

TABLE 3  
Lagged VIX and the Relation between Daily Bond and Stock Returns

	1/86–12/00	1/88–12/00	1/86–6/93	7/93–12/00
<i>Panel A. Restrict <math>a_2</math> and <math>a_3 = 0</math></i>				
$a_0$	0.022 (2.77)	0.022 (2.95)	0.027 (2.22)	0.017 (1.67)
$a_1$	0.102 (5.04)	0.101 (6.02)	0.142 (3.42)	0.063 (3.18)
$R^2$ (%)	4.96	4.75	8.91	2.06
<i>Panel B. Restrict <math>a_3 = 0</math></i>				
$a_0$	0.018 (2.38)	0.019 (2.59)	0.024 (2.04)	0.011 (1.13)
$a_1$	0.792 (4.99)	1.231 (9.40)	0.625 (6.21)	1.722 (10.94)
$a_2$	-0.208 (-4.33)	-0.355 (-8.68)	-0.142 (-5.24)	-0.513 (-10.48)
$R^2$ (%)	9.32	10.64	11.75	14.91
$a_1 + a_2 \ln(\text{VIX})$ (at the median VIX)	0.174	0.192	0.206	0.178
$a_1 + a_2 \ln(\text{VIX})$ (at VIX's 95th pctl.)	0.073	0.012	0.129	-0.041
$a_1 + a_2 \ln(\text{VIX})$ (at VIX's 5th pctl.)	0.278	0.360	0.257	0.480
<i>Panel C. <math>CV_{t-1} = \text{Lagged 22-Day Stock-Bond Return Correlation}</math></i>				
$a_0$	0.019 (2.37)	0.018 (2.54)	0.024 (2.07)	0.011 (1.17)
$a_1$	0.504 (4.84)	0.606 (4.59)	0.570 (4.41)	1.063 (5.47)
$a_2$	-0.136 (-4.35)	-0.173 (-4.18)	-0.132 (-4.00)	-0.311 (-5.07)
$a_3$	0.241 (5.03)	0.260 (9.16)	0.054 (0.51)	0.211 (4.72)
$R^2$ (%)	13.06	14.39	11.83	16.93
<i>Panel D. <math>CV_{t-1} = \text{Asian-Russian Crisis Dummy}^a</math></i>				
	1/86–12/00 Asian and Russian Crisis	1/86–12/00 Asian Only	1/86–12/00 Russian Only	
$a_0$	0.018 (2.33)	0.018 (2.35)	0.018 (2.35)	
$a_1$	0.747 (6.37)	0.793 (5.24)	0.748 (5.92)	
$a_2$	-0.188 (-5.39)	-0.207 (-4.51)	-0.190 (-5.03)	
$a_3$	-0.196 (-6.63)	-0.184 (-5.04)	-0.186 (-5.10)	
$R^2$ (%)	11.16	9.83	10.54	

Table 3 reports results from estimating the following regression,

$$B_t = a_0 + (a_1 + a_2 \ln(\text{VIX}_{t-1}) + a_3 CV_{t-1})S_t + \nu_t,$$

where  $B_t$  and  $S_t$  are the daily 10-year T-bond and stock returns, respectively;  $\ln(\text{VIX}_{t-1})$  is the natural log of the CBOE's VIX at the end of period  $t - 1$ ;  $\nu_t$  is the residual,  $CV_{t-1}$  is the additional conditioning variable noted in Panels C and D, and the  $a_i$ s are estimated coefficients. The overall sample period is 1986 to 2000. The regression is estimated by OLS and  $t$ -statistics are in parentheses, calculated with autocorrelation and heteroskedastic-consistent standard errors per the Newey and West (1987) method with five lags.

<sup>a</sup>For the Asian crisis only model,  $CV_{t-1} = 1$  over the October 1 to December 31, 1997 period, and zero otherwise. For the "Russian crisis only" model,  $CV_{t-1} = 1$  over the July 6 to December 31, 1998 period, and zero otherwise. For the Asian and Russian crises,  $CV_{t-1} = 1$  over both crisis periods.