Discussion of Del Negro, Giannoni and Patterson: The Forward Guidance Puzzle

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  - Impaired credibility (Åhl, 2015)
- This paper is one of the first contributions on the issue

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- That future policy rates has a large impact on developments today in NK models is an insight we learned from the fiscal ZLB literature (Eggertsson 2010, Woodford, 2010, Christiano, Eichenbaum and Rebelo, 2011, Coenen et al., 2012)

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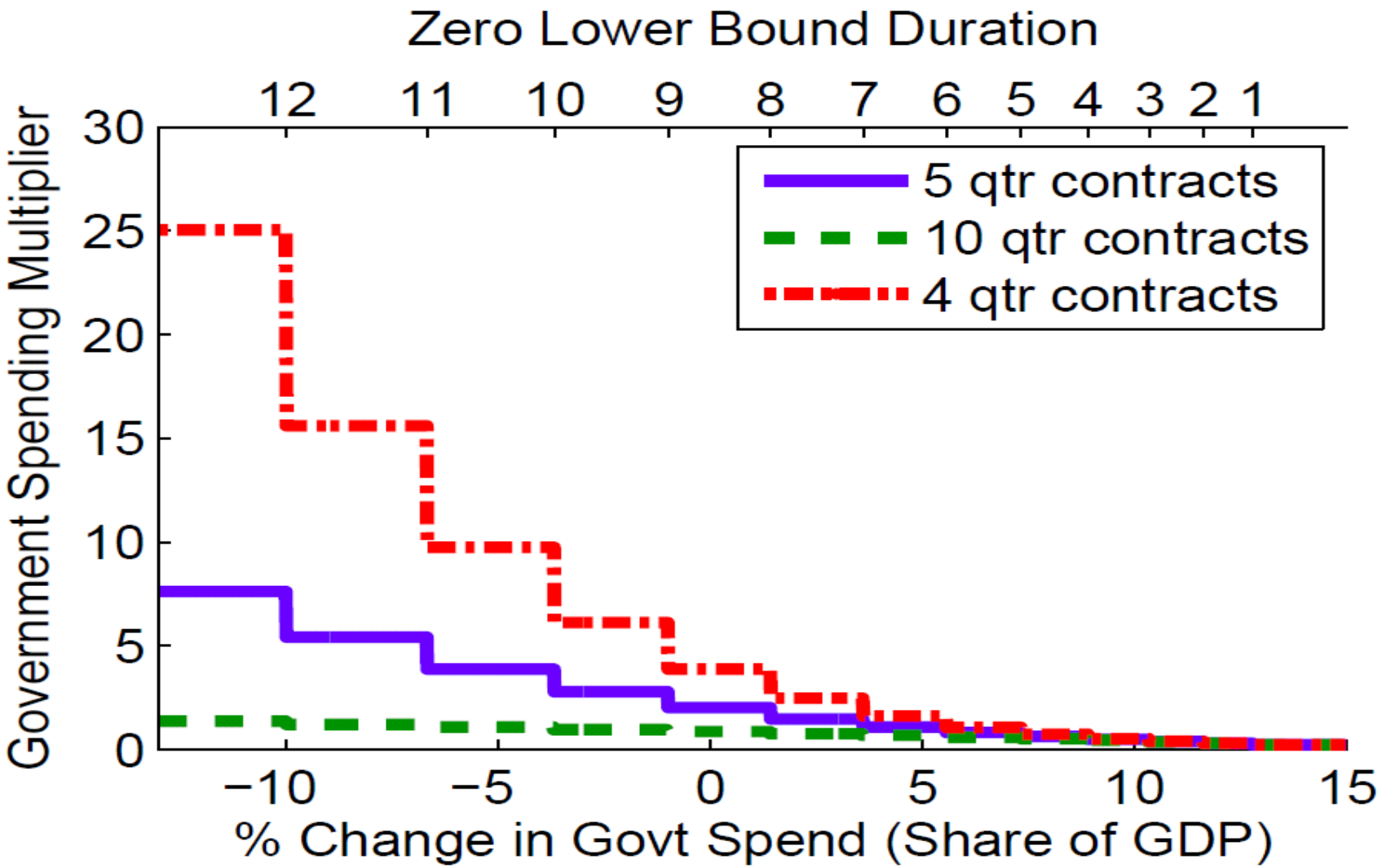
  - But EI-channel also contested (Dupor and Li, 2015, and Wieland, 2015)

Fiscal Spending Multiplier at the ZLB

Multiplier as function of ZLB duration in trinity NK model Erceg-Lindé (2013, JEEA)



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- Introduces Blanchard-Yaari (discounting of future real rates) in SW model to account for the *FG Puzzle*
  - Argues that this mechanism goes a long way in resolving the puzzle

Remaining of Discussion

- Reflections on the empirical part of the paper
- A couple of comments on the resolution
- Wrap up

Reflections on the empirical part of the paper

Very nice work but difficult...

