

OPTIMA VOLATILITY PICTURE -- EURODOLLAR ^ Thu 5/23/02

IMPLIED VOLATILITY OVERVIEW -- EDU volatility finished +1.52 at a 1-1/4 month high settlement at 35.68. The EDU futures contract settled at +.0350 at 97.6500. The short-term trend for EDU volatility is bullish as volatility posted a 1-1/4 month high settle yesterday.

MATURITY STRUCTURE OF IMPLIED VOLATILITY -- The maturity structure is upward sloping in shape. Imp vol: EDU was +1.52 at 35.68 and EDZ +1.60 was at 36.79.

RICH/CHEAP ANALYSIS -- The Volatility Cheapness Indexes were unchanged with EDU and EDZ rich at 100.0

SIGMA BOUNDARY -- The 1-standard deviation moves for today are: EDU +/-0.0550, EDZ +/-0.0700.

SUPPORT/RESISTANCE LEVELS -- EURODOLLAR IMPLIED VOLATILITY (EDU02)

44.49	Contract high (11/7/01)	32.90	20-day implied volatility average
43.51	5-3/4 month high (12/31/01)	30.32	9-month low (May 1)
38.21	3-3/4 month high (2/6/02)	22.87	9-1/4 month low (9/04/01)
36.70	2-3/4 month high (April 9)	22.32	9-1/2 month low (8/27/01)
*35.68	1-1/4 month high (Wednesday)	20.60	10-1/4 month low (7/26/01)
33.42	60-day implied volatility average	19.52	Contract low (7/5/01)

Note: Call for a User Manual that has explanations of the volatility terms used above.

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OPTIMA VOLATILITY SUMMARY - IMM EURODOLLARS

As of: 052202	:	EDM02	EDU02	EDZ02	EDH03	EDM03	EDU03
Underlying Settle:	:	98.0430s	97.6500s	97.0400s	96.4450s	95.8800s	95.4550s
Change:	:	+.0160	+.0350	+.0550	+.0600	+.0550	+.0500
Implied Volatility	:	22.02s	35.68s	36.79s	33.94s	30.02s	27.19s
Change from Prev:	:	+.72	+.77	+1.10	+1.17	+.34	+.46
last 20Days High:	:	22.02	35.68	36.79	33.94	30.02	27.19
Avg:	:	19.89	33.08	33.87	31.14	28.35	25.75
Low:	:	17.32	30.32	31.63	28.86	26.25	24.06
last 60Days High:	:	33.05	36.70	36.79	33.94	30.02	27.84
Avg:	:	25.38	33.40	32.97	30.03	27.32	25.14
Low:	:	17.32	30.32	30.13	26.98	24.97	23.38
Historical 20 Day:	:	21.15%	51.01%	52.52%	44.75%	35.12%	29.65%
Volatility 30 Day:	:	19.44%	43.88%	44.92%	38.26%	30.24%	25.50%
50 Day:	:	22.74%	40.61%	40.92%	34.99%	28.24%	24.84%
100 Day:	:	36.19%	46.44%	44.03%	39.51%	33.17%	28.87%
200 Day:	:	44.41%	48.64%	44.60%	39.81%	34.21%	30.43%

Notes: Implied Volatility is interpolated for the at-the-money straddle.

OPTIMA VOLATILITY CHEAPNESS INDEX

Historical Volatility							
Max	:	41.5	31.2	26.7	24.7	24.1	22.5
Median	:	12.3	12.4	12.5	13.0	13.9	14.0
Min	:	2.5	5.4	6.0	7.1	7.9	8.9
Vol Cheapness Ind:	:	88.2	100.0	100.0	100.0	100.0	100.0
change	:	+.9	unch	unch	unch	unch	unch
Last 20 sess							
High	:	88.2	100.0	100.0	100.0	100.0	100.0
Avg	:	79.1	100.0	100.0	100.0	100.0	100.0
Low	:	73.6	100.0	100.0	100.0	100.0	100.0
Last 60 sess							
High	:	96.5	100.0	100.0	100.0	100.0	100.0
Avg	:	88.0	100.0	100.0	100.0	100.0	100.0
Low	:	73.6	100.0	100.0	100.0	100.0	100.0
Days to Expiration	:	26	117	208	299	390	481

Notes: VCI ranks implied vol on a percentile basis (100 max, 0 min) against historical vol for given days to expiration.

OPTIMA SIGMA BOUNDARY

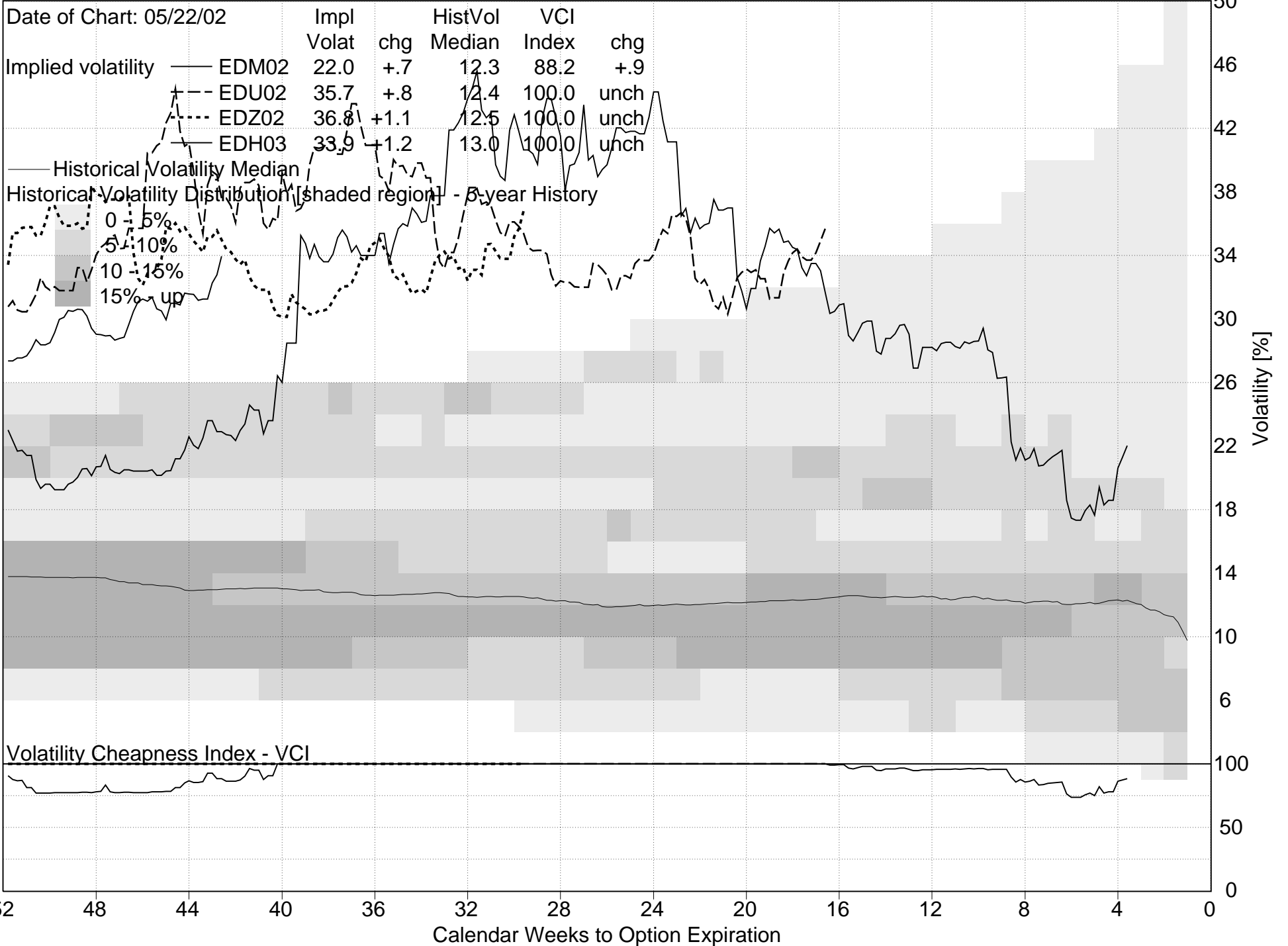
Today: +1 Std Dev:	:	.0270	.0520	.0680	.0750	.0770	.0770
-1 Std Dev:	:	.0270	.0530	.0690	.0770	.0790	.0790
68% H:	:	98.0690	97.7020	97.1080	96.5200	95.9570	95.5320
L:	:	98.0150	97.5970	96.9710	96.3680	95.8010	95.3760
95% H:	:	98.0960	97.7540	97.1760	96.5950	96.0340	95.6090
L:	:	97.9880	97.5430	96.9010	96.2910	95.7230	95.2980
99% H:	:	98.1230	97.8070	97.2430	96.6710	96.1120	95.6870
L:	:	97.9600	97.4900	96.8320	96.2140	95.6440	95.2190
20Days +1 Std Dev:	:	.1180	.2250	.2910	.3240	.3340	.3350
Out: -1 Std Dev:	:	.1250	.2480	.3230	.3570	.3640	.3620
To +1 Std Dev:	:	.1120	.4300	.7180	.9400	1.0990	1.2180
Expir- -1 Std Dev:	:	.1190	.5260	.9480	1.2790	1.4990	1.6650
ation 68% H:	:	98.1540	98.0800	97.7580	97.3850	96.9790	96.6730
L:	:	97.9240	97.1240	96.0920	95.1660	94.3810	93.7900
95% H:	:	98.2660	98.5100	98.4760	98.3260	98.0780	97.8920
L:	:	97.8050	96.5980	95.1450	93.8880	92.8820	92.1250
99% H:	:	98.3780	98.9390	99.1930	99.2660	99.1770	99.1100
L:	:	97.6870	96.0720	94.1970	92.6090	91.3830	90.4600

Notes: Shows probability of closing within price range based on implied volatility on sub-annual basis. Call for charts & info

