



The Impact of BSP Policy Rates on Market Interest Rates

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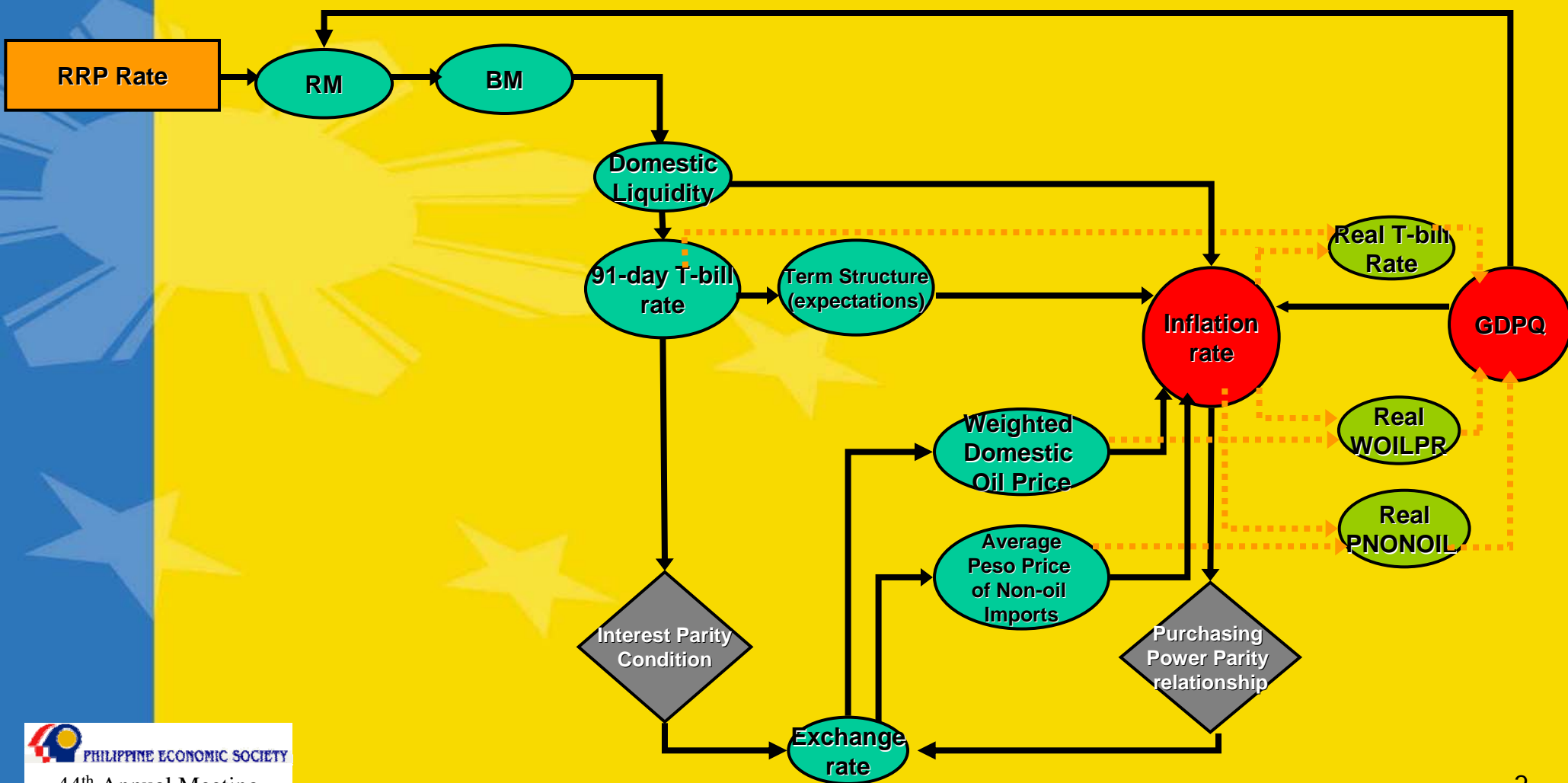
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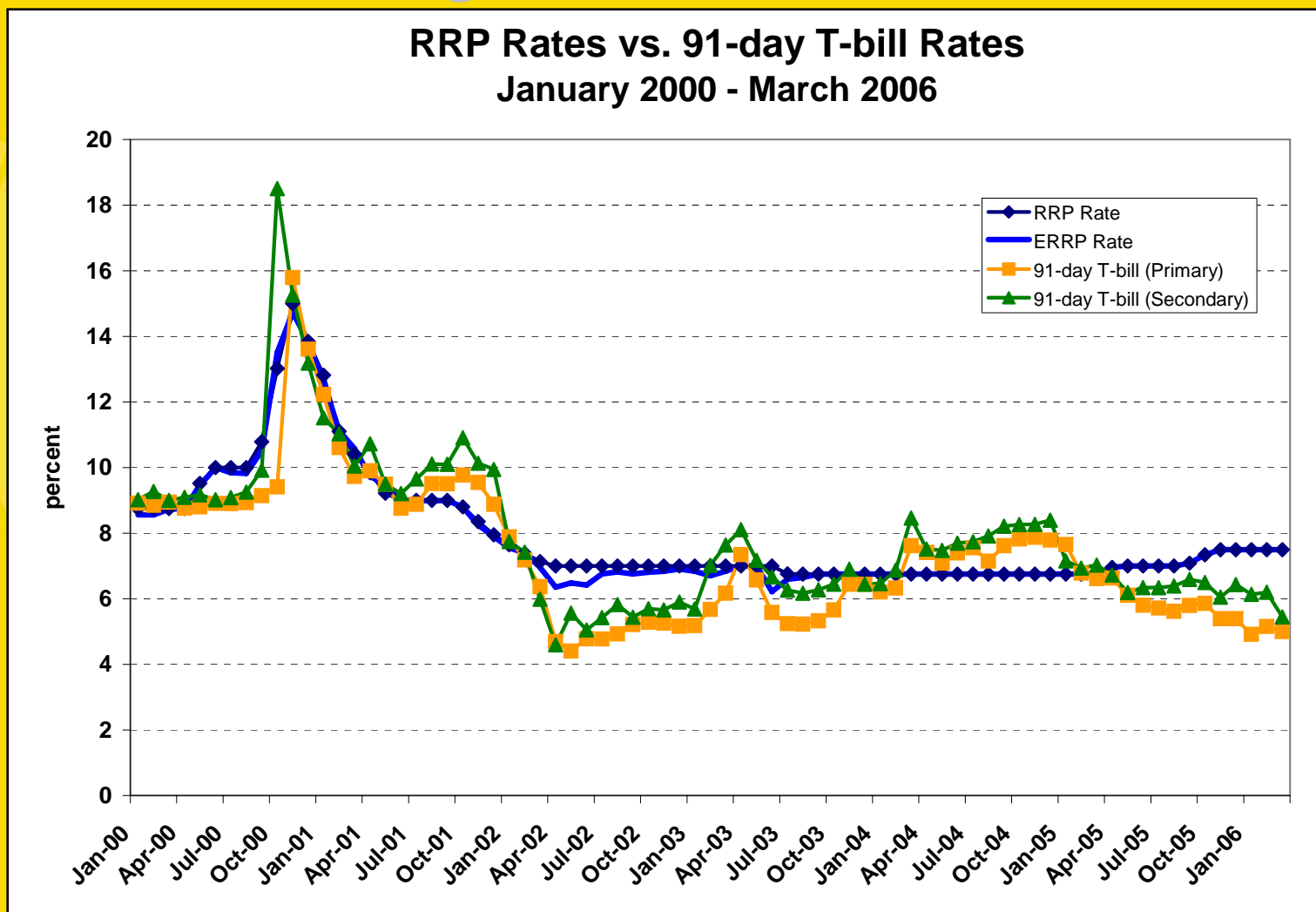


