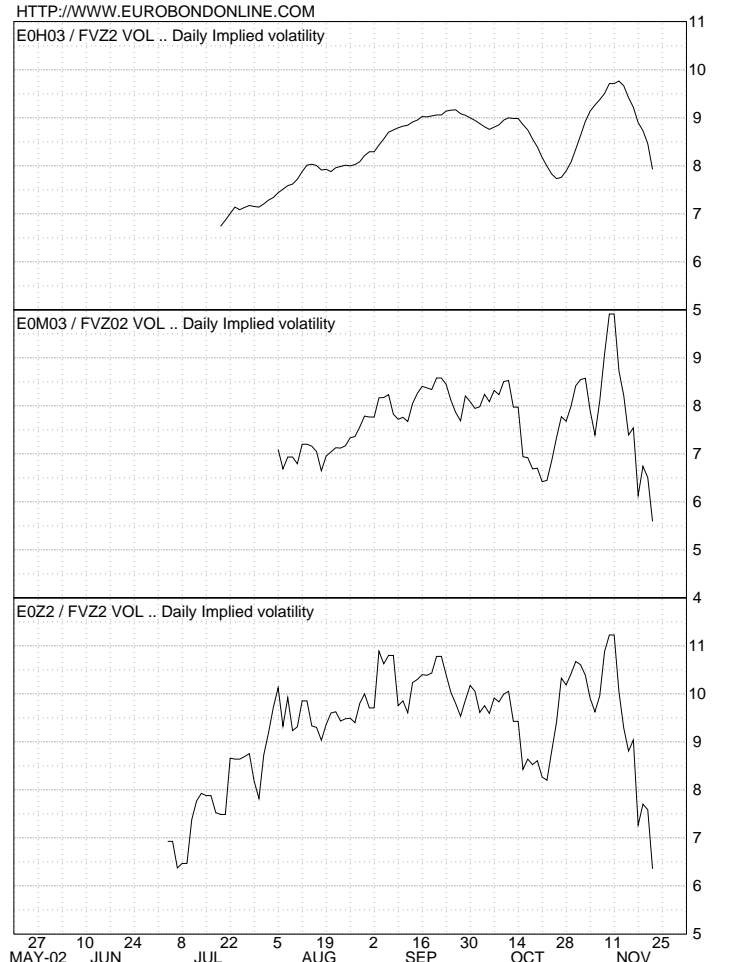


HTTP://WWW.EUROBONDONLINE.COM
 FV 6% 5YR - EDU03 .. Daily HLC plot



DECEMBER 02 IMM 1YR EURO MIDCURVE OPTIONS										
11/22/02 days to exp: 24 int. rate: 1.21% calc. imp vol of *: 51.00%										
strike	last imp vol	delta	gamma	theta-7	vega	prem	iv-skew			
EDZ03 97.3450										
97.8700C	0.0100s	57.03	.06	0.29	0.00574	0.00079	0.01000	+6.03		
97.7500C	0.0175s	52.64	.10	0.48	0.00954	0.00119	0.01750	+1.64		
97.6200C	0.0350s	49.90	.18	0.77	0.01314	0.00179	0.03500	-1.10		
97.5000C	0.0750s	52.78	.30	0.97	0.01953	0.00238	0.07500	+1.79		
97.3700C	0.1225s	49.90*	.44	1.16	0.02122	0.00269	0.12250	-1.10		
97.2500C	0.1950s	51.66*	.58	1.11	0.02159	0.00266	0.10000	+6.66		
97.1200C	0.2800s	49.46	.72	1.00	0.01726	0.00231	0.05500	-1.54		
97.0000C	0.3800s	51.27	.81	0.79	0.01393	0.00188	0.03500	+2.27		
96.7500C	0.6075s	53.91	.92	0.41	0.00709	0.00105	0.01250	+2.91		
96.5000C	0.8450s	.00	1.00	0.00	0.00000	0.00000	0.00000			
98.2500P	0.9100s	86.72	.98	0.09	0.00360	0.00039	0.00500	+35.72		
97.7500P	0.4225s	52.93	.90	0.48	0.00858	0.00120	0.01750	+1.93		
97.6200P	0.3150s	52.73	.81	0.76	0.01446	0.00186	0.04000	+1.74		
97.5000P	0.2300s	52.83	.70	0.97	0.01951	0.00239	0.07500	+1.83		
97.3700P	0.1525s	51.76*	.55	1.12	0.02200	0.00269	0.12750	+7.76		
97.2500P	0.1000s	51.61*	.42	1.11	0.02159	0.00266	0.10000	+6.11		
97.1200P	0.0600s	51.56	.29	0.98	0.01839	0.00234	0.06000	+5.56		
97.0000P	0.0350s	51.17	.19	0.79	0.01396	0.00188	0.03500	+1.17		
96.8700P	0.0125s	51.95	.12	0.57	0.00981	0.00133	0.01250	+9.96		
96.7500P	0.0125s	53.52	.08	0.41	0.00705	0.00103	0.01250	+2.52		
MARCH 03 IMM 1YR EURO MIDCURVE OPTIONS										
11/22/02 days to exp: 115 int. rate: 1.21% calc. imp vol of *: 47.74%										
strike	last imp vol	delta	gamma	theta-7	vega	prem	iv-skew			
EDH04 96.4350										
98.0000C	0.0300s	55.57	.06	0.13	0.00356	0.00217	0.03000	+7.83		
97.7500C	0.0475s	49.22	.10	0.21	0.00462	0.00314	0.04750	+1.48		