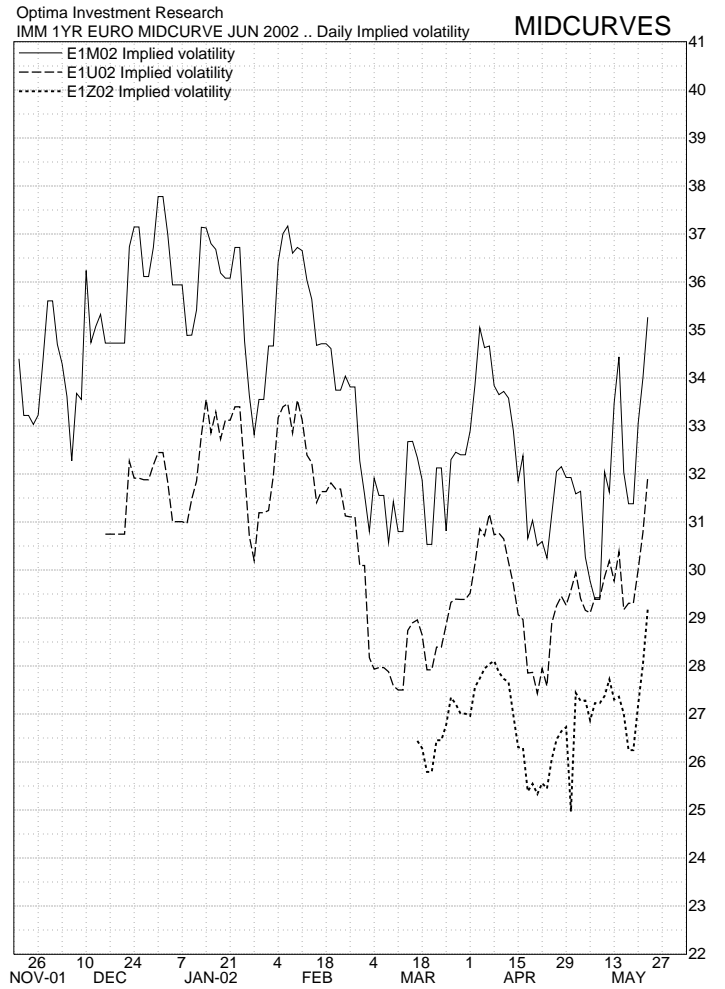
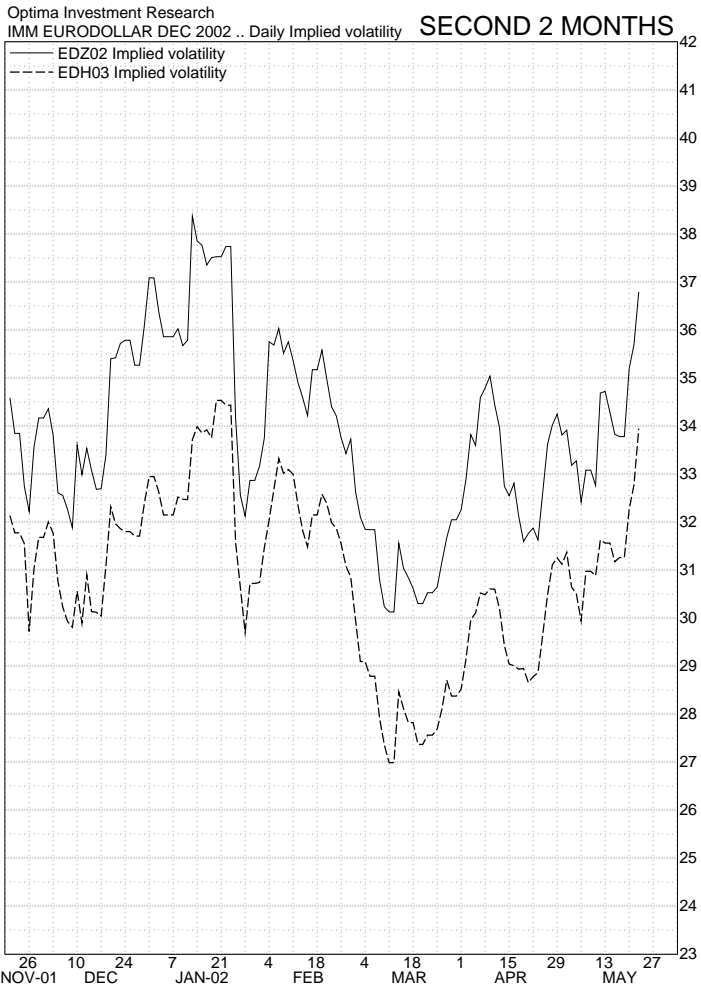
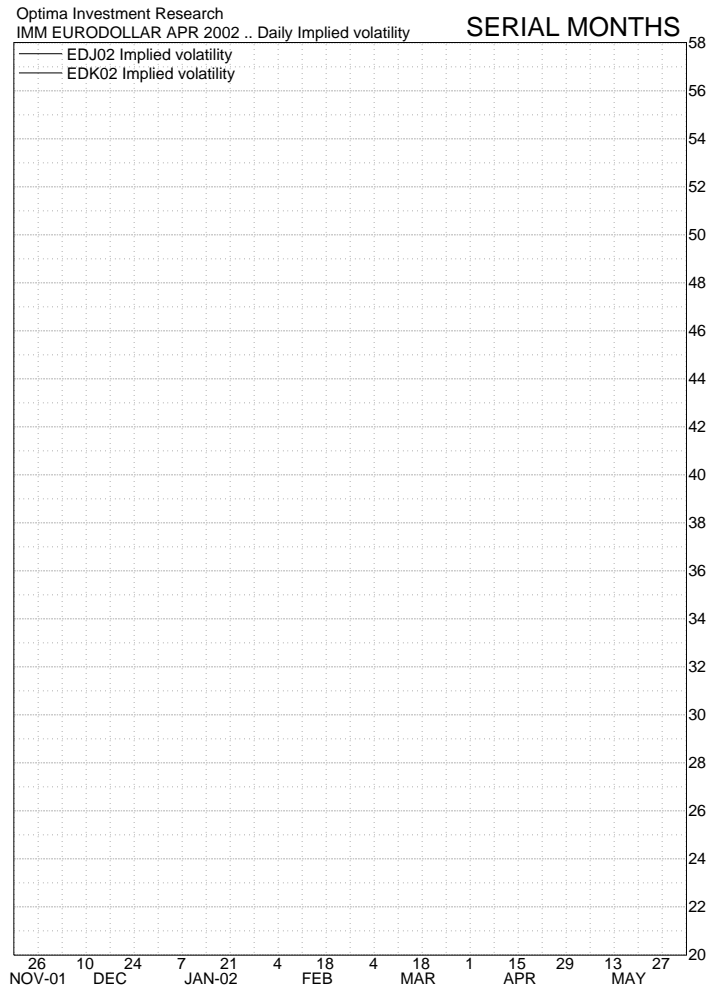
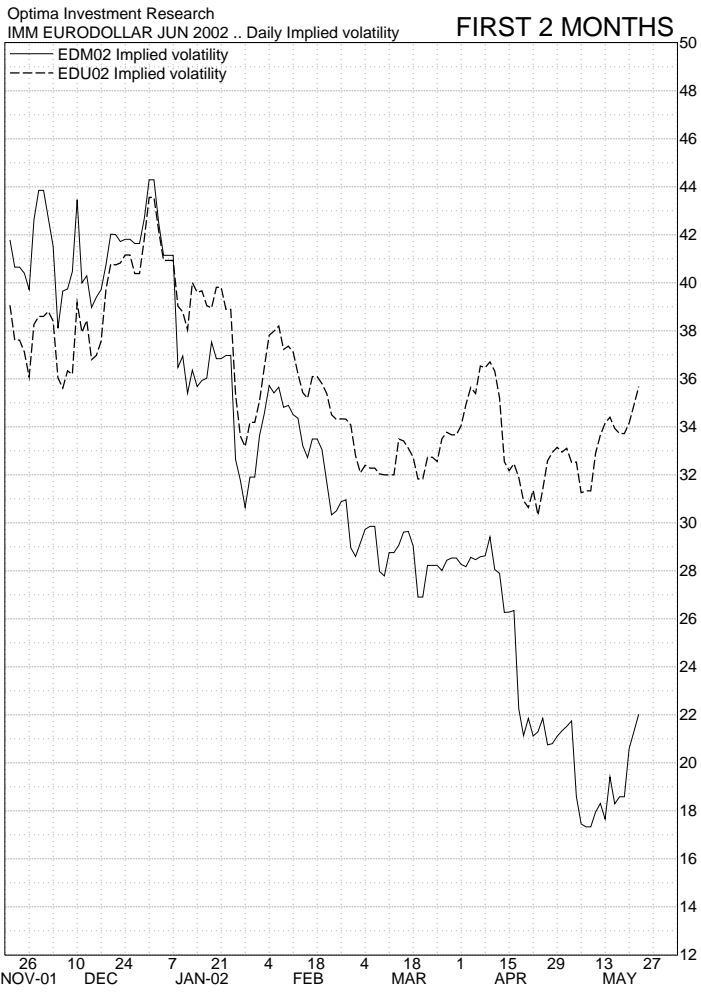
IMM EURODOLLAR JUN 2002 .. Daily Implied volatility



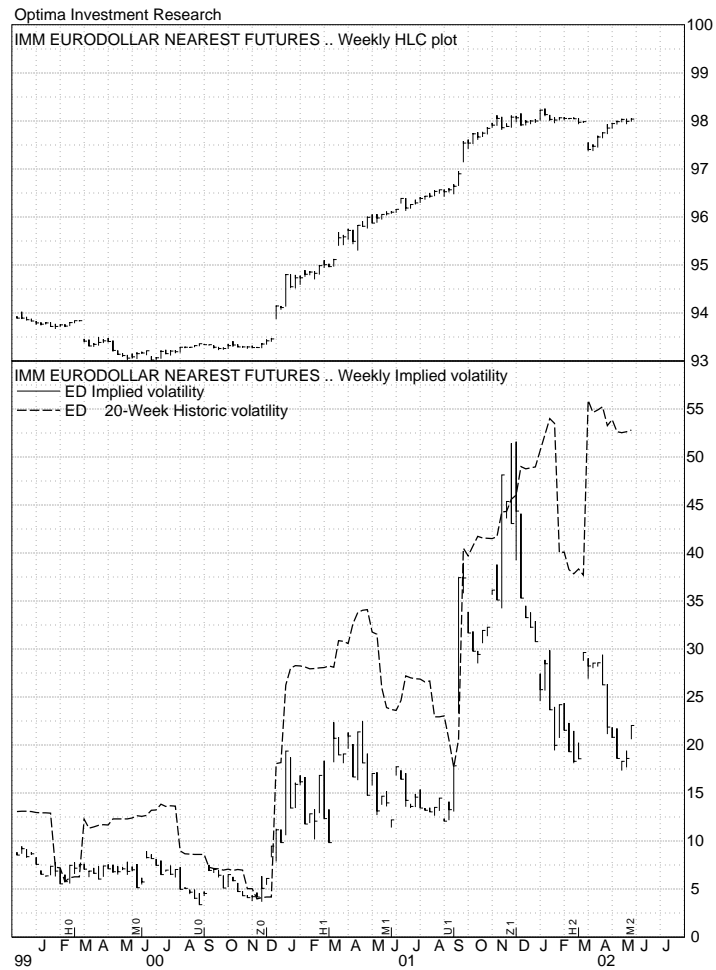
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 IMM EURODOLLAR .. Volatility Cone



