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Comments on "Central Banking in the Credit Turmoil / Marvin Goodfriend"

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2009 International Conference
May 28, 2009

The Views expressed herein are those of the author and do not necessarily reflect the views of the BOJ.

1. A Central Bank Conducting "Pure Monetary Policy" at the Zero Bound

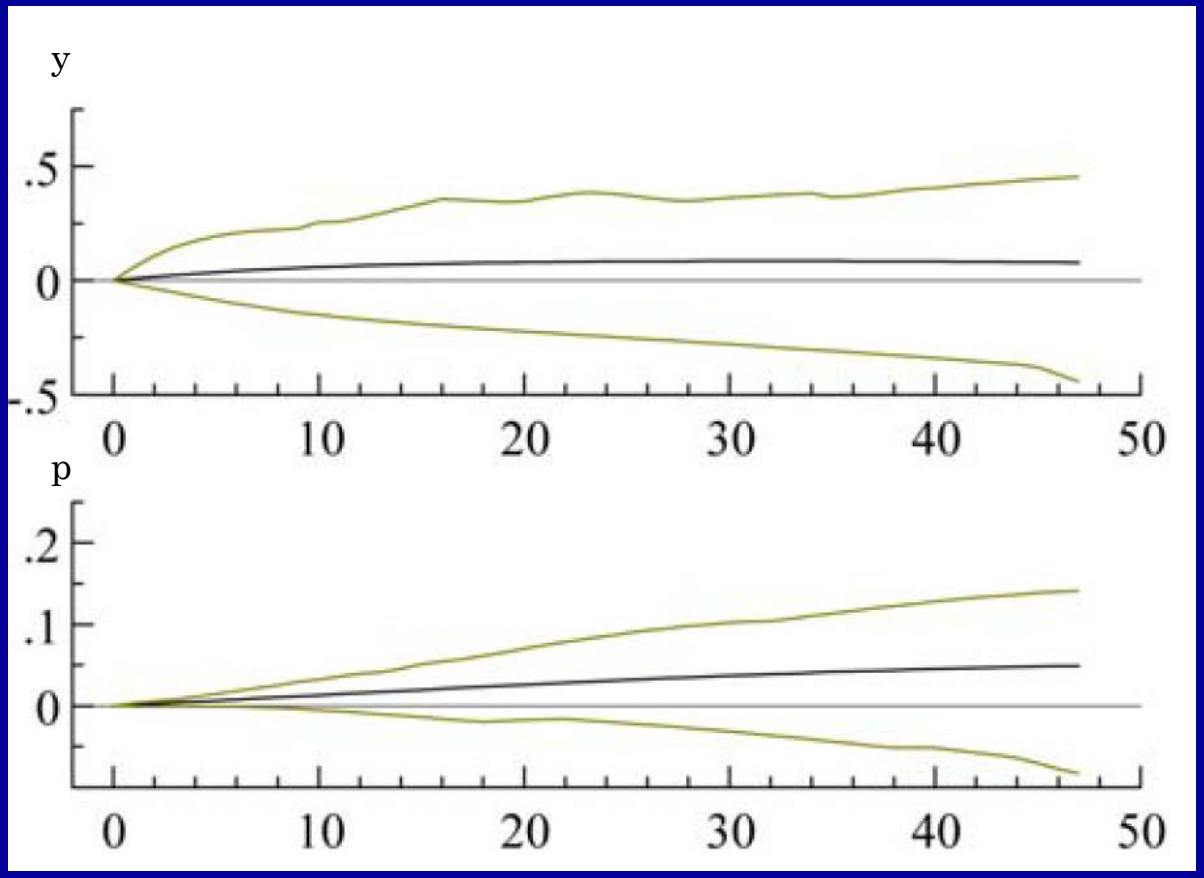
Prof. Goodfriend's Model	**From My Point of View……**
(1) An increase in the MB at the zero bound affects economic activity and prices. (2) Credit policy is fiscal policy. To conduct credit policy, agreement with the Treasury is needed. (3) Should adhere to Treasury-only policy. Should purchase long-term Treasuries until this action exerts marked effects.	(1) This effect is negligible or small, if any. (2) A central bank cannot take effective actions because it has to conclude an agreement with the Treasury every time. (3) This effect is small, if any. Mega-purchases are the monetization of government debts.
Image of this central banking: A central bank which establishes the territory of monetary policy and acts against deflation by aggressively using the effective tools.	**Image of this central banking:** A central bank which has lost its independence as well as its effective tools, and is forced to monetize government debts.