- I really like the empirical part of the paper, although distinguishing between *Delphic* (CB revealing bad news about the economy) and *Odyssean* (CB provide unusual stimulus, maintained assumption in the model) FG is a daunting task

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- Even harder is separating out effects of FG and QE announcements, but the paper makes a heroic attempt and comes out with seemingly reasonable effects
  - But hard as effects of QE and FG interact (signalling effect of QE lbuilds credibility of FG)

Reflections on the empirical part of the paper

A few comments...

- A potential problem seems that you only get results for the short-end (up to 4 quarters). Would be nice to have effects of FG on expected policy rates farther out during the projection horizon as they should be more potent

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- Could a critic use your results to argue that FG is useless - only QE works?

Comments on the proposed resolution

Calibration of death probability

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  - However, this have unfavorable implication for r^* in the model, becoming very high as households have strong incentives to consume today
  - How should we reconcile this calibration with the higher life expectancy in Western countries and downward pressure on the real rate in the data?

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  - Check robustness of findings on the re-estimated model

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Slope of wage and pricing schedules yet additional arguments for re-estimation

- An additional argument for re-estimating and re-assessing the potency of your proposed mechanism: estimation of SW-type models through the recession suggest that sensitivity of wage and price inflation lower than previously recognized

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- Next slide shows evidence in Lindé, Smets and Wouters

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Evidence of Flatter Pricing and Wage Schedules in the US

Table 5.1: Posterior distributions in SW Model: 1966Q1-2014Q2.

Parameter		No ZLB model Posterior mode	std.dev. Hess.	Endogenous ZLB duration Posterior mode	std.dev. Hess.	OIS-based ZLB duration Posterior mode	std.dev. Hess.	SW07 results Posterior mode
Calvo prob. wages	ξ_w	0.83	0.040	0.85	0.026	0.86	0.035	0.73
Calvo prob. prices	ξ_p	0.75	0.039	0.83	0.032	0.89	0.023	0.65

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Impact of lower price and wage slopes...

- Use simple NK model to tease out impact of flatter slope:

$$\begin{aligned} x_t &= \eta x_{t+1|t} - \sigma(i_t - \pi_{t+1|t} - r_t^{pot}), \\ \pi_t &= \beta \pi_{t+1|t} + \kappa x_t, \end{aligned}$$

or equivalently:

$$\begin{bmatrix} x_t \\ \pi_t \end{bmatrix} = -\sum_{j=0}^{\infty} A^j B \left(i_{t+j|t} - r_{t+j|t}^{pot} \right)$$

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  - Next figure plots weights $A^j B$ for $j = 0, 1, ..., 16$