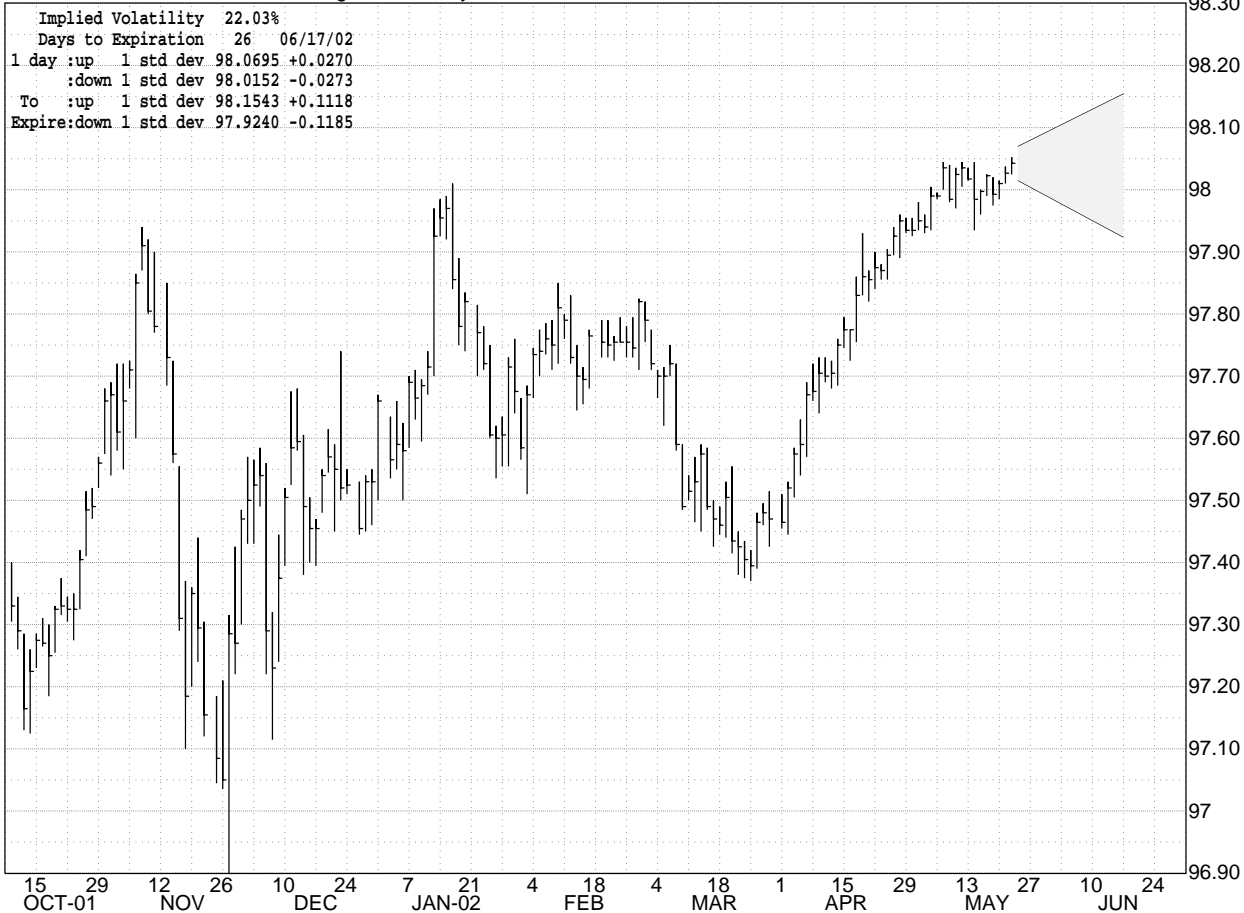
EURODOLLAR IMPLIED VOLATILITIES



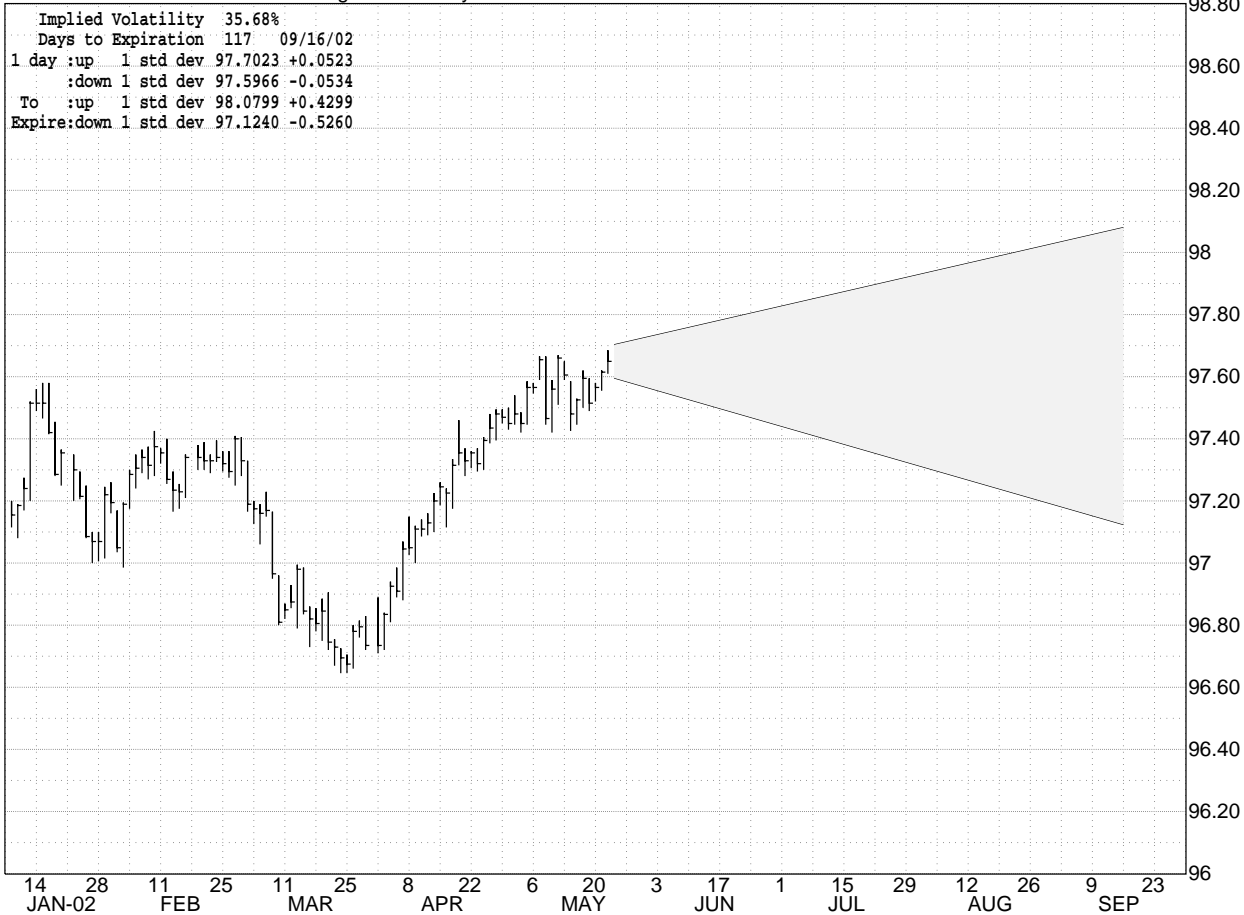
ED IMPLIED VS HISTORICAL - DAILY & WEEKLY



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 IMM EURODOLLAR JUN 2002 .. Sigma Boundary



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 IMM EURODOLLAR SEP 2002 .. Sigma Boundary



ED QUOTES & SKEWS - FRONT MONTHS

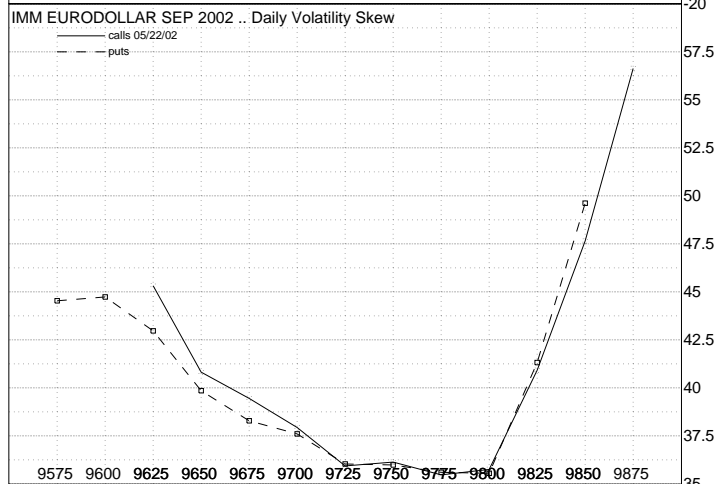
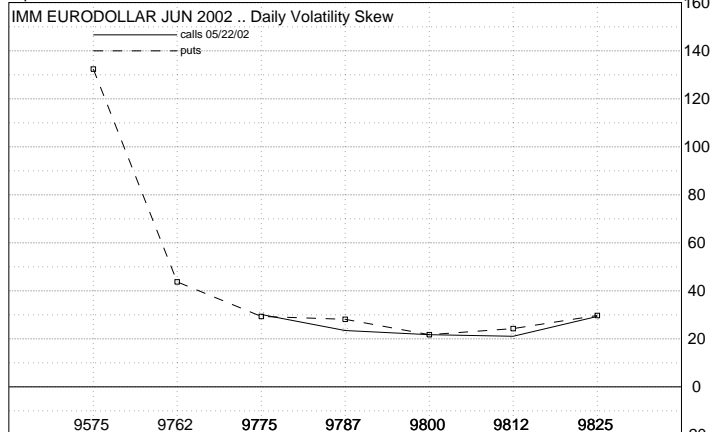
JUNE 02 IMM EURODOLLAR OPTIONS
05/22/02 days to exp: 26 int. rate: 1.72% calc. imp vol of *: 22.03%

strike	last imp vol	delta	gamma	theta-7	vega	prem	iv-skew
EDM02 98.0425							
98.2500C	.5s 29.30	.07	0.88	0.00253	0.00073	0.00500	+7.27
98.1200C	1.5s 21.09*	.23	2.74	0.00452	0.00159	0.01500	- .93
98.0000C	7.0s 21.68*	.63	3.32	0.00609	0.00197	0.02750	- .35
97.8700C	18.0s 23.44	.91	1.36	0.00250	0.00091	0.00500	+1.41
97.7500C	29.5s 30.08	.95	0.60	0.00160	0.00052	0.00250	+8.05
97.6200C	42.0s .00	1.00	0.00	0.00000	0.00000	-0.00500	
97.5000C	54.5s .00	1.00	0.00	0.00000	0.00000	-0.00000	
97.3700C	67.0s .00	1.00	0.00	0.00000	0.00000	-0.00500	
97.2500C	79.5s .00	1.00	0.00	0.00000	0.00000	-0.00000	
97.0000C	104.5s .00	1.00	0.00	0.00000	0.00000	-0.00000	
96.7500C	129.5s .00	1.00	0.00	0.00000	0.00000	-0.00000	
96.5000C	154.5s .00	1.00	0.00	0.00000	0.00000	-0.00000	
96.2500C	179.5s .00	1.00	0.00	0.00000	0.00000	-0.00000	
96.0000C	204.5s .00	1.00	0.00	0.00000	0.00000	-0.00000	
95.7500C	229.5s .00	1.00	0.00	0.00000	0.00000	-0.00000	
95.6200C	242.0s .00	1.00	0.00	0.00000	0.00000	-0.00500	
99.0000P	96.0s 100.00	.99	0.02	0.00000	0.00000	0.00000	+77.97
98.7500P	71.0s 50.00	1.00	0.00	0.00000	0.00000	0.00000	+27.97
98.5000P	46.0s 25.00	1.00	0.00	0.00000	0.00000	0.00000	+2.97
98.2500P	21.5s 29.69	.93	0.89	0.00258	0.00075	0.00500	+7.66
98.1200P	10.0s 24.22*	.74	2.54	0.00568	0.00169	0.02000	+2.19
98.0000P	3.0s 21.68*	.37	3.32	0.00610	0.00197	0.02750	- .35
97.8700P	1.0s 28.13	.14	1.50	0.00423	0.00118	0.01000	+6.10
97.7500P	.5s 29.30	.04	0.57	0.00150	0.00048	0.00250	+7.27
97.6200P	.5c 43.75	.05	0.47	0.00286	0.00058	0.00500	+21.72
95.7500P	.5 132.42	.02	0.08	0.00360	0.00028	0.00500	+110.40