Transmission Mechanism of Monetary Policy: BSP-MEM





It has been observed that the 91-day T-bill rate has diverged from the RRP rate.





Nevertheless, econometric analysis tends to show that the BSP policy rate continues to play a significant role in the determination of 91-day T-bill rate.

- **The T-bill equation estimated from the BSP-MEM shows that the 91-day T-bill rate is determined by the following factors:**
 - BSP RRP rate, lagged one month
 - Deviation of real GDP from trend, lagged four months
 - Month-on-month changes in the exchange rate, lagged one month
 - 90-day LIBOR
 - Real money supply, lagged four months
 - First- and fourth-order autoregressive terms



Estimation Output: T-Bill Equation

Dependent Variable: TBILL
 Method: Least Squares
 Date: 09/05/05 Time: 16:49
 Sample (adjusted): 1988:09 1991:12 1992:02 1992:12 1993:02
 1993:12 1994:02 2005:03
 Included observations: 196 after adjustments
 Convergence achieved after 20 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	53.46856	20.40123	2.620850	0.0095
LOG(GDPQ(-4))-LGDP(AHP(-4))	1.562276	1.451408	1.076386	0.2831
D(LER(-1))	5.191072	3.231428	1.606433	0.1099
RRPO(-1)	0.104502	0.014581	7.166774	0.0000
LIBOR90	0.744998	0.317862	2.343776	0.0201
LOG(M3(-4)/CPI2000F(-4))	-4.978056	2.155397	-2.309578	0.0220
AR(1)	0.980207	0.041048	23.87948	0.0000
AR(4)	-0.071376	0.040276	-1.772180	0.0780
R-squared	0.958931	Mean dependent var	12.74857	
Adjusted R-squared	0.957402	S.D. dependent var	5.373788	
S.E. of regression	1.109110	Akaike info criterion	3.084954	
Sum squared resid	231.2637	Schwarz criterion	3.218754	
Log likelihood	-294.3255	F-statistic	627.0980	
Durbin-Watson stat	1.755605	Prob(F-statistic)	0.000000	
Inverted AR Roots	.87	.55	-.22-.32i	-.22+.32i



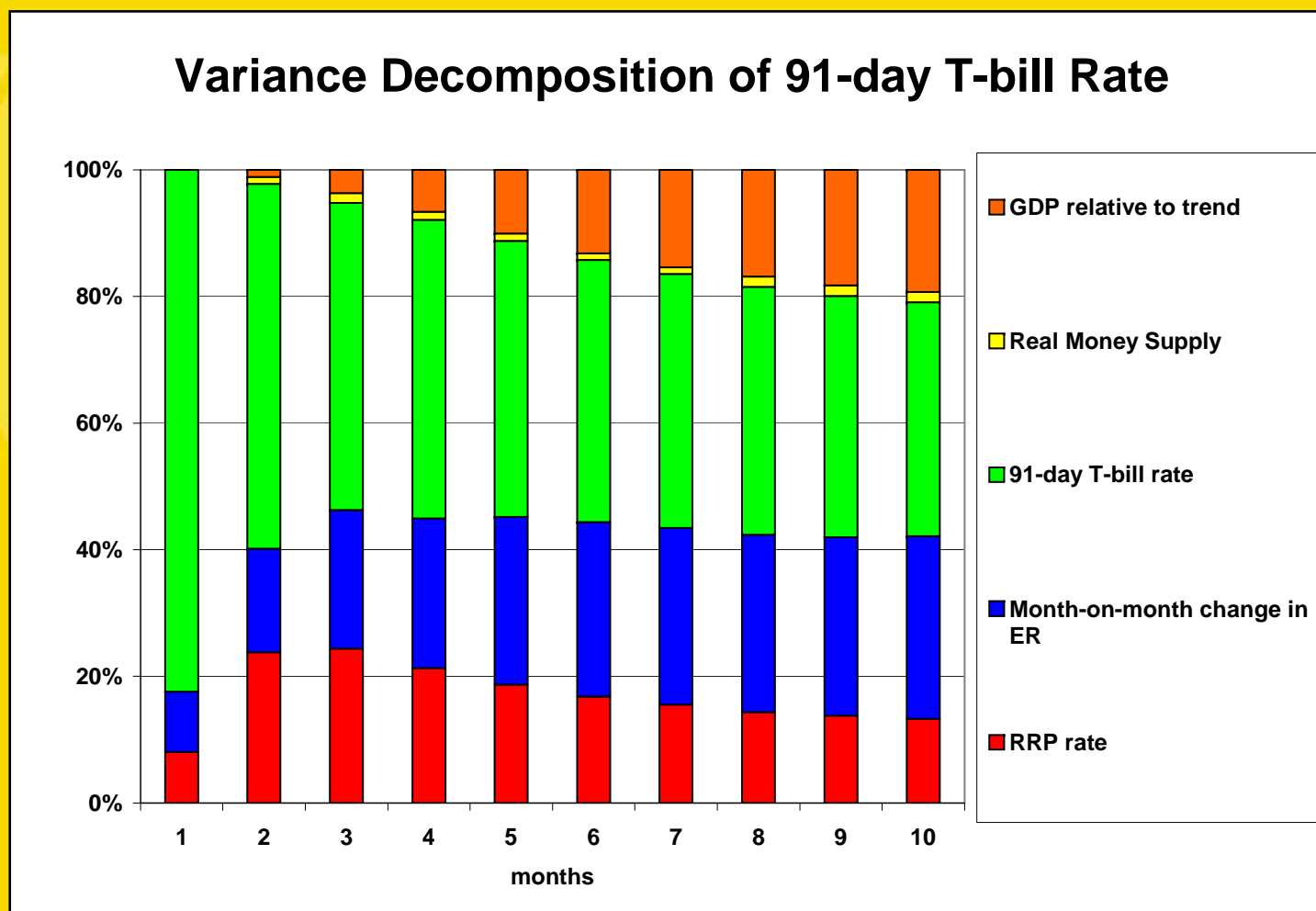
Of these factors, the RRP rate is the most significant determinant of the 91-day T-bill rate