97.5000C	0.1100s	51.03	.20	0.31	0.00740	0.00477	0.11000	+3.29		
97.2500C	0.1950s	50.83	.30	0.40	0.00931	0.00597	0.19500	+3.09		
97.0000C	0.2925s	48.02*	.41	0.47	0.00986	0.00638	0.29250	+2.28		
96.7500C	0.4300s	46.95*	.53	0.49	0.00978	0.00681	0.24500	-7.79		
96.5000C	0.5975s	46.29	.65	0.46	0.00893	0.00638	0.16250	-1.45		
96.2500C	0.7825s	44.58	.75	0.41	0.00722	0.00546	0.09750	-3.16		
96.0000C	0.9975s	45.07	.82	0.33	0.00587	0.00451	0.06250	-2.67		
95.7500C	1.2250s	45.80	.87	0.26	0.00463	0.00362	0.04000	-1.94		
98.2500P	1.3250s	59.77	.96	0.07	0.00192	0.00129	0.01000	+12.03		
97.5000P	0.6725s	50.93	.80	0.31	0.00725	0.00476	0.10750	+3.19		
97.2500P	0.5100s	51.03	.70	0.40	0.00928	0.00597	0.19500	+3.29		
97.0000P	0.3575s	48.05*	.58	0.47	0.00985	0.00668	0.29250	+3.11		
96.7500P	0.2450s	46.85*	.46	0.49	0.00980	0.00681	0.24500	-8.89		
96.5000P	0.1650s	46.41	.35	0.46	0.00906	0.00597	0.16500	-1.33		
96.2500P	0.1000s	44.58	.25	0.41	0.00738	0.00546	0.10000	-3.16		
96.0000P	0.0650s	44.82	.17	0.33	0.00601	0.00448	0.06500	-2.92		
95.7500P	0.0450s	45.95	.13	0.26	0.00494	0.00364	0.04500	-1.79		
95.5000P	0.0350s	48.24	.10	0.21	0.00433	0.00306	0.03500	+5.50		
JUNE 03 IMM 1YR EURO MIDCURVE OPTIONS										
11/22/02 days to exp: 206 int. rate: 1.21% calc. imp vol of *: 44.24%										
strike	last imp vol	delta	gamma	theta-7	vega	prem	iv-skew			
EDM04 96.5650										
97.7500C	0.0700s	50.73	.10	0.13	0.00376	0.00444	0.07000	+6.49		
97.5000C	0.1150s	48.34	.14	0.18	0.00479	0.00598	0.11500	+4.18		
97.2500C	0.1700s	48.08	.21	0.28	0.00585	0.00740	0.17000	+2.53		
97.0000C	0.2500s	45.41	.28	0.29	0.00671	0.00872	0.25000	+1.17		
96.7500C	0.3525s	44.26*	.37	0.33	0.00726	0.00967	0.35250	+0.02		
96.5000C	0.4875s	44.24*	.45	0.34	0.00760	0.01016	0.42250	+0.00		
96.2500C	0.6350s	43.41	.54	0.35	0.00742	0.01017	0.32000	-8.83		
96.0000C	0.8250s	42.94	.62	0.34	0.00697	0.00976	0.24000	-1.30		
95.7500C	0.9900s	42.36	.69	0.32	0.00627	0.00902	0.17500	-1.88		