SEPTEMBER 02 IMM EURODOLLAR OPTIONS
05/22/02 days to exp: 117 int. rate: 1.72% calc. imp vol of *: 35.74%

strike	last imp vol	delta	gamma	theta-7	vega	prem	iv-skew
EDU02 97.6500s							
98.7500C	.5s 56.64	.02	0.05	0.00089	0.00057	0.00500	+20.90
98.5000C	1.0s 47.66	.04	0.12	0.00145	0.00108	0.01000	+11.91
98.2500C	2.5s 40.92	.08	0.28	0.00243	0.00205	0.02250	+5.17
98.0000C	5.5s 35.74	.18	0.56	0.00378	0.00356	0.02500	+ .00
97.7500C	14.0s 35.47*	.37	0.80	0.00536	0.00502	0.13750	- .27
97.5000C	28.0s 36.13*	.58	0.81	0.00558	0.00518	0.13000	+ .39
97.2500C	46.5s 35.94	.74	0.66	0.00441	0.00425	0.06250	+ .19
97.0000C	68.5s 37.94	.84	0.46	0.00329	0.00316	0.03250	+2.19
96.7500C	91.5s 39.45	.90	0.31	0.00219	0.00221	0.01500	+3.71
96.5000C	115.5s 40.82	.94	0.20	0.00134	0.00150	0.00500	+5.08
96.2500C	140.5s 45.31	.95	0.16	0.00118	0.00130	0.00250	+9.57
96.0000C	165.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
95.7500C	190.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
95.5000C	215.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
95.2500C	240.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
95.0000C	265.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
94.7500C	290.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
94.5000C	315.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
94.2500C	340.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
94.0000C	365.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
99.0000P	135.0s 50.00	.99	0.00	0.00000	0.00000	0.00000	+14.26
98.5000P	86.0s 49.61	.95	0.13	0.00140	0.00119	0.00750	+13.86
98.2500P	62.0s 41.31	.91	0.28	0.00230	0.00208	0.02000	+5.56
98.0000P	40.0s 35.55	.81	0.56	0.00363	0.00355	0.05000	- .20
97.7500P	24.0s 35.60*	.62	0.80	0.00535	0.00502	0.13750	- .15
97.5000P	13.0s 35.99*	.42	0.81	0.00561	0.00518	0.13000	+ .24
97.2500P	6.5s 36.04	.25	0.66	0.00456	0.00426	0.06500	+ .29
97.0000P	3.5s 37.60	.15	0.46	0.00343	0.00312	0.03500	+1.85
96.7500P	2.0s 38.28	.08	0.30	0.00226	0.00207	0.01750	+2.54
96.5000P	1.0s 39.84	.05	0.19	0.00155	0.00140	0.01000	+4.10
96.2500P	1.0s 42.97	.04	0.14	0.00129	0.00109	0.00750	+7.22
96.0000P	.5s 44.73	.02	0.10	0.00095	0.00079	0.00500	+8.98
95.7500P	.5s 44.53	.01	0.06	0.00055	0.00047	0.00250	+8.79

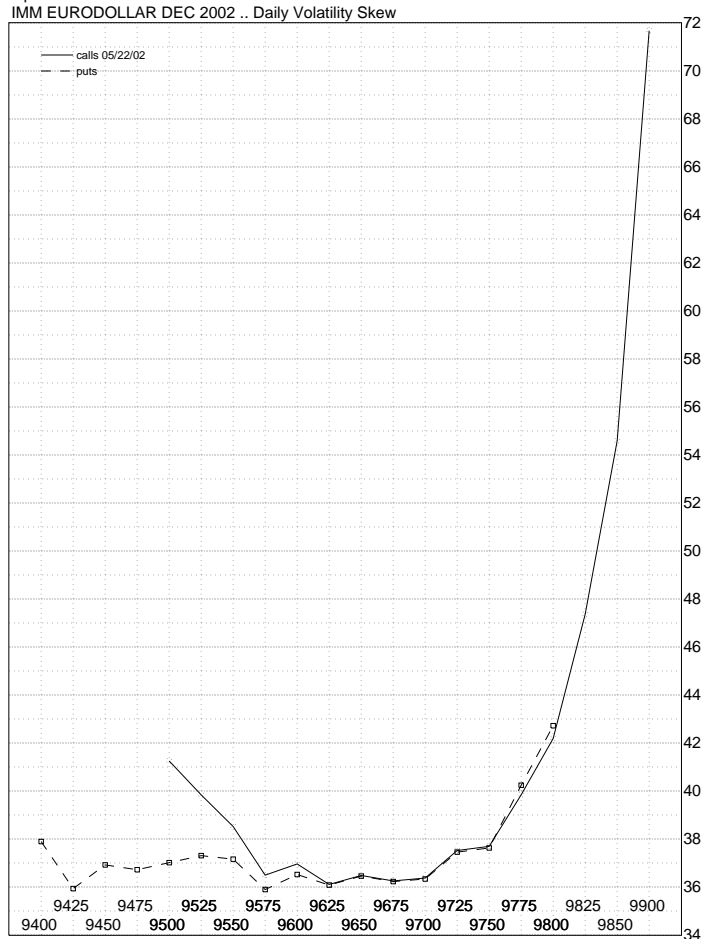
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DECEMBER 02 IMM EURODOLLAR OPTIONS
05/22/02 days to exp: 208 int. rate: 1.72% calc. imp vol of *: 36.53%

strike	last imp vol	delta	gamma	theta-7	vega	prem	iv-skew
EDZ02 97.0400							
99.0000C	1.0s 71.68	.01	0.02	0.00078	0.00068	0.00750	+35.15
98.5000C	2.0s 54.59	.03	0.06	0.00142	0.00162	0.01750	+18.06
98.2500C	2.5s 47.36	.05	0.10	0.00178	0.00232	0.02500	+10.83
98.0000C	4.0s 42.19	.08	0.16	0.00236	0.00342	0.04000	+5.65
97.7500C	7.5s 39.84	.14	0.25	0.00335	0.00507	0.07500	+3.31
97.5000C	13.0s 37.70	.23	0.36	0.00425	0.00676	0.13000	+1.16
97.2500C	22.5s 37.52*	.34	0.43	0.00511	0.00815	0.22500	+ .99
97.0000C	34.5s 36.38*	.46	0.48	0.00532	0.00879	0.30250	- .16
96.7500C	50.0s 36.25	.58	0.48	0.00515	0.00866	0.20750	- .28
96.5000C	68.0s 36.47	.67	0.43	0.00465	0.00794	0.14000	- .06
96.2500C	88.0s 36.11	.76	0.37	0.00382	0.00682	0.08750	- .43
96.0000C	110.0s 36.96	.82	0.31	0.00317	0.00576	0.05750	+ .43
95.7500C	132.0s 36.50	.87	0.24	0.00227	0.00453	0.03000	- .04
95.5000C	156.0s 38.53	.89	0.20	0.00194	0.00392	0.02000	+1.99
95.2500C	180.0s 39.84	.91	0.16	0.00153	0.00331	0.01000	+3.31
95.0000C	204.5s 41.26	.93	0.13	0.00121	0.00284	0.00250	+4.73
94.7500C	229.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
94.5000C	254.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
94.2500C	279.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
94.0000C	304.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
93.0000C	404.0s .00	1.00	0.00	0.00000	0.00000	-0.00000	
99.0000P	99.5s 42.72	.91	0.16	0.00212	0.00348	0.03250	+6.19
97.7500P	78.0s 40.23	.85	0.25	0.00318	0.00511	0.07000	+3.70
97.5000P	58.5s 37.62	.76	0.36	0.00409	0.00676	0.12500	+1.09
97.2500P	43.5s 37.45*	.65	0.44	0.00503	0.00815	0.22250	+ .92
97.0000P	30.5s 36.33*	.53	0.48	0.00532	0.00879	0.30250	- .21
96.7500P	21.0s 36.23	.41	0.48	0.00524	0.00865	0.21000	- .30
96.5000P	14.5s 36.45	.32	0.43	0.00483	0.00794	0.14500	- .08
96.2500P	9.5s 36.08	.23	0.37	0.00408	0.00682	0.09500	- .45
96.0000P	6.5s 36.52	.17	0.31	0.00342	0.00569	0.06500	- .01
95.7500P	4.0s 35.89	.11	0.24	0.00257	0.00440	0.04000	- .65
95.5000P	3.0s 37.16	.09	0.19	0.00218	0.00364	0.03000	+ .62
95.2500P	2.0s 37.30	.06	0.15	0.00166	0.00280	0.02000	+ .77
95.0000P	1.5s 37.01	.04	0.11	0.00119	0.00205	0.01250	+ .48
94.7500P	1.0s 36.72	.03	0.07	0.00082	0.00145	0.00750	+ .18
94.5000P	.5s 36.91	.02	0.05	0.00060	0.00107	0.00500	+ .38
94.2500P	.5s 35.94	.01	0.03	0.00035	0.00066	0.00250	- .60
94.0000P	.5c 37.89	.01	0.03	0.00036	0.00064	0.00250	+1.36

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ED QUOTES & SKEWS - BACK MONTHS

MARCH 03 IMM EURODOLLAR OPTIONS
05/22/02 days to exp: 299 int. rate: 1.72% calc. imp vol of *: 33.92%

