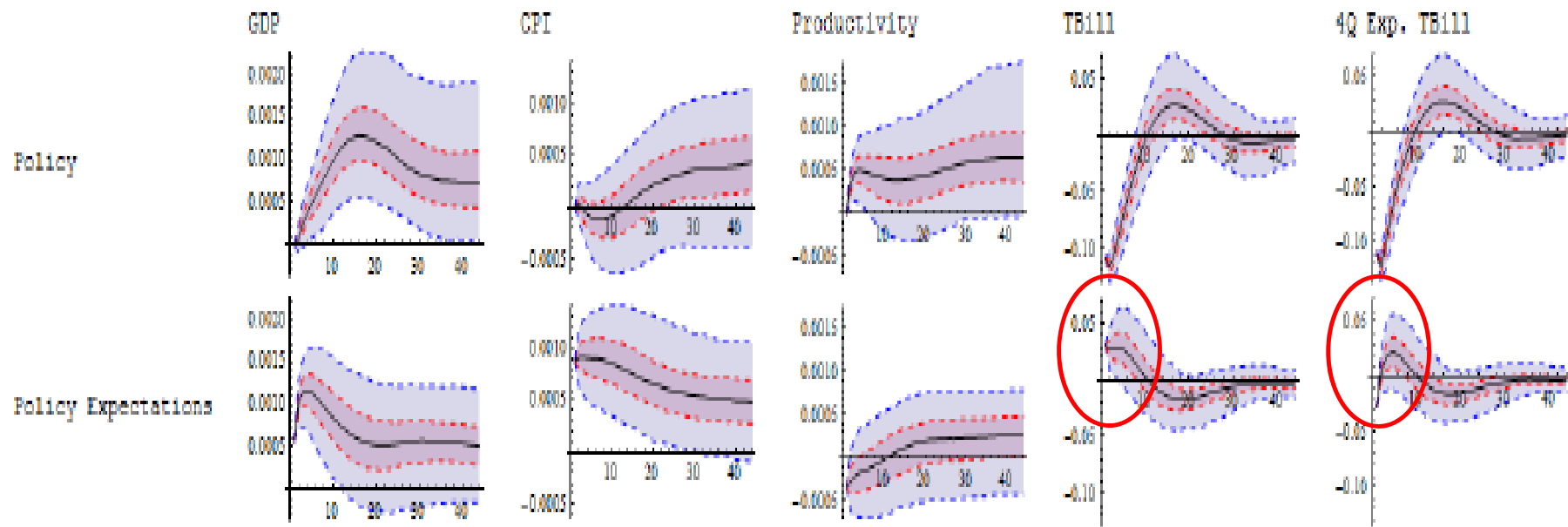
Summary of methodology

- NK model to study shocks to policy expectations
- Standard VAR + expectation variables
- Shocks identified with zero/sign restrictions
- Compare conventional policy shocks with shocks to expectations of future policy rate