- **The RRP rate has the highest level of statistical significance compared to other determinants of the 91-day T-bill rate, with the exception of past trend in the T-bill rate itself. ***

* It can be concluded from the estimation output, that at the 99 percent confidence level, the RRP rate impacts on the 91-day T-bill rate.



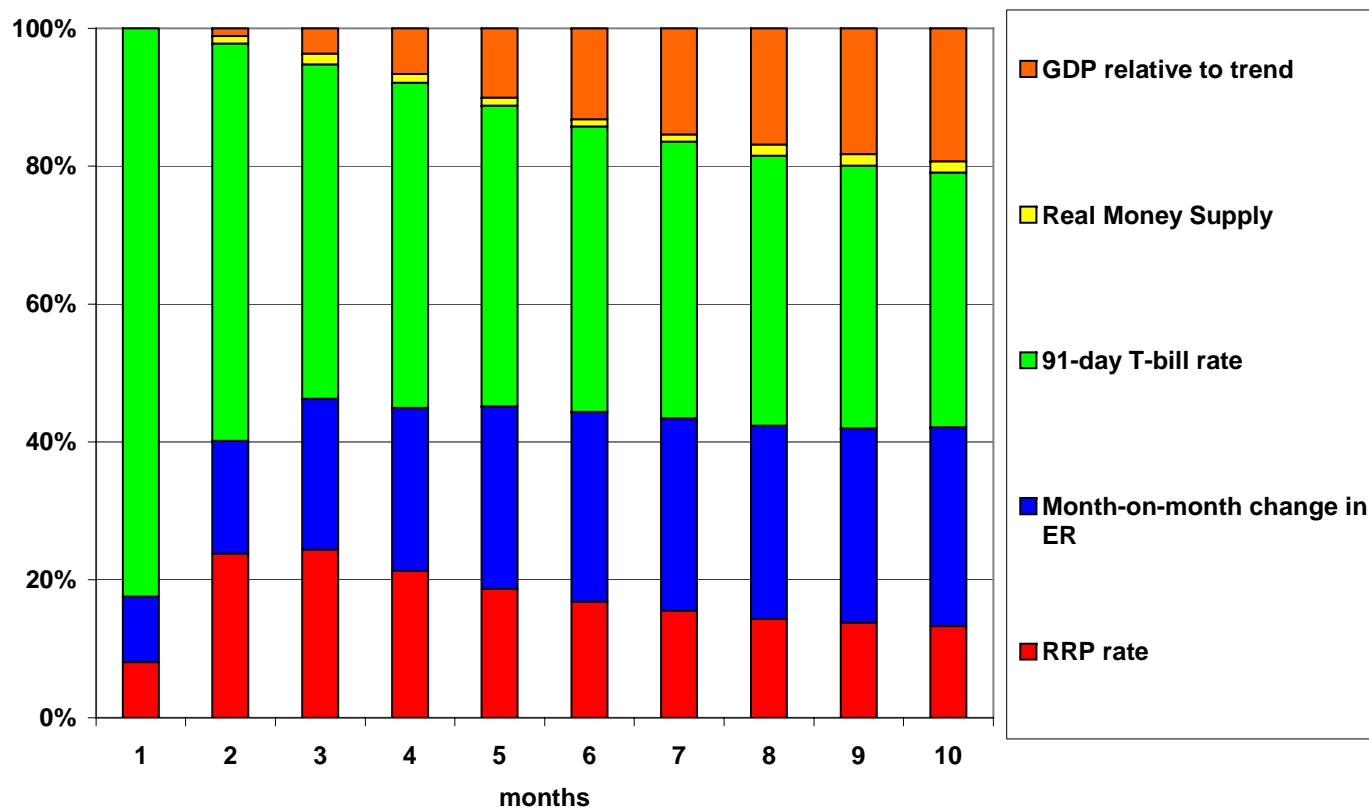
Moreover, next to the past trend of the 91-day T-bill rate, the RRP rate accounts for the largest source of variation in the bellwether rate in the very near term.