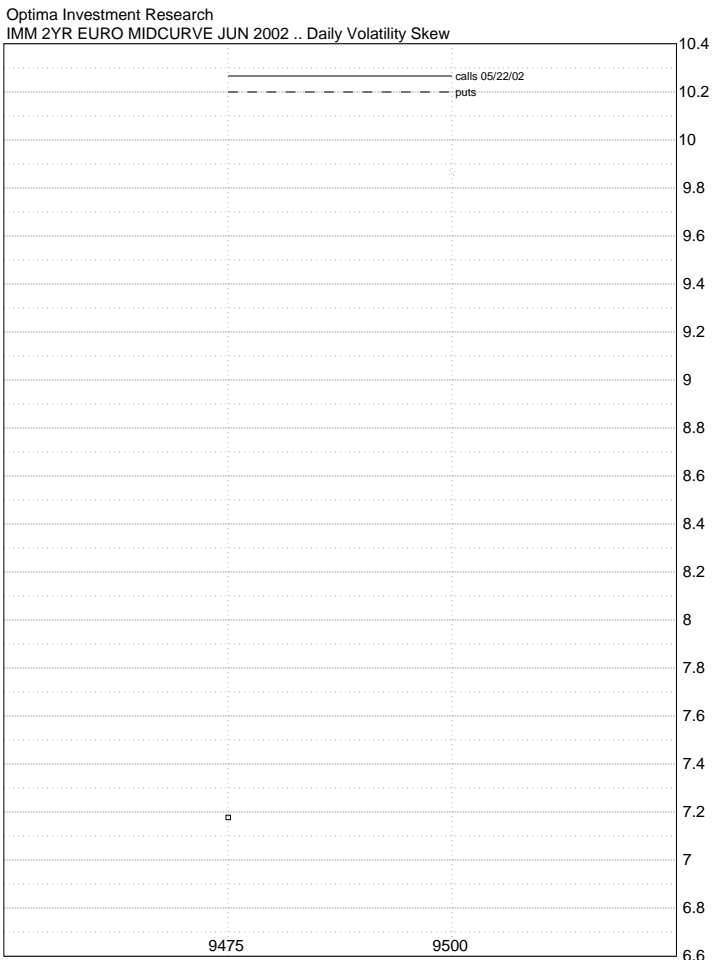
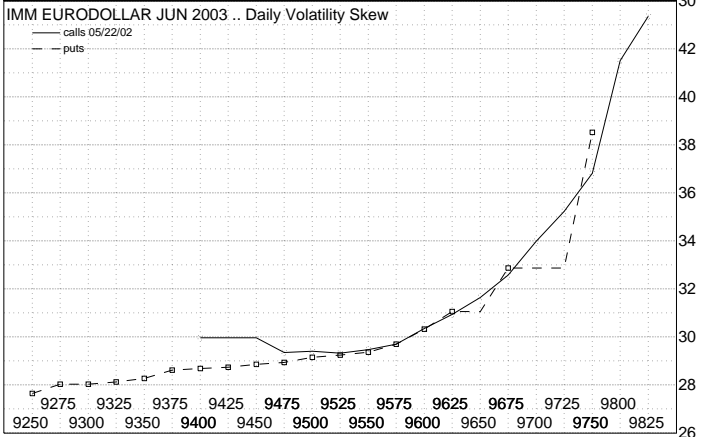
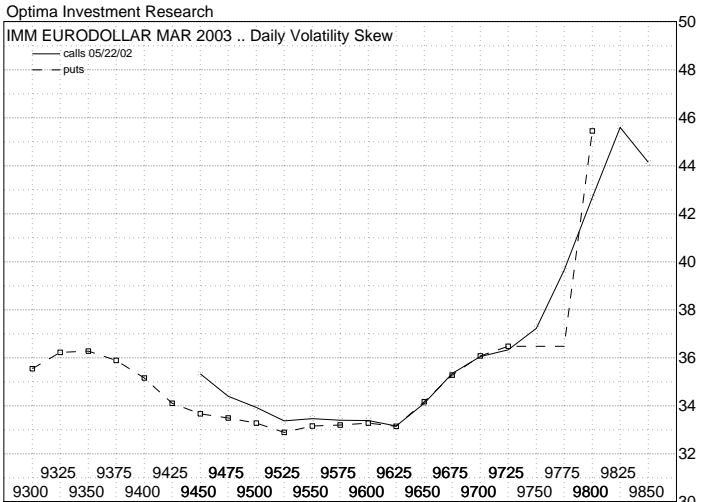
strike	last imp vol	delta	gamma	theta-7	vega	prem	iv-skew	
EDM03 96.4450								
98.2500C	2.0s	45.61	.03	0.04	0.00105	0.00205	0.01750	+11.68
98.0000C	3.0s	42.68	.05	0.07	0.00152	0.00315	0.03000	+8.76
97.7500C	5.0s	39.65	.07	0.11	0.00202	0.00448	0.04750	+5.73
97.5000C	7.5s	37.23	.11	0.16	0.00262	0.00615	0.07500	+3.31
97.2500C	12.5s	36.33	.17	0.22	0.00341	0.00816	0.12500	+2.41
97.0000C	20.0s	36.06	.24	0.27	0.00418	0.01005	0.20000	+2.14
96.7500C	29.0s	35.35	.33	0.31	0.00469	0.01150	0.29250	+1.43
96.5000C	40.0s	34.11*	.41	0.35	0.00485	0.01239	0.40000	+1.19
96.2500C	53.5s	33.17*	.50	0.37	0.00477	0.01265	0.33750	-.75
96.0000C	70.0s	33.39	.59	0.36	0.00460	0.01232	0.25500	-.53
95.7500C	88.5s	33.40	.66	0.33	0.00422	0.01155	0.18750	-.52
95.5000C	108.0s	33.47	.72	0.30	0.00373	0.01049	0.13500	-.45
95.2500C	129.0s	33.37	.78	0.26	0.00314	0.00925	0.09250	-.55
95.0000C	151.0s	33.94	.82	0.23	0.00268	0.00815	0.06500	+0.01
94.7500C	174.0s	34.40	.85	0.19	0.00221	0.00709	0.04250	+1.48
94.5000C	197.5s	35.33	.87	0.17	0.00187	0.00628	0.02750	+1.41
98.0000P	157.5s	45.46	.93	0.07	0.00133	0.00357	0.01750	+11.54
97.2500P	92.0s	36.47	.82	0.21	0.00317	0.00818	0.11500	+2.55
97.0000P	75.0s	36.08	.74	0.27	0.00401	0.01006	0.19250	+2.16
96.7500P	59.0s	35.28	.66	0.31	0.00458	0.01149	0.28750	+1.36
96.5000P	45.5s	34.17*	.57	0.35	0.00484	0.01239	0.40000	+2.25
96.2500P	34.0s	33.14*	.48	0.37	0.00483	0.01265	0.34000	-.78
96.0000P	26.0s	33.28	.40	0.36	0.00473	0.01232	0.26000	-.64
95.7500P	19.5s	33.20	.32	0.33	0.00441	0.01152	0.19500	-.72
95.5000P	14.5s	33.15	.26	0.30	0.00398	0.01043	0.14500	-.77
95.2500P	10.5s	32.90	.20	0.26	0.00344	0.00913	0.10500	-1.02
95.0000P	8.0s	33.28	.16	0.23	0.00301	0.00796	0.08000	-.64
94.7500P	6.0s	33.50	.13	0.19	0.00258	0.00681	0.06000	-.42
94.5000P	4.5s	33.67	.10	0.16	0.00217	0.00575	0.04500	-.25
94.2500P	3.5s	34.11	.08	0.13	0.00186	0.00489	0.03500	+1.19
94.0000P	3.0s	35.16	.07	0.12	0.00170	0.00436	0.03000	+1.94
93.7500P	2.5s	35.89	.06	0.10	0.00151	0.00382	0.02500	+1.97

JUNE 03 IMM EURODOLLAR OPTIONS
05/22/02 days to exp: 390 int. rate: 1.72% calc. imp vol of *: 30.03%

strike	last imp vol	delta	gamma	theta-7	vega	prem	iv-skew	
EDM03 95.8800s								
98.2500C	1.5s	43.36	.02	0.02	0.00065	0.00178	0.01250	+13.33
98.0000C	2.5s	41.50	.03	0.04	0.00101	0.00284	0.02250	+11.48
97.7500C	5.5s	36.82	.07	0.08	0.00176	0.00551	0.05250	+6.79
97.5000C	8.0s	35.23	.10	0.11	0.00226	0.00736	0.08000	+5.20
97.0000C	12.0s	33.98	.14	0.15	0.00281	0.00943	0.12000	+3.96
96.7500C	17.0s	32.57	.19	0.19	0.00328	0.01148	0.17000	+2.54
96.5000C	24.0s	31.64	.25	0.23	0.00374	0.01344	0.24000	+1.61
96.2500C	33.0s	30.93	.32	0.27	0.00409	0.01506	0.33000	+0.91
96.0000C	44.0s	30.35*	.39	0.29	0.00428	0.01616	0.44000	+0.32
95.7500C	57.0s	29.69*	.47	0.31	0.00427	0.01665	0.43750	-.34
95.5000C	72.0s	29.47	.54	0.31	0.00415	0.01654	0.34000	-.56
95.2500C	89.0s	29.32	.61	0.30	0.00390	0.01591	0.26000	-.71
95.0000C	108.0s	29.39	.67	0.28	0.00357	0.01492	0.19750	-.63
94.7500C	127.5s	29.35	.73	0.25	0.00315	0.01367	0.14500	-.68
94.0000C	193.0s	29.96	.84	0.18	0.00192	0.00975	0.04750	-.07
97.5000P	165.5s	38.53	.91	0.08	0.00146	0.00591	0.03250	+8.50
96.7500P	103.0s	32.86	.79	0.19	0.00305	0.01152	0.15750	+2.83
96.2500P	69.5s	31.05	.66	0.27	0.00398	0.01506	0.32500	+1.03
96.0000P	56.0s	30.32*	.59	0.29	0.00424	0.01616	0.43750	+0.30
95.7500P	44.0s	29.70*	.51	0.31	0.00432	0.01665	0.44000	-.33
95.5000P	34.5s	29.36	.44	0.31	0.00426	0.01654	0.34500	-.67
95.2500P	27.0s	29.24	.37	0.30	0.00409	0.01590	0.27000	-.79
95.0000P	21.0s	29.15	.31	0.28	0.00381	0.01488	0.21000	-.88
94.7500P	16.0s	28.93	.25	0.26	0.00344	0.01355	0.16000	-1.10
94.5000P	12.5s	28.86	.20	0.23	0.00305	0.01211	0.12250	-1.17
94.2500P	9.5s	28.74	.16	0.20	0.00264	0.01060	0.09250	-1.29
94.0000P	7.0s	28.69	.13	0.17	0.00227	0.00916	0.07000	-1.34
93.7500P	5.5s	28.61	.10	0.15	0.00191	0.00779	0.05250	-1.41
93.5000P	4.0s	28.27	.08	0.12	0.00154	0.00640	0.03750	-1.76
93.2500P	3.0s	28.13	.06	0.10	0.00124	0.00525	0.02750	-1.90
93.0000P	2.0s	28.03	.05	0.08	0.00100	0.00428	0.02000	-2.00
92.7500P	1.5s	28.03	.03	0.06	0.00081	0.00349	0.01500	-2.00
92.5000P	1.0s	27.64	.02	0.05	0.00060	0.00267	0.01000	-2.39

JUNE 02 IMM 2YR EURO MIDCURVE OPTIONS
05/22/02 days to exp: 26 int. rate: 1.72% calc. imp vol of *: 8.14%

strike	last imp vol	delta	gamma	theta-7	vega	prem	iv-skew	
EDM04 94.8400s								
95.0000C	0.0075s	9.86*	.11	1.41	0.00336	0.00282	0.00750	+1.72
94.7500C	0.0190s	.00	1.00	0.00	0.00000	0.00000	0.07100	
94.7500P	0.0100s	7.18*	.19	2.71	0.00358	0.00387	0.01000	-.97