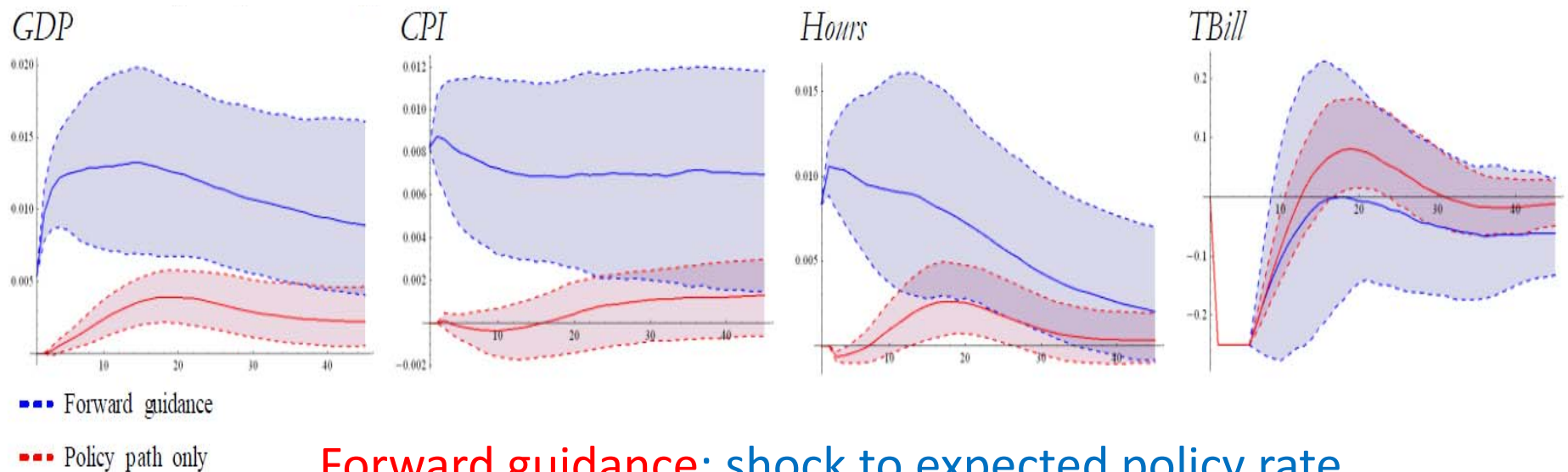
Summary of results

- Expectations of future policy easing have immediate positive effects on output, inflation, and employment
- Effects larger than “conventional” (unexpected) policy rate changes
- Implications for models: forward guidance → too large effects on π

Summary of results (cont'd)



Summary of results (cont'd)



Forward guidance: shock to expected policy rate, followed by a sequence of shocks to actual policy rate that prove expectations to be correct

Main comments

Comment 1 – Changes in monetary policy-making

- Sample period: 1983:3 to 2015:2
- Important changes in policy-making after 2008 GFC
 - Zero-lower bound (ZLB)
 - Forward guidance
 - Large scale asset purchases (LSAP)
- How to deal with such changes? TVP-VAR with news shocks (Mendicino and D'Agostino, 2015)? A non-linear VAR (ZLB)?

Main comments (cont'd)

Comment 2 – Forward guidance and identified shocks (Table 3)

- Forward guidance introduced in December 2008, at ZLB (“[...] *exceptionally low levels of the federal funds rate for some time [...]*”)
- Forward guidance has taken several forms since then
 - Open-ended
 - Date-based
 - Outcome-based

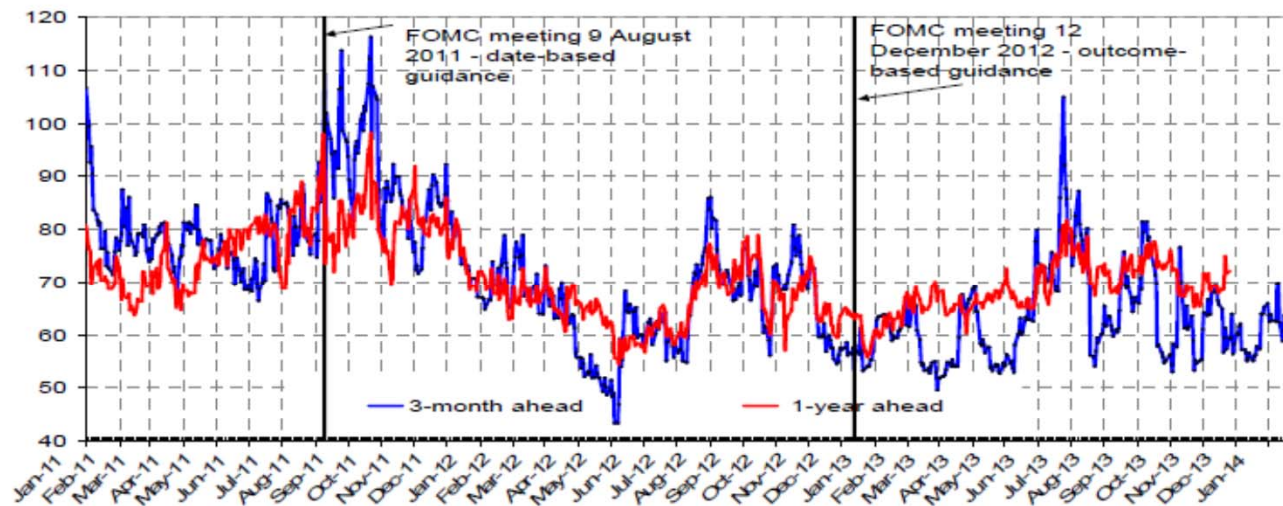
Main comments (cont'd)