Beyond the third month, the exchange rate dominates the policy rate in terms of influence over the T-bill rate.

Variance Decomposition of 91-day T-bill Rate



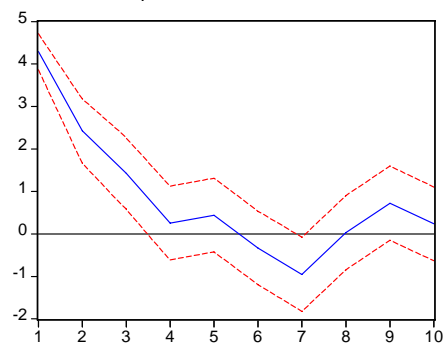


However, an analysis of the impact of an RRP rate shock on the T-bill rate and other variables shows that the pass-through of the RRP shock to the T-bill rate may be limited.

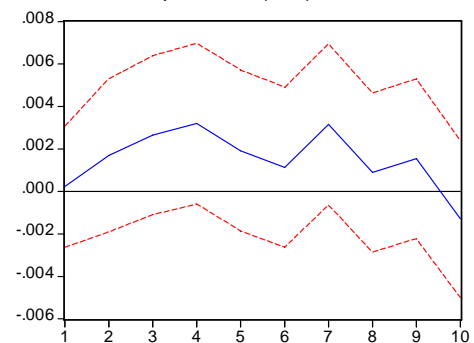


Response to Cholesky One S.D. Innovations \pm 2 S.E.