95.5000C	1.1875s	41.58	.76	0.29	0.00536	0.00802	0.12250	-2.67		
97.0000P	0.6825s	45.46	.71	0.29	0.00662	0.00872	0.24750	+1.22		
96.7500P	0.5375s	44.38*	.63	0.33	0.00723	0.00967	0.35250	+1.14		
96.5000P	0.4225s	44.19*	.54	0.35	0.00760	0.01016	0.42250	-0.05		
96.2500P	0.3225s	43.43	.45	0.35	0.00749	0.01017	0.32250	-8.83		
96.0000P	0.2425s	42.82	.37	0.34	0.00708	0.00976	0.24250	-1.42		
95.7500P	0.1800s	42.31	.30	0.32	0.00644	0.00902	0.18000	-1.93		
95.5000P	0.1300s	41.63	.24	0.29	0.00562	0.00803	0.13000	-2.62		
95.2500P	0.0950s	41.38	.19	0.25	0.00483	0.00699	0.09500	-2.86		
95.0000P	0.0700s	41.36	.15	0.21	0.00413	0.00599	0.07000	-2.89		
94.7500P	0.0500s	41.06	.11	0.18	0.00335	0.00496	0.05000	-3.18		



MARCH 03 CBT 5-YEAR T-NOTE OPTIONS										
11/22/02 days to exp: 91 int. rate: 1.21% calc. imp vol of *: 5.53%										
strike	last imp vol	delta	gamma	theta-7	vega	prem	iv-skew			
FVH03 110-145										
111-225C	0-48s	5.79	.35	0.1161	0-03	0-13	0-48	+2.27		
111-160C	0-48s	5.44	.37	0.1253	0-03	0-13	0-48	-1.08		
111-000C	0-61s	5.48	.43	0.1298	0-03	0-14	0-61	-0.05		
110-225C	1-12s	5.96	.47	0.1208	0-03	0-14	1-12	+4.43		
110-160C	1-12s	5.52*	.50	0.1307	0-03	0-14	1-12	-0.01		
110-000C	1-30s	5.62*	.56	0.1268	0-03	0-14	1-01	+0.09		
109-225C	1-50s	6.29	.59	0.1117	0-03	0-14	1-02	+7.76		
109-160C	1-50s	5.72	.62	0.1199	0-03	0-13	0-53	+1.19		
109-000C	2-07s	5.76	.68	0.1119	0-03	0-13	0-42	+2.23		
111-225P	1-51s	4.80	.67	0.1354	0-02	0-13	0-35	-7.73		
111-160P	1-51s	5.46	.63	0.1249	0-03	0-13	0-48	-0.06		
111-000P	1-32s	5.49	.56	0.1295	0-03	0-14	0-61	-3.03		
110-225P	1-15s	5.03	.53	0.1430	0-03	0-14	0-63	-5.50		
110-160P	1-15s	5.52*	.50	0.1307	0-03	0-14	1-12	-0.01		
110-000P	1-01s	5.62*	.43	0.1268	0-03	0-14	1-01	+0.09		
109-225P	0-53s	5.32	.39	0.1307	0-03	0-14	0-53	-2.20		
109-160P	0-53s	5.70	.37	0.1202	0-03	0-13	0-53	+1.17		
109-000P	0-42s	5.74	.32	0.1122	0-03	0-13	0-42	+2.21		
108-225P	0-35s	5.64	.28	0.1080	0-03	0-12	0-35	+1.11		