2. Which View Is More Plausible?

(1-1) How effective is the increase in the MB at the zero bound?

Fujiwara (2006)

Impulse responses to a monetary base shock MSVAR(4) after regime switch



Confidence intervals: 10th and 90th percentile values.

Kimura and Small (2006)

The effects of increasing current account balances at the BOJ on credit spreads of corporate bonds

$$CS_t^i = \phi_i(IR_t) + \alpha_i(HV_{t-1}^i) + \delta_i(IV_t^s) + \beta_i(CA_t) + \gamma_i(OP_t) + c_i + \xi_t^i,$$
where $\delta_i = \gamma_i = 0$.

		Sample period: 2001/1/21 ~ 2003/6/30				Sample period: 2001/1/21 ~ 2004/3/31			
i		ϕ_i	α_i	β_i	adj.R^2/S.E.	ϕ_i	α_i	β_i	adj.R^2/S.E.
Aa	1 year	0.0651*** (0.0010)	-0.7783*** (0.0431)	-0.0014*** (3.68E-05)	0.560 0.027	0.0540*** (0.0023)	-0.883*** (0.0857)	-0.0020*** (5.08E-05)	0.614 0.026
	3 year	0.0933*** (0.0011)	1.2627*** (0.0317)	-0.0031*** (5.35E-05)	0.750 0.031	0.1001*** (0.0037)	1.4986*** (0.0696)	-0.0026*** (6.67E-05)	0.773 0.029
	5 year	0.0931*** (0.0014)	0.9568*** (0.0348)	-0.0019*** (6.40E-05)	0.787 0.023	0.0963*** (0.0022)	0.8822*** (0.0587)	-0.0017*** (8.36E-05)	0.800 0.022
A	1 year	0.1835*** (0.0021)	-1.0513*** (0.0391)	0.0057*** (0.0001)	0.375 0.049	0.0328*** (0.0045)	-1.4361*** (0.0961)	-0.0034*** (0.0001)	0.297 0.061
	3 year	0.1237*** (0.0017)	-0.7448*** (0.0283)	0.0021*** (9.14E-05)	0.370 0.041	0.0362*** (0.0045)	-0.2600*** (0.0479)	-0.0033*** (0.0001)	0.412 0.048
	5 year	0.1275*** (0.0023)	3.2136*** (0.0587)	0.0010*** (0.0001)	0.349 0.056	0.0357*** (0.0062)	1.7938*** (0.109)	-0.0049*** (0.0001)	0.487 0.058
Baa	1 year	0.3084*** (0.0034)	1.6760*** (0.0581)	0.0131*** (0.0002)	0.372 0.084	0.0129 (0.0095)	4.2588*** (0.1944)	-0.0042*** (0.0002)	0.160 0.111
	3 year	0.2946*** (0.0033)	2.4108*** (0.0591)	0.0202*** (0.0002)	0.419 0.109	-0.0233 (0.0142)	3.7964*** (0.1821)	0.0006* (0.0003)	0.028 0.134
	5 year	0.3140*** (0.0034)	4.1787*** (0.0712)	0.0208*** (0.0002)	0.394 0.124	-0.0102 (0.0142)	6.1055*** (0.2393)	0.0010** (0.0004)	0.062 0.145
J-statistic		0.0026				0.0053			

(Note)***/**/* denotes significance at the 1/5/10 percent level.

CS: Credit Spreads
IR: Yields on 10-year JGBs
HV: Historical volatility of the credit spreads
IV^S: Implied volatility of the stock price index

→ Proxy for implied volatility of corporate bond prices

CA: Outstanding amount of current account balances
OP: Outstanding amount of outright purchases of long-term JGBs by the BOJ

Decrease in premiums (Effective)

Increase in premiums (Harmful)

(1-2) How effective is the CB's purchases of long-term Treasuries?