Table 1 – Evolution of the Federal Reserve forward guidance during the financial crisis

<i>Date</i>	<i>FOMC statement</i>	<i>Type of guidance</i>
16 December 2008	<i>“exceptionally low levels of the federal funds rate for some time”</i>	Open-ended
18 March 2009	<i>“exceptionally low levels of the federal funds rate for an extended period”</i>	
9 August 2011	<i>“at least through mid-2013”</i>	Date-based
25 January 2012	<i>“at least through late 2014”</i>	
13 September 2012	<i>“for a considerable time after the economic recovery strengthens [...] Mid-2015”</i>	
12 December 2012	<i>“at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee’s 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored”</i>	Outcome-based
19 June 2013	<i>“ [...] would be appropriate to moderate the monthly pace of purchases later this year [...] continue to reduce the pace of purchases in measured steps through the first half of next year, ending purchases around mid-year [...] the unemployment rate would likely be in the vicinity of 7 percent, with solid economic growth supporting further job gains”</i>	

Main comments (cont'd)

Figure 4 – Volatility of 1-year interest rate swap in U.S. dollar
(percentage points; daily data)



Source: Thomson Reuters.

Note: Volatility of the 1-year interest rate swap at the 3-month and 1-year horizon implied in the prices of options on interest rate swaps (swaptions). The data for the 1-year maturity have not been updated by the provider.

Main comments (cont'd)

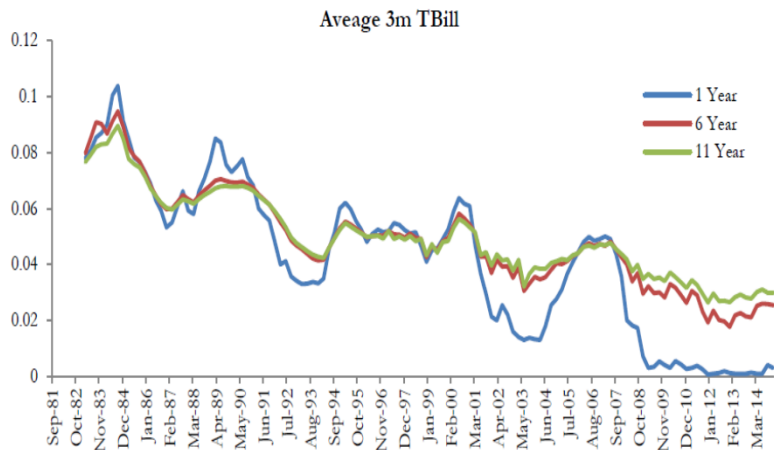
Comment 2 – Forward guidance and identified shocks (Table 3)

- Forward guidance introduced in December 2008, at ZLB (“[...] *exceptionally low levels of the federal funds rate for some time [...]*”)
- Forward guidance has taken several forms since then
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 - Outcome-based
- Would VAR uncover some of these “forward-guidance” shocks?
- Estimate VAR over 2008-2015 + identify shocks to policy expectations?

