Table 2: Correlations of S&P 500 Index Option Returns

Reported below are correlations among 12 option returns time series: (1) CSTOTM (short-term out-of-the-money calls), (2) CSTATM (short-term at-the-money calls), (3) CSTITM (short-term in-the-money calls), (4) CLTOTM (long-term out-of-the money calls), (5) CLTATM (long-term at-the-money calls), (6) CLTITM (long-term in-the-money calls), (7) PSTOTM (short-term out-of-the-money puts), (8) PSTATM (short-term at-the-money puts), (9) PSTITM (short-term in-the-money puts), (10) PLTOTM (long-term out-of-the-money puts), (11) PLTATM (long-term at-the-money puts), and (12) PLTITM (long-term in-the-money puts). The sample period extends from June 1, 1988 through May 31, 1994, for a total of 1506 daily observations.

Return Series	CSTOTM	CSTATM	CSTITM	CLTOTM	CLTATM	CLTITM	PSTOTM	PSTATM	PSTITM	PLTOTM	PLTATM	PLTITM
CSTOTM	1.00											
CSTATM	0.88	1.00										
CSTITM	0.79	0.89	1.00									
CLTOTM	0.80	0.84	0.77	1.00								
CLTATM	0.85	0.91	0.84	0.88	1.00							
CLTITM	0.84	0.90	0.85	0.86	0.96	1.00						
PSTOTM	-0.70	-0.81	-0.79	-0.72	-0.83	-0.85	1.00					
PSTATM	-0.80	-0.91	-0.89	-0.79	-0.89	-0.90	0.93	1.00				
PSTITM	-0.82	-0.92	-0.89	-0.81	-0.90	-0.91	0.87	0.94	1.00			
PLTOTM	-0.72	-0.78	-0.75	-0.69	-0.81	-0.83	0.83	0.84	0.83	1.00		
PLTATM	-0.78	-0.87	-0.86	-0.78	-0.88	-0.90	0.87	0.92	0.92	0.90	1.00	
PLTITM	-0.78	-0.87	-0.86	-0.79	-0.89	-0.91	0.85	0.90	0.92	0.86	0.94	1.00

Table 3: Correlations among S&P 500 Index Returns, S&P 500 Index Option Returns and Option Index Returns

Reported below are correlations between a pair of option return and the S&P 500 index return (or an equally weighted option index return). The option-return time series includes (1) CSTOTM (short-term out-of-the-money calls), (2) CSTATM (short-term at-the-money calls), (3) CSTITM (short-term in-the-money calls), (4) CLTOTM (long-term out-of-the money calls), (5) CLTATM (long-term at-the-money calls), (6) CLTITM (long-term in-the-money calls), (7) PSTOTM (short-term out-of-the-money puts), (8) PSTATM (short-term at-the-money puts), (9) PSTITM (short-term in-the-money puts), (10) PLTOTM (long-term out-of-the-money puts), (11) PLTATM (long-term at-the-money puts), and (12) PLTITM (long-term in-the-money puts). The option indexes include equally weighted "market" (EW), equally weighted short-term (EW Short-term), and equally weighted long-term (EW Long-term) option indexes. The sample period extends from June 1, 1988 through May 31, 1994, for a total of 1506 daily observations.

Return Series	CSTOTM	CSTATM	CSTITM	CLTOTM	CLTATM	CLTITM	PSTOTM	PSTATM	PSTITM	PLTOTM	PLTATM	PLTITM
S&P 500 Index	0.78	0.89	0.90	0.77	0.87	0.88	-0.81	-0.89	-0.92	-0.80	-0.89	-0.90
EW	0.36	0.17	0.06	0.26	0.11	0.06	0.30	0.15	0.05	0.21	0.14	0.10
EW short-term	0.37	0.15	0.06	0.13	0.05	0.01	0.34	0.17	0.06	0.14	0.10	0.07
EW long-term	0.18	0.12	0.03	0.42	0.20	0.13	0.08	0.03	0.01	0.28	0.16	0.10