Oda and Ueda (2005)

The effects of the BOJ's purchases of long-term JGBs on the risk premium component of short- to medium-term interest rates

Regression Method: Maximum Likelihood with AR(1)
Period: 1995/Q1-2003/Q4

	Risk premium components		
	10-year	5-year	3-year
BOJ's current account balance	-0.016	0.003	0.008
Standard error	*0.01*	*0.01*	*0.01*
P-value	*0.23*	*0.72*	*0.30*
BOJ's share of JGBs	0.020	0.065	0.061
Standard error	*0.07*	*0.04*	*0.04*
P-value	*0.76*	*0.14*	*0.13*
Turnover rate of JGBs	-0.19	-0.17	-0.14
Standard error	*0.08*	*0.06*	*0.05*
P-value	*0.02*	*0.01*	*0.01*
Spread between TB and CD	0.59	0.11	-0.04
Standard error	*0.58*	*0.43*	*0.38*
P-value	*0.32*	*0.81*	*0.92*
Constant	2.00	0.13	-0.26
Standard error	*1.27*	*0.83*	*0.75*
P-value	*0.13*	*0.87*	*0.73*
AR(1)	0.40	0.26	0.29
Standard error	*0.16*	*0.15*	*0.16*
P-value	*0.02*	*0.11*	*0.08*
Adjusted-R^2	0.55	0.40	0.33
Std. err. of equation	0.28	0.21	0.18
D.W. ratio	2.38	2.12	1.82

Statistically Insignificant

Kimura and Small (2006)

The effects of the BOJ's purchases of long-term JGBs on credit spreads of corporate bonds

$$CS_t^i = \phi_i(IR_t) + \alpha_i(HV_{t-1}^i) + \delta_i(IV_t^s) + \beta_i(CA_t) + \gamma_i(OP_t) + c_i + \xi_t^i,$$
where $\delta_i = \beta_i = 0$.

i		Sample period: 2001/1/21 ~ 2003/6/30			
		ϕ_i	α_i	γ_i	adj R^2/S.E.
Aa	1 year	-0.0034 (0.0027)	-1.3421*** (0.0862)	-0.0073*** (0.0002)	0.649 0.024
	3 year	0.0421*** (0.0047)	1.3461*** (0.0836)	-0.0081*** (0.0003)	0.765 0.031
	5 year	0.0426*** (0.0036)	0.8742*** (0.0661)	-0.0065*** (0.0003)	0.823 0.022
A	1 year	0.1730*** (0.0077)	-1.2902*** (0.0907)	0.0067*** (0.0004)	0.259 0.053
	3 year	0.1121*** (0.0069)	-0.8164*** (0.0580)	0.0019*** (0.0004)	0.342 0.042
	5 year	0.0697*** (0.0078)	2.9533*** (0.1241)	-0.0032*** (0.0004)	0.357 0.056
Baa	1 year	0.3524*** (0.0131)	2.3284*** (0.1375)	0.0211*** (0.0007)	0.229 0.094
	3 year	0.5157*** (0.0155)	2.0704*** (0.1515)	0.0440*** (0.0009)	0.386 0.112
	5 year	0.4480*** (0.0155)	4.776*** (0.1605)	0.0382*** (0.0009)	0.280 0.135
J-statistic		0.0056			

(Note) ***/**/* denotes significance at the 1/5/10 percent level.

CS: Credit Spreads
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IV^S: Implied volatility of the stock price index
→ Proxy for implied volatility of corporate bond prices
CA: Outstanding amount of current account balances
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Decrease in premiums (Effective)

Increase in premiums (Harmful)

(2) Should a CB continue to purchase an enormous amount of long-term Treasuries until the purchases become effective significantly?

(a) the amount of improving economic conditions

(b) the amount of losing confidence in the CB

If (a) > (b), the confidence in the CB would be lost.

(3) Is the agreement between the CB and the Treasury on an inflation objective sufficient to prevent the risk of inflation?

The time inconsistency problem of the government.

(4) In sum, should a CB attempt this policy framework to ascertain whether it works?

Once the confidence in the CB and the currency is lost, it is impossible to regain it easily.

3. To What Extent Is a CB's Credit Policy Necessary in the Current Turmoil?

- Imperative to improve the market and financial intermediation functioning in order to make monetary policy transmission channels effective.
- All major CBs worldwide are conducting a kind of credit policy.
- Sympathy with Prof. Goodfriend in that CBs' policy actions are approaching the area of the fiscal policy....A CB has to find a way to maintain its basic stance of being cautious.

  --- However, no single answer to the question about the desirable way to set principles.
- Important for a CB to conduct credit policy with its own decision and responsibility.