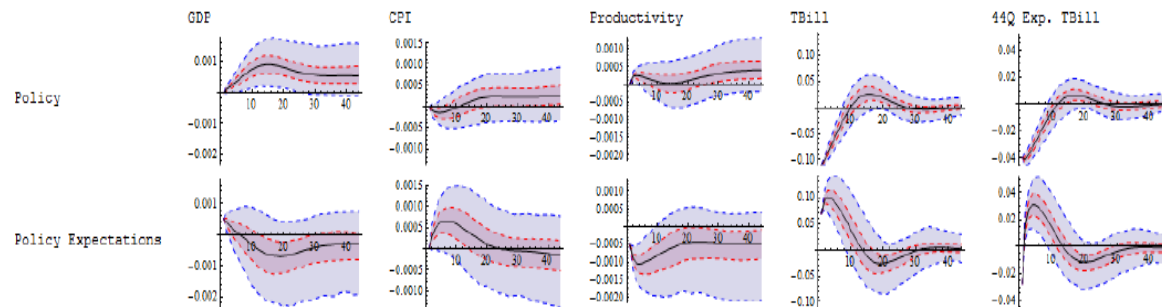
Main comments (cont'd)

Comment 3 - Horizon for expectation shocks

- Authors consider 1-, 6- and 11-year expectations on π , Δy and 3m T-bill
- What do shocks to medium and long-term expectations capture?
Certainly not monetary policy; changes in natural rate of interest?



C. Using 11-year expectations



Main comments (cont'd)

Comment 4 – Sign restrictions

- Why should 3m rate move in response to shocks to expectations?
- More plausible to assume rate does not move
- Alternatively, leave response unrestricted.
- In any case, ZLB is an issue. I-VAR (Interaction-VAR; Caggiano et al., 2015)?
- Identification may be picking up announcement of LSAPs and macro news