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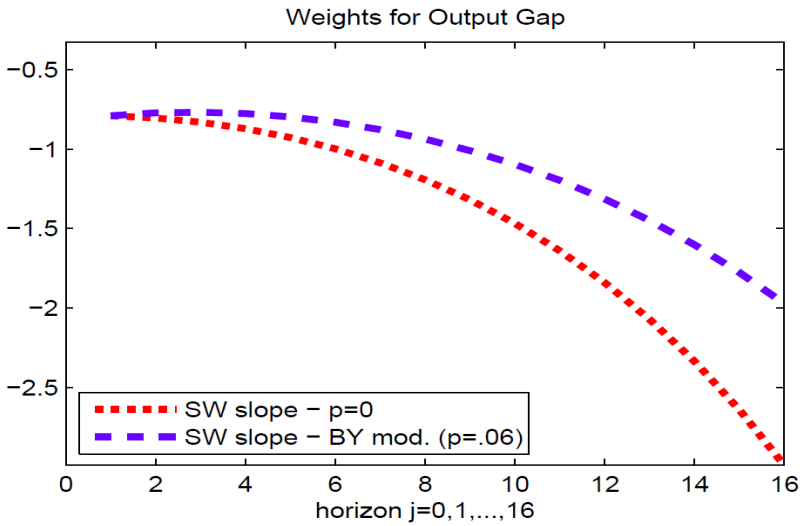
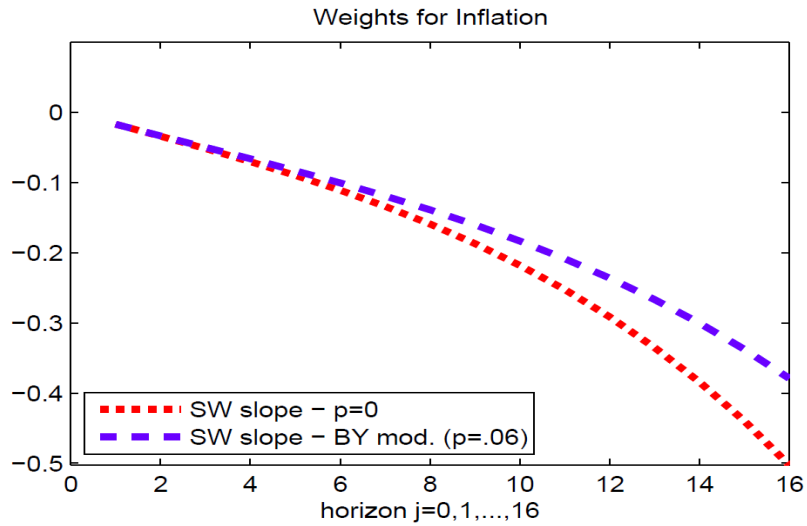
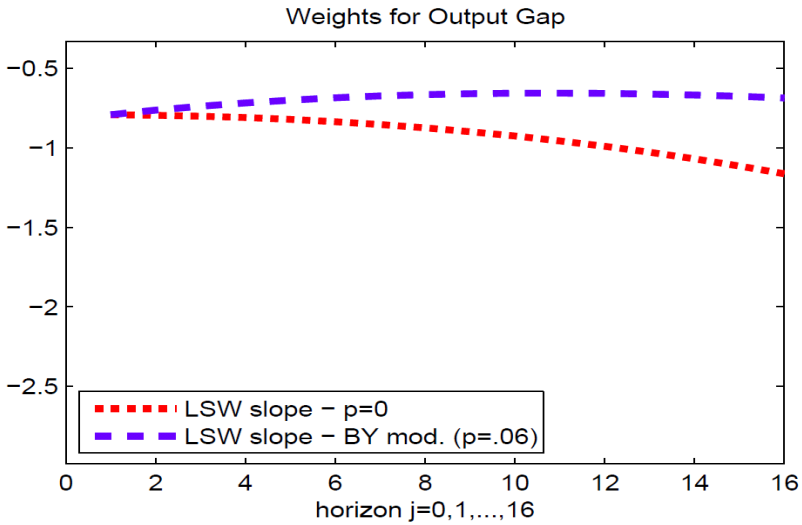
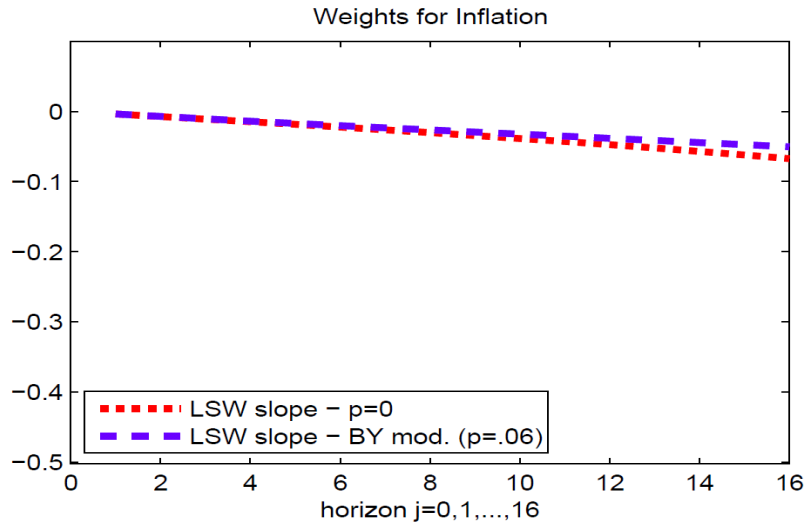
Impact of flatter NKPC in simple NK Model









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Effects of Odyssean FG in simple NK Model: No Price Adjustment