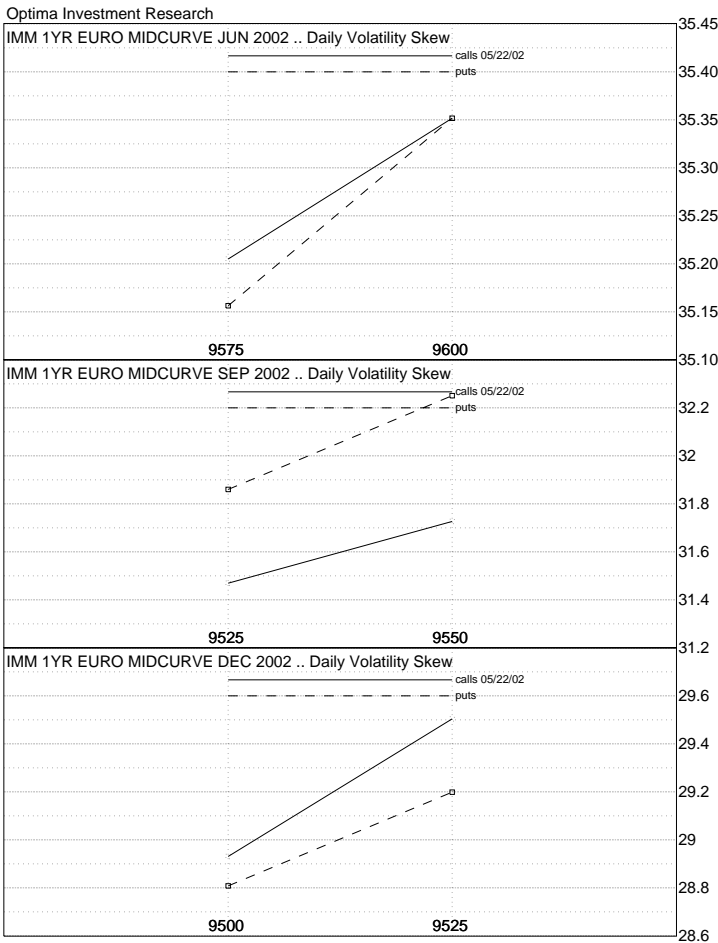


1-YR EURO MIDCURVE OPTIONS

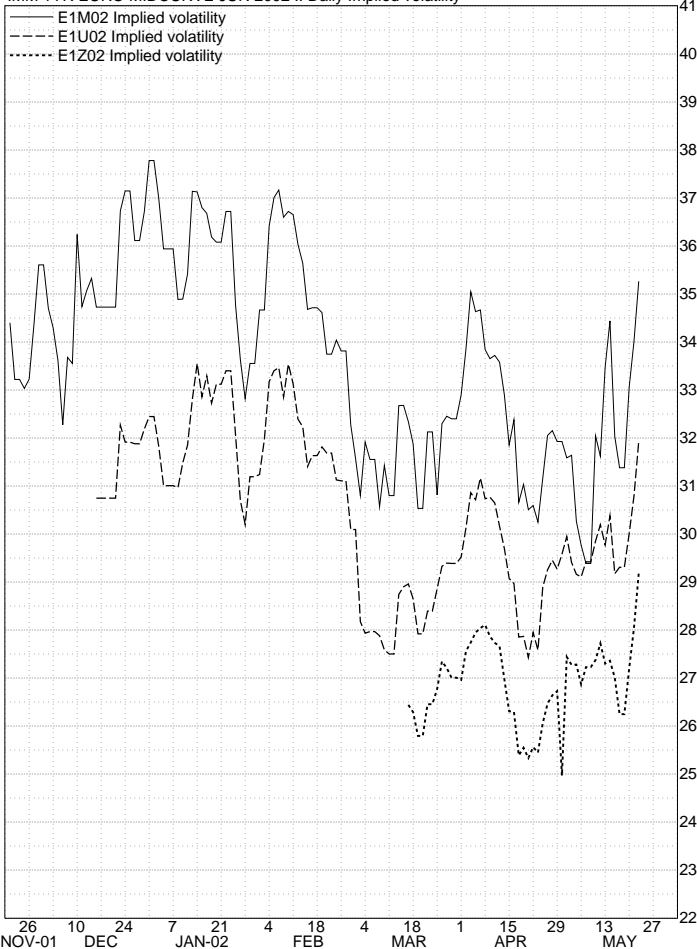
JUNE 02 IMM 1YR EURO MIDCURVE OPTIONS
 05/22/02 days to exp: 26 int. rate: 1.72% calc. imp vol of *: 35.27%
 strike last imp vol delta gamma theta-7 vega prem iv-skew
 EDM03 95.8800s
 96.0000C 0.100s 35.35* .36 0.96 0.0209 0.0041 0.1000 +.08
 95.7500C 0.230s 35.21* .61 0.99 0.0212 0.0042 0.1000 -.06
 96.0000P 0.220s 35.35* .64 0.96 0.0208 0.0041 0.1000 +.08
 95.7500P 0.100s 35.16* .39 0.99 0.0213 0.0042 0.1000 -.11

SEPTEMBER 02 IMM 1YR EURO MIDCURVE OPTIONS
 05/22/02 days to exp: 117 int. rate: 1.72% calc. imp vol of *: 31.93%
 strike last imp vol delta gamma theta-7 vega prem iv-skew
 EDU03 95.4550s
 95.5000C 0.300s 31.73* .44 0.48 0.0096 0.0101 0.3000 -.20
 95.2500C 0.440s 31.47* .56 0.48 0.0095 0.0101 0.2350 -.46
 95.5000P 0.350s 32.25* .55 0.47 0.0098 0.0101 0.3050 +.32
 95.2500P 0.240s 31.86* .44 0.48 0.0097 0.0101 0.2400 -.07

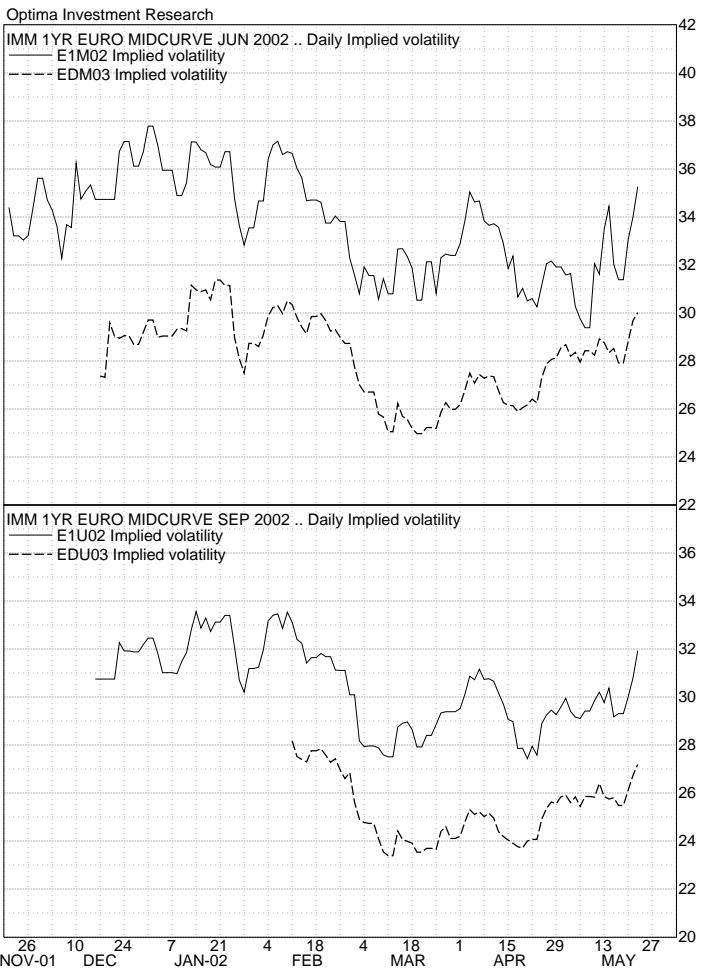
DECEMBER 02 IMM 1YR EURO MIDCURVE OPTIONS
 05/22/02 days to exp: 208 int. rate: 1.72% calc. imp vol of *: 29.19%
 strike last imp vol delta gamma theta-7 vega prem iv-skew
 EDZ03 95.1650s
 95.2500C 0.380s 29.50* .42 0.36 0.0070 0.0142 0.3800 +.32
 95.0000C 0.510s 28.93* .51 0.37 0.0069 0.0144 0.3450 -.26
 95.2500P 0.460s 29.20* .57 0.36 0.0069 0.0142 0.3750 +.01
 95.0000P 0.345s 28.81* .48 0.38 0.0069 0.0144 0.3450 -.38



Optima Investment Research
 IMM 1YR EURO MIDCURVE JUN 2002 .. Daily Implied volatility



1YR MIDCURVE VS QUARTERLY OPTIONS



JUN 02 IMM EURODOLLAR OPTIONS

Evaluation date: 05/23/02 Expiration date: 06/17/02 # days: 25
 Futures last:98.0425 Implied volatility: 22.03% Interest rate: 1.72%