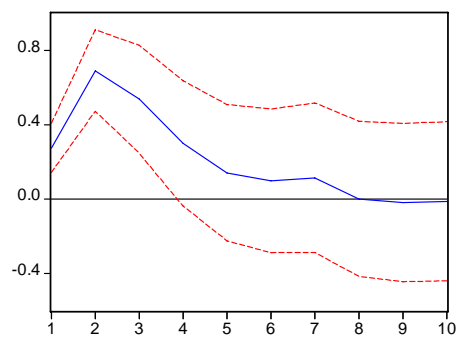
Response of RRPO to RRPO



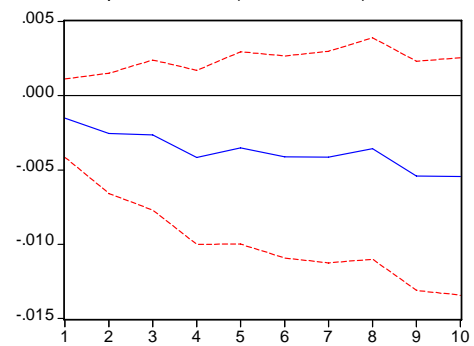
Response of D(LER) to RRPO



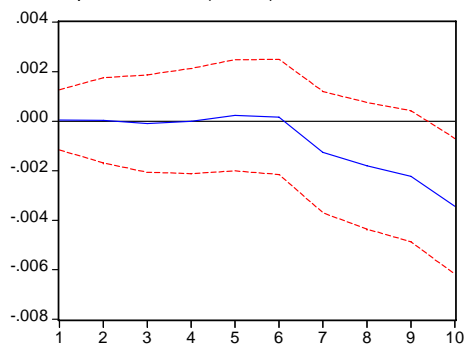
Response of TBILL to RRPO



Response of LOG(M3/CPI2000F) to RRPO



Response of LOG(GDPQ)-LGDPSAHP to RRPO





The correlation between RRP rates and T-bill rates remained high from January 2000 to March 2006, the correlation weakened for the period after the adoption of IT.

Correlation Matrix				
(January 2000 – March 2006)				
	RRP rate	ERRP rate	91-day T-bill rate (primary)	91-day T-bill rate (secondary)
RRP rate	1.000000	0.993167	0.843428	0.855609
ERRP rate	0.993167	1.000000	0.858916	0.876087
91-day T-bill rate (primary)	0.843428	0.858916	1.000000	0.884862
91-day T-bill rate (secondary)	0.855609	0.876087	0.884862	1.000000



Nonetheless, the correlation weakened for the period after the adoption of IT.

Correlation Matrices				
(January 2000 – December 2001)				
	RRP rate	ERRP rate	91-day T-bill rate (primary)	91-day T-bill rate (secondary)
RRP rate	1.000000	0.990675	0.825056	0.782363
ERRP rate	0.990675	1.000000	0.813285	0.805753
91-day T-bill rate (primary)	0.825056	0.813285	1.000000	0.593415
91-day T-bill rate (secondary)	0.782363	0.805753	0.593415	1.000000
(January 2002 – March 2006)				
	RRP rate	ERRP rate	91-day T-bill rate (primary)	91-day T-bill rate (secondary)
RRP rate	1.000000	0.778663	-0.455342	-0.395205
ERRP rate	0.778663	1.000000	-0.002162	0.015696
91-day T-bill rate (primary)	-0.455342	-0.002162	1.000000	0.911403
91-day T-bill rate (secondary)	-0.395205	0.015696	0.911403	1.000000



The weakening is consistent with IT as a framework of monetary policy.

- **Under IT, the policy rate is set in consideration on how inflation forecast compares with the target.**
- **The focus towards the inflation outlook imparts a stabilizing trend to the policy rate.**
- **Correlation between RRP rates and T-bill rates, in fact turned negative during the post-IT period. However, adjusting the policy rate for the impact of tiering corrects the relationship.**



Causality tests support the hypothesis that the way policy rates were set have changed since the adoption of IT.

DIRECTION OF CAUSALITY	
Before IT	After IT
T-bill (secondary) → RRP	T-bill (secondary) ← RRP
T-bill (secondary) → ERRP	T-bill (secondary) ← ERRP



DIRECTION OF CAUSALITY	
Before IT	After IT
T-bill (primary) ↔ RRP	T-bill (primary) ↔ RRP
T-bill (primary) ↔ ERRP	T-bill (primary) ↔ ERRP



In summary:

- **The BSP retains its capability to influence market interest rates through the adjustment of the policy rate.**
 - **Apart from the past trend in the T-bill rate itself, the policy rate is the most significant determinant of the T-bill rate over the very near term (three months).**
 - **Beyond this period, exchange rate changes dominate the policy rate in influencing the T-bill rate.**



To summarize:

- **The pass-through from the policy rate to the T-bill rate remains limited. Causality tests indicate that the channel of impact may also be indirect, through secondary rates.**



THE END

Thank you!