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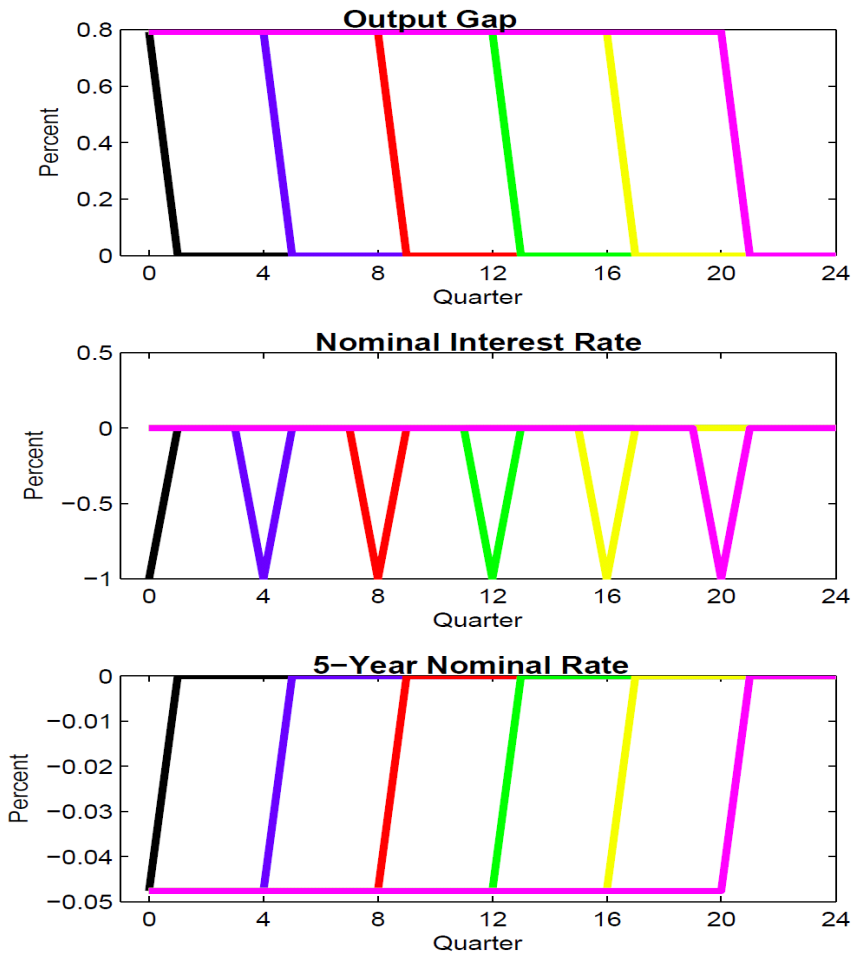
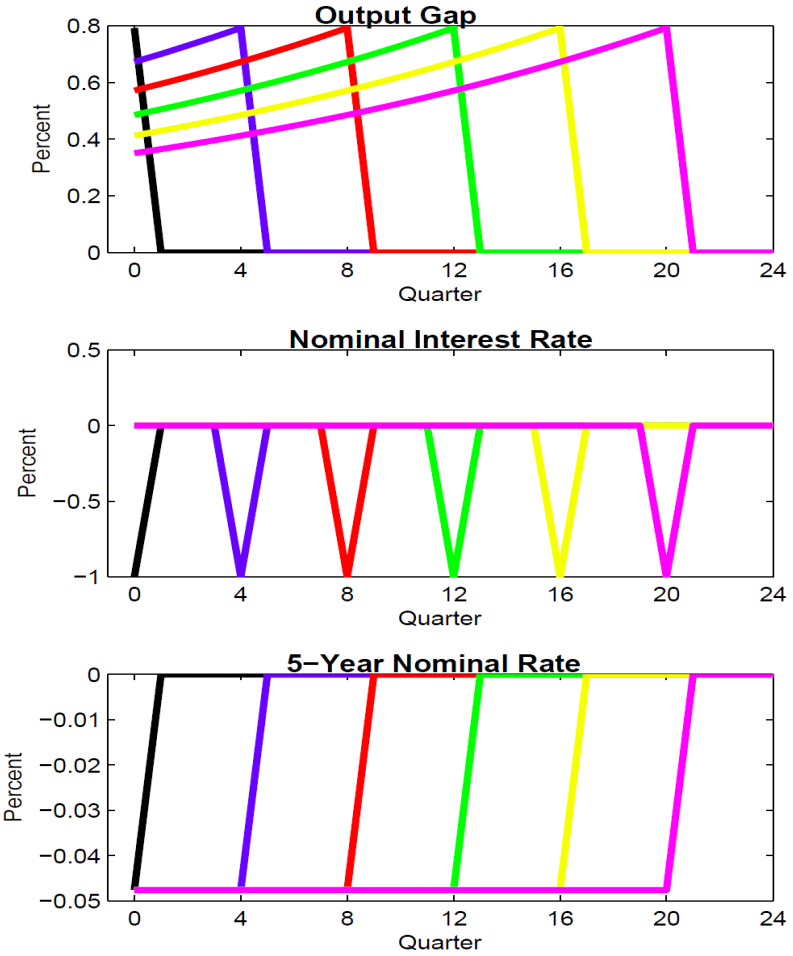