	98.7500		98.5000		98.2500		98.0000		97.7500		97.5000	
	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put
98.2000 @24.00%	0	0	0	0	2.5	32	7.5	-68	20.0	95	0	-5
@23.00%	0	0	0	0	2.0	31	7.0	-69	20.0	96	0	-4
@22.00%	0	0	0	0	2.0	30	7.0	-70	20.0	96	0	-4
@21.00%	0	0	0	0	2.0	29	7.0	-70	20.0	97	0	-3
@20.00%	0	0	0	0	1.5	29	6.5	-71	20.0	98	0	-2
98.1800 @24.00%	0	0	0	0	2.0	26	9.0	-74	18.5	93	.5	-7
@23.00%	0	0	0	0	1.5	25	8.5	-75	18.5	94	.5	-6
@22.00%	0	0	0	0	1.5	24	8.5	-76	18.0	95	0	-5
@21.00%	0	0	0	0	1.5	23	8.5	-77	18.0	95	0	-5
@20.00%	0	0	0	0	1.0	22	8.0	-78	18.0	96	0	-4
98.1600 @24.00%	0	0	0	0	1.5	20	10.5	-80	16.5	90	.5	-10
@23.00%	0	0	0	0	1.0	19	10.0	-81	16.5	91	.5	-9
@22.00%	0	0	0	0	1.0	18	10.0	-81	16.5	92	.5	-8
@21.00%	0	0	0	0	1.0	17	10.0	-83	16.5	93	.5	-7
@20.00%	0	0	0	0	1.0	16	10.0	-84	16.0	94	0	-6
98.1400 @24.00%	0	0	0	0	1.0	16	12.0	-84	14.5	87	.5	-13
@23.00%	0	0	0	0	1.0	15	12.0	-85	14.5	88	.5	-12
@22.00%	0	0	0	0	1.0	14	12.0	-86	14.5	89	.5	-11
@21.00%	0	0	0	0	.5	13	11.5	-87	14.5	90	.5	-10
@20.00%	0	0	0	0	.5	12	11.5	-88	14.5	91	.5	-9
98.1200 @24.00%	0	0	0	0	.5	12	13.5	-88	13.0	83	1.0	-17
@23.00%	0	0	0	0	.5	11	13.5	-89	13.0	84	1.0	-16
@22.00%	0	0	0	0	.5	10	13.5	-90	13.0	85	1.0	-15
@21.00%	0	0	0	0	.5	9	13.5	-91	12.5	86	.5	-14
@20.00%	0	0	0	0	.5	8	13.5	-92	12.5	88	.5	-12
98.1000 @24.00%	0	0	0	0	.5	9	15.5	-91	11.5	78	1.5	-22
@23.00%	0	0	0	0	.5	8	15.5	-92	11.5	79	1.5	-21
@22.00%	0	0	0	0	.5	7	15.5	-93	11.0	80	1.0	-19
@21.00%	0	0	0	0	.5	6	15.5	-94	11.0	82	1.0	-18
@20.00%	0	0	0	0	0	6	15.5	-94	11.0	83	1.0	-17
98.0800 @24.00%	0	0	0	0	.5	7	17.5	-93	10.0	73	2.0	-27
@23.00%	0	0	0	0	.5	6	17.5	-94	9.5	74	1.5	-26
@22.00%	0	0	0	0	0	5	17.0	-95	9.5	75	1.5	-25
@21.00%	0	0	0	0	0	4	17.0	-96	9.5	76	1.5	-24
@20.00%	0	0	0	0	0	4	17.0	-96	9.5	77	1.5	-23
98.0600 @24.00%	0	0	0	0	0	5	19.0	-95	8.5	67	2.5	-32
@23.00%	0	0	0	0	0	4	19.0	-96	8.5	68	2.5	-32
@22.00%	0	0	0	0	0	3	19.0	-96	8.0	69	2.0	-31
@21.00%	0	0	0	0	0	3	19.0	-97	8.0	70	2.0	-30
@20.00%	0	0	0	0	0	2	19.0	-98	8.0	71	2.0	-29
98.0400 @24.00%	0	0	0	0	0	3	21.0	-97	7.0	61	3.0	-39
@23.00%	0	0	0	0	0	3	21.0	-97	7.0	62	3.0	-38
@22.00%	0	0	0	0	0	2	21.0	-98	7.0	63	3.0	-37
@21.00%	0	0	0	0	0	2	21.0	-98	6.5	63	2.5	-37
@20.00%	0	0	0	0	0	1	21.0	-98	6.5	64	2.5	-36
98.0200 @24.00%	0	0	0	0	0	2	23.0	-98	6.0	55	4.0	-45
@23.00%	0	0	0	0	0	2	23.0	-98	6.0	55	4.0	-44
@22.00%	0	0	0	0	0	1	23.0	-98	5.5	56	3.5	-44
@21.00%	0	0	0	0	0	1	23.0	-99	5.5	56	3.5	-44
@20.00%	0	0	0	0	0	1	23.0	-99	5.0	57	3.0	-43
98.0000 @24.00%	0	0	0	0	0	2	25.0	-98	5.0	49	5.0	-51
@23.00%	0	0	0	0	0	1	25.0	-99	5.0	49	5.0	-51
@22.00%	0	0	0	0	0	1	25.0	-99	4.5	49	4.5	-51
@21.00%	0	0	0	0	0	1	25.0	-99	4.5	49	4.5	-51
@20.00%	0	0	0	0	0	0	25.0	-99	4.0	49	4.0	-51
97.9800 @24.00%	0	0	0	0	0	1	27.0	-99	4.0	42	6.0	-57
@23.00%	0	0	0	0	0	1	27.0	-99	4.0	42	6.0	-58
@22.00%	0	0	0	0	0	1	27.0	-99	3.5	42	5.5	-58
@21.00%	0	0	0	0	0	0	27.0	-99	3.5	42	5.5	-58
@20.00%	0	0	0	0	0	0	27.0	-100	3.5	41	5.5	-58
97.9600 @24.00%	0	0	0	0	0	1	29.0	-99	3.5	36	7.5	-63
@23.00%	0	0	0	0	0	0	29.0	-99	3.0	36	7.0	-64
@22.00%	0	0	0	0	0	0	29.0	-100	3.0	35	7.0	-64
@21.00%	0	0	0	0	0	0	29.0	-100	2.5	35	6.5	-65
@20.00%	0	0	0	0	0	0	29.0	-100	2.5	34	6.5	-66
97.9400 @24.00%	0	0	0	0	0	0	31.0	-99	2.5	31	8.5	-69
@23.00%	0	0	0	0	0	0	31.0	-100	2.5	30	8.5	-70
@22.00%	0	0	0	0	0	0	31.0	-100	2.5	29	8.5	-71
@21.00%	0	0	0	0	0	0	31.0	-100	2.0	29	8.0	-71
@20.00%	0	0	0	0	0	0	31.0	-100	2.0	28	8.0	-72
97.9201 @24.00%	0	0	0	0	0	0	33.0	-100	2.0	26	10.0	-74
@23.00%	0	0	0	0	0	0	33.0	-100	2.0	25	10.0	-75
@22.00%	0	0	0	0	0	0	33.0	-100	1.5	24	9.5	-76
@21.00%	0	0	0	0	0	0	33.0	-100	1.5	23	9.5	-77
@20.00%	0	0	0	0	0	0	33.0	-100	1.5	22	9.5	-78
97.9001 @24.00%	0	0	0	0	0	0	35.0	-100	1.5	21	11.5	-79
@23.00%	0	0	0	0	0	0	35.0	-100	1.5	20	11.5	-80
@22.00%	0	0	0	0	0	0	35.0	-100	1.5	19	11.5	-81
@21.00%	0	0	0	0	0	0	35.0	-100	1.0	18	11.0	-82
@20.00%	0	0	0	0	0	0	35.0	-100	1.0	17	11.0	-83
97.8801 @24.00%	0	0	0	0	0	0	37.0	-100	1.0	17	13.0	-83
@23.00%	0	0	0	0	0	0	37.0	-100	1.0	16	13.0	-84
@22.00%	0	0	0	0	0	0	37.0	-100	1.0	15	13.0	-85
@21.00%	0	0	0	0	0	0	37.0	-100	1.0	14	13.0	-86
@20.00%	0	0	0	0	0	0	37.0	-100	.5	13	12.5	-87

SEP 02 IMM EURODOLLAR OPTIONS
 Evaluation date: 05/23/02 Expiration date: 09/16/02 # days: 116
 Futures last:97.6500 Implied volatility: 35.68% Interest rate: 1.72%