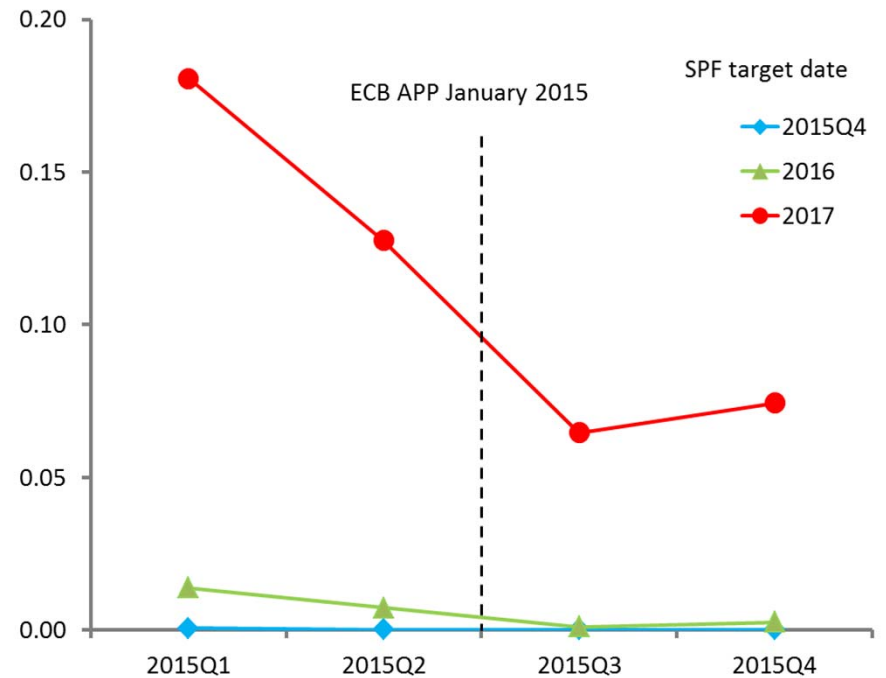
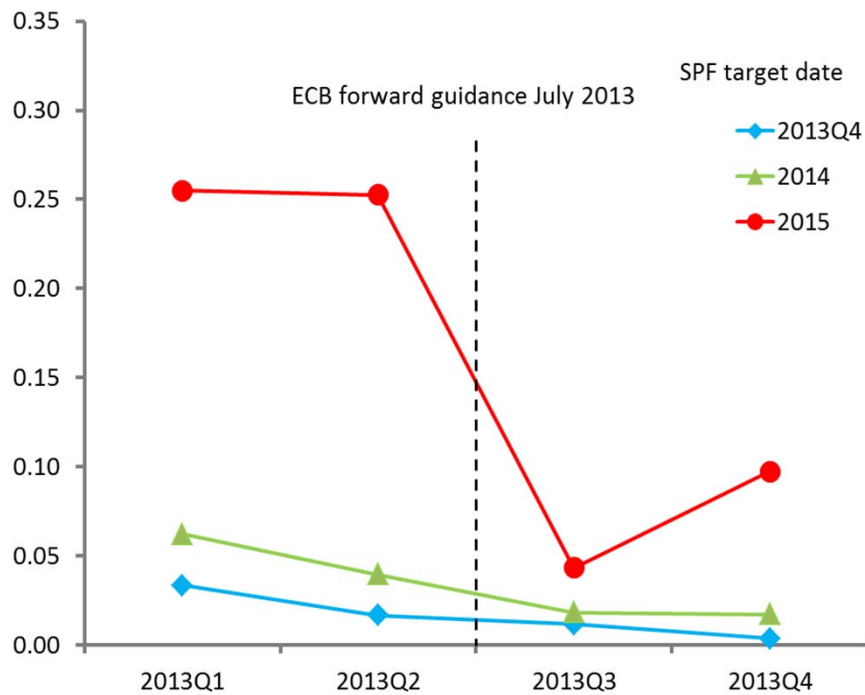
Table 1. Baseline identification restrictions on contemporaneous impact of shocks

Block / Variable	Shock		
	Policy expectations (η)	Conventional policy (ϵ)	
x1	GDP CPI Labor productivity	?	0 0 0
x2	M2 growth Corporate profits Longer-term yield	?	? ? ?
i	3m T-Bill rate	+	-
$E^s[x_{t+h}]$	Survey GDP Survey CPI Survey 3m T-Bill	+ + -	? ? ?

Notes: The table shows the restrictions imposed to identify structural shocks in the baseline VAR.

Main comments (cont'd)

Assumption on ECB MRO rate



Source: ECB Survey of Professional Forecasters

Main comments (cont'd)

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- In any case, ZLB is an issue. I-VAR (Interaction-VAR; Caggiano et al., 2015)?
- Identification may be picking up announcement of LSAPs and macro news
- Adding index of macro surprises and/or Federal Reserve's balance sheet?

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Minor comments

- What is role of corporate profits? No justification in paper, rather “unconventional” choice
- Robustness check: sign restriction for conventional policy shock seem too weak ($R \downarrow$ and $\pi \downarrow$). See Uhlig (2005)
- Variables in level and yearly changes (Y and P): is there any problem?
- Draw model parameters from uniform distribution and derive sign restrictions for impulse responses (Dedola and Neri, 2007)
- “*Monetary News, Surprises and the Macroeconomy*”, Gallio (2015). Paper investigates effects of anticipated and unanticipated monetary shocks

All in all ...

... a very interesting, well written, perhaps a bit too ambitious paper ...

... but room for improving identification of shocks and specification of VAR

Interaction between **asset purchases** and **forward guidance**? Key for ECB monetary policy

From latest Introductory Statement by President Draghi: “[...] *the Governing Council **expects** the key ECB interest rates to **remain** at present or lower levels for an extended period of time, and well past the horizon of our net **asset purchases**”*