p=0.06



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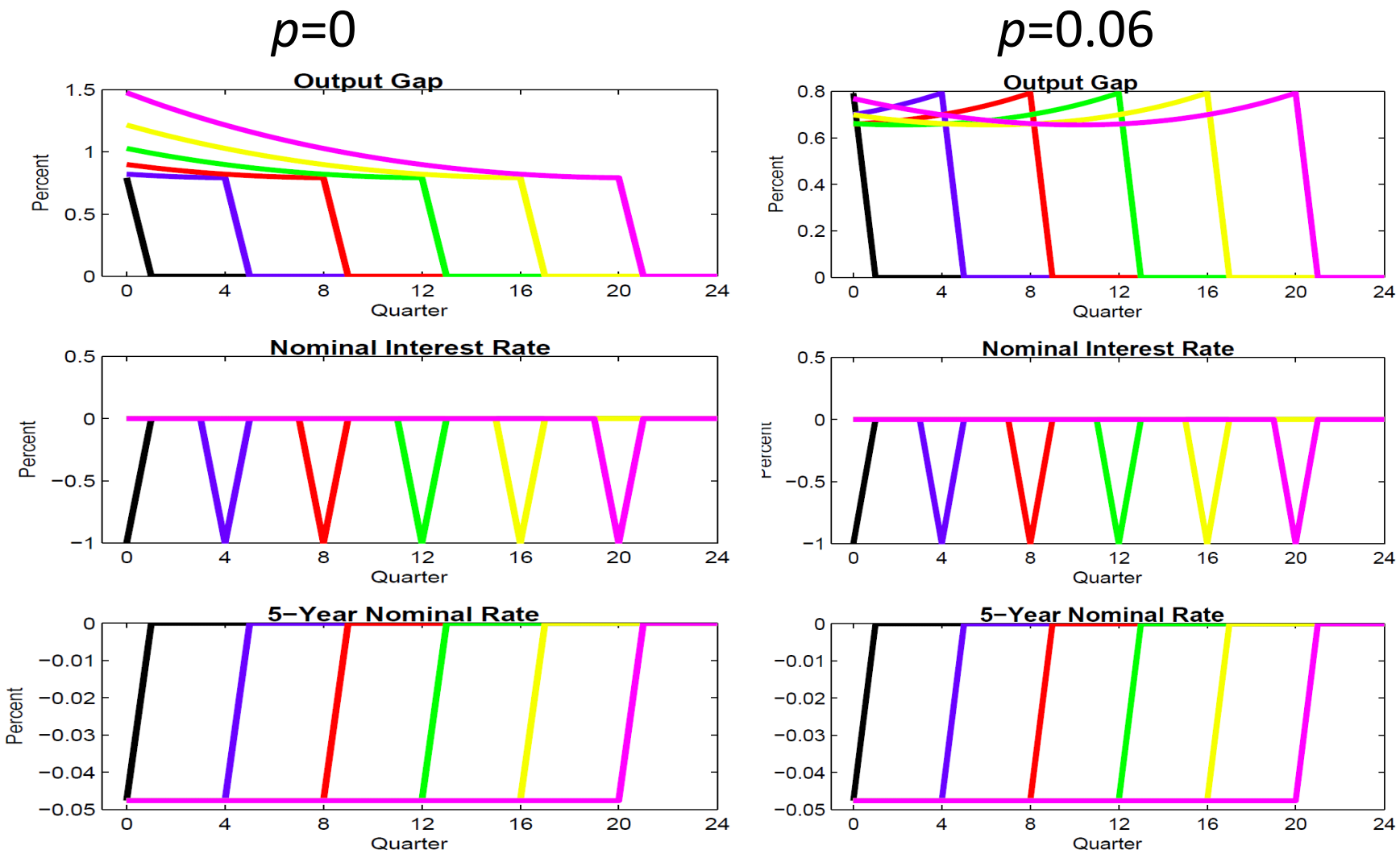
Effects of Odyssean FG in simple NK Model: With Price Adjustment (LSW-slope)



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- Credibility for DSGEs were built in a framework with predetermined expectations (CEE); this assumption was relaxed in policy models estimated with Bayesian methods