		98.5000		98.2500		98.0000		97.7500		97.5000		97.2500	
		Call	Put	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put
97.8200	@37.50%	.5	3 68.0 -96	3.0	13 46.0 -87	10.0	30 28.0 -69	22.0	51 15.5 -48	39.5	70 7.5 -29	60.0	84 3.5 -16
	@36.50%	.5	3 68.0 -97	3.0	12 45.5 -87	9.5	30 27.5 -70	21.5	52 15.0 -48	39.0	71 7.0 -29	60.0	84 3.0 -15
	@35.50%	.5	2 68.0 -97	2.5	11 45.5 -88	9.0	30 27.0 -70	21.5	52 14.5 -47	38.5	72 7.0 -28	59.5	85 3.0 -14
	@34.50%	.5	2 68.0 -97	2.5	11 45.0 -89	8.5	29 26.5 -70	21.0	52 14.0 -47	38.0	72 6.5 -27	59.5	86 2.5 -14
	@33.50%	.5	2 68.0 -98	2.0	10 45.0 -89	8.5	29 26.0 -71	20.5	53 13.5 -47	38.0	73 6.0 -26	59.0	87 2.5 -13
97.8000	@37.50%	.5	3 70.0 -97	3.0	12 47.5 -88	9.5	29 29.5 -71	21.0	50 16.0 -50	38.0	69 8.0 -31	58.5	82 4.0 -17
	@36.50%	.5	2 70.0 -97	2.5	11 47.5 -88	9.0	28 29.0 -71	20.5	50 16.0 -49	37.5	69 8.0 -30	58.0	83 3.5 -16
	@35.50%	.5	2 70.0 -97	2.5	11 47.0 -89	8.5	28 28.5 -71	20.0	50 15.5 -49	37.0	70 7.5 -29	58.0	84 3.5 -15
	@34.50%	.5	2 70.0 -98	2.0	10 47.0 -89	8.0	28 28.0 -72	19.5	50 15.0 -49	37.0	71 7.0 -29	57.5	85 3.0 -15
	@33.50%	.5	2 70.0 -98	2.0	10 47.0 -90	7.5	27 27.5 -72	19.5	51 14.5 -49	36.5	72 6.5 -28	57.5	86 2.5 -14
97.7800	@37.50%	.5	2 72.0 -97	2.5	11 49.5 -89	9.0	27 30.5 -72	20.0	48 17.5 -51	36.5	67 9.0 -32	57.0	81 4.0 -18
	@36.50%	.5	2 72.0 -97	2.5	10 49.0 -89	8.5	27 30.5 -73	19.5	48 17.0 -51	36.5	68 8.5 -32	56.5	82 4.0 -17
	@35.50%	.5	2 72.0 -97	2.0	10 49.0 -90	8.0	27 30.0 -73	19.0	48 16.5 -51	36.0	69 8.0 -31	56.5	83 3.5 -17
	@34.50%	.5	2 72.0 -98	2.0	9 49.0 -90	7.5	26 29.5 -73	19.0	49 16.0 -51	35.5	69 7.5 -30	56.0	84 3.5 -16
	@33.50%	0	1 72.0 -98	2.0	9 48.5 -91	7.0	26 29.0 -74	18.5	49 15.5 -51	35.0	70 7.0 -29	55.5	85 3.0 -15
97.7600	@37.50%	.5	2 74.0 -97	2.5	10 51.0 -89	8.5	26 32.0 -74	19.5	46 18.5 -53	35.5	66 9.5 -34	55.5	80 4.5 -19
	@36.50%	.5	2 74.0 -97	2.5	10 51.0 -90	8.0	26 32.0 -74	19.0	47 18.0 -53	35.0	66 9.0 -33	55.0	81 4.0 -18
	@35.50%	.5	2 74.0 -98	2.0	9 51.0 -90	7.5	25 31.5 -74	18.5	47 17.5 -53	34.5	67 8.5 -33	54.5	82 4.0 -18
	@34.50%	.5	2 74.0 -98	2.0	9 50.5 -91	7.0	25 31.0 -75	18.0	47 17.0 -53	34.0	68 8.0 -32	54.5	83 3.5 -17
	@33.50%	0	1 74.0 -98	1.5	8 50.5 -91	6.5	24 30.5 -75	17.5	47 16.5 -53	33.5	68 7.5 -31	54.0	83 3.5 -16
97.7400	@37.50%	.5	2 76.0 -97	2.5	9 53.0 -90	8.0	25 33.5 -75	18.5	45 19.5 -55	34.0	64 10.0 -35	53.5	79 5.0 -20
	@36.50%	.5	2 76.0 -98	2.0	9 53.0 -91	7.5	24 33.0 -75	18.0	45 19.0 -55	33.5	65 9.5 -35	53.5	80 4.5 -20
	@35.50%	.5	2 76.0 -98	2.0	8 52.5 -91	7.0	24 33.0 -76	17.5	45 18.5 -55	33.0	65 9.5 -34	53.0	81 4.5 -19
	@34.50%	0	1 76.0 -98	1.5	8 52.5 -92	6.5	23 32.5 -76	17.0	45 18.0 -54	32.5	66 9.0 -33	52.5	81 4.0 -18
	@33.50%	0	1 76.0 -98	1.5	7 52.0 -92	6.0	23 32.0 -77	16.5	45 17.5 -54	32.0	67 8.5 -33	52.5	82 3.5 -17
97.7200	@37.50%	.5	2 78.0 -98	2.0	9 55.0 -91	7.5	23 35.0 -76	17.5	43 20.5 -56	33.0	63 11.0 -37	52.0	78 5.5 -22
	@36.50%	.5	2 78.0 -98	2.0	8 54.5 -91	7.0	23 35.0 -77	17.0	43 20.0 -56	32.5	63 10.5 -36	52.0	79 5.0 -21
	@35.50%	0	1 78.0 -98	1.5	8 54.5 -92	6.5	22 34.5 -77	16.5	43 19.5 -56	32.0	64 10.0 -36	51.5	79 4.5 -20
	@34.50%	0	1 78.0 -98	1.5	7 54.0 -92	6.0	22 34.0 -78	16.0	43 19.0 -56	31.5	64 9.5 -35	51.0	80 4.5 -19
	@33.50%	0	1 78.0 -98	1.5	7 54.0 -93	6.0	21 33.5 -78	15.5	43 18.5 -56	31.0	65 9.0 -35	50.5	81 4.0 -18
97.7000	@37.50%	.5	2 80.0 -98	2.0	8 56.5 -91	7.0	22 36.5 -77	16.5	41 21.5 -58	31.5	61 11.5 -38	50.5	77 6.0 -23
	@36.50%	.5	1 80.0 -98	2.0	8 56.5 -92	6.5	22 36.5 -78	16.0	41 21.0 -58	31.0	62 11.0 -38	50.0	77 5.5 -22
	@35.50%	0	1 80.0 -98	1.5	7 56.5 -92	6.0	21 36.0 -78	15.5	41 20.5 -58	30.5	62 10.5 -37	50.0	78 5.0 -21
	@34.50%	0	1 80.0 -98	1.5	7 56.0 -93	5.5	21 35.5 -79	15.0	41 20.0 -58	30.0	63 10.0 -37	49.5	79 4.5 -20
	@33.50%	0	1 80.0 -99	1.0	6 56.0 -93	5.5	20 35.0 -79	14.5	41 19.5 -58	29.5	63 9.5 -36	49.0	80 4.5 -20
97.6800	@37.50%	.5	1 82.0 -98	2.0	7 58.5 -92	6.5	21 38.5 -79	16.0	40 23.0 -60	30.5	59 12.5 -40	49.0	75 6.5 -24
	@36.50%	0	1 82.0 -98	1.5	7 58.5 -92	6.0	20 38.0 -79	15.5	40 22.5 -60	30.0	60 12.0 -40	48.5	76 6.0 -23
	@35.50%	0	1 82.0 -98	1.5	7 58.0 -93	5.5	20 37.5 -80	15.0	40 22.0 -60	29.5	60 11.5 -39	48.5	77 5.5 -23
	@34.50%	0	1 82.0 -98	1.5	6 58.0 -93	5.5	19 37.0 -80	14.5	40 21.5 -60	29.0	61 11.0 -38	48.0	78 5.0 -22
	@33.50%	0	1 82.0 -99	1.0	6 58.0 -94	5.0	19 37.0 -81	14.0	40 21.0 -60	28.5	62 10.5 -38	47.5	79 4.5 -21
97.6600	@37.50%	.5	1 84.0 -98	1.5	7 60.5 -93	6.0	20 40.0 -80	15.0	38 24.0 -61	29.0	58 13.5 -42	47.5	74 7.0 -25
	@36.50%	0	1 84.0 -98	1.5	6 60.0 -93	5.5	19 39.5 -80	14.5	38 23.5 -61	28.5	58 13.0 -41	47.0	75 6.5 -25
	@35.50%	0	1 84.0 -98	1.5	6 60.0 -93	5.5	19 39.0 -81	14.0	38 23.0 -61	28.0	59 12.5 -41	47.0	76 6.0 -24
	@34.50%	0	1 84.0 -99	1.0	6 60.0 -94	5.0	18 39.0 -81	13.5	38 22.5 -61	27.5	59 12.0 -40	46.5	76 5.5 -23
	@33.50%	0	1 84.0 -99	1.0	5 59.5 -94	4.5	18 38.5 -82	13.0	38 22.0 -62	27.0	60 11.0 -40	46.0	77 5.0 -22
97.6400	@37.50%	0	1 86.0 -98	1.5	6 62.0 -93	5.5	19 41.5 -81	14.5	37 25.5 -63	28.0	56 14.0 -43	46.0	73 7.5 -27
	@36.50%	0	1 86.0 -98	1.5	6 62.0 -94	5.5	18 41.0 -81	14.0	37 25.0 -63	27.5	57 13.5 -43	45.5	74 7.0 -26
	@35.50%	0	1 86.0 -99	1.0	6 62.0 -94	5.0	18 40.5 -82	13.5	37 24.5 -63	27.0	57 13.0 -42	45.5	74 6.5 -25
	@34.50%	0	1 86.0 -99	1.0	5 61.5 -94	4.5	17 40.5 -82	13.0	36 24.0 -63	26.5	58 12.5 -42	45.0	75 6.0 -24
	@33.50%	0	1 86.0 -99	1.0	5 61.5 -95	4.5	16 40.0 -83	12.5	36 23.5 -63	26.0	58 12.0 -41	44.5	76 5.5 -24
97.6200	@37.50%	0	1 88.0 -98	1.5	6 64.0 -94	5.5	18 43.0 -82	13.5	35 26.5 -64	27.0	55 15.0 -45	44.5	71 8.0 -28
	@36.50%	0	1 88.0 -99	1.0	5 64.0 -94	5.0	17 42.5 -82	13.0	35 26.0 -64	26.5	55 14.5 -44	44.0	72 7.5 -27
	@35.50%	0	1 88.0 -99	1.0	5 63.5 -94	4.5	17 42.5 -83	12.5	35 25.5 -64	26.0	55 14.0 -44	44.0	73 7.0 -27
	@34.50%	0	1 88.0 -99	1.0	5 63.5 -95	4.5	16 42.0 -83	12.0	35 25.0 -65	25.5	56 13.5 -44	43.5	74 6.5 -26
	@33.50%	0	1 88.0 -99	1.0	4 63.5 -95	4.0	15 41.5 -84	11.5	35 24.5 -65	25.0	56 13.0 -43	43.0	74 6.0 -25
97.6000	@37.50%	0	1 90.0 -98	1.5	5 66.0 -94	5.0	17 44.5 -83	13.0	34 28.0 -66	26.0	53 16.0 -46	43.5	70 8.5 -29
	@36.50%	0	1 90.0 -99	1.0	5 66.0 -94	4.5	16 44.5 -83	12.5	34 27.5 -66	25.5	54 15.5 -46	43.0	71 8.0 -29
	@35.50%	0	1 90.0 -99	1.0	5 65.5 -95	4.5	16 44.0 -84	12.0	33 27.0 -66	25.0	54 15.0 -46	42.5	72 7.5 -28
	@34.50%	0	1 90.0 -99	1.0	4 65.5 -95	4.0	15 43.5 -84	11.5	33 26.5 -66	24.5	54 14.5 -45	42.0	72 7.0 -27
	@33.50%	0	0 90.0 -99	1.0	4 65.5 -96	3.5	14 43.5 -85	11.0	33 26.0 -66	23.5	55 14.0 -45	41.5	73 6.5 -26
97.5800	@37.50%	0	1 92.0 -99	1.0	5 68.0 -94	4.5	16 46.5 -84	12.0	32 29.0 -67	25.0	52 17.0 -48	42.0	69 9.0 -31
	@36.50%	0	1 92.0 -99	1.0	5 67.5 -95	4.5	15 46.0 -84	12.0	32 28.5 -67	24.5	52 16.5 -48	41.5	69 8.5 -30
	@35.50%	0	1 92.0 -99	1.0	4 67.5 -95	4.0	15 45.5 -85	11.5	32 28.0 -67	23.5	52 16.0 -47	41.0	70 8.0 -29
	@34.50%	0	1 92.0 -99	1.0	4 67.5 -96	3.5	14 45.5 -85	11.0	32 27.5 -68	23.0	53 15.0 -47	40.5	71 7.5 -29
	@33.50%	0	0 92.0 -99	.5	3 67.5 -96	3.5	13 45.0 -86	10.5	31 27.0 -68	22.5	53 14.5 -47	40.0	72 7.0 -28
97.5600	@37.50%	0	1 94.0 -99	1.0	5 69.5 -95	4.5	15 48.0 -85	11.5	31 30.5 -68	24.0	50 18.0 -49	40.5	67 9.5 -32
	@36.50%	0	1 94.0 -99	1.0	4 69.5 -95	4.0	14 48.0 -85	11.0	31 30.0 -69	23.5	50 17.5 -49	40.0	68 9.0 -31
	@35.50%	0	1 94.0 -99	1.0	4 69.5 -96	3.5	14 47.5 -86	10.5	31 29.5 -69	22.5	51 16.5 -49	39.5	69 8.5 -31
	@34.50%	0	0 94.0 -99	.5	4 69.5 -96	3.5	13 47.0 -86	10.0	30 29.0 -69	22.0	51 16.0 -49	39.0	69 8.0 -30
	@33.50%	0	0 94.0 -99	.5	3 69.0 -96	3.0	12 47.0 -87	9.5	30 28.5 -70	21.5</			

DEC 02 IMM EURODOLLAR OPTIONS

Evaluation date: 05/23/02 Expiration date: 12/16/02 # days: 207

Futures last:97.0400 Implied volatility: 36.79% Interest rate: 1.72%

		97.7500		97.5000		97.2500		97.0000		96.7500		96.5000	
		Call	Put	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put
97.2000	@39.00%	9.5	18	64.0	-81	18.0	29	47.5	-70	29.5	41	34.5	-58
	@38.00%	9.0	18	63.5	-81	17.5	29	47.0	-70	29.0	41	34.0	-58
	@37.00%	8.5	18	63.0	-81	16.5	29	46.5	-70	28.0	42	33.0	-58
	@36.00%	8.0	17	62.5	-82	16.0	29	45.5	-70	27.0	42	32.0	-57
	@35.00%	7.5	17	62.0	-82	15.0	28	45.0	-71	26.5	42	31.5	-57
97.1800	@39.00%	9.0	18	65.5	-81	17.5	29	49.0	-70	29.0	40	36.0	-59
	@38.00%	8.5	17	65.0	-82	16.5	28	48.5	-71	28.0	40	35.0	-59
	@37.00%	8.0	17	64.5	-82	16.0	28	47.5	-71	27.0	41	34.0	-59
	@36.00%	7.5	16	64.0	-83	15.5	28	47.0	-71	26.5	41	33.5	-58
	@35.00%	7.0	16	63.5	-83	14.5	28	46.5	-71	25.5	41	32.5	-58
97.1600	@39.00%	9.0	17	67.5	-82	17.0	28	50.5	-71	28.0	39	37.0	-60
	@38.00%	8.5	17	67.0	-82	16.0	28	50.0	-71	27.0	40	36.0	-60
	@37.00%	8.0	16	66.0	-83	15.5	27	49.0	-72	26.5	40	35.5	-59
	@36.00%	7.5	16	65.5	-83	14.5	27	48.5	-72	25.5	40	34.5	-59
	@35.00%	7.0	15	65.0	-84	14.0	27	47.5	-72	25.0	40	33.5	-59
97.1400	@39.00%	8.5	17	69.0	-82	16.5	27	52.0	-72	27.5	39	38.0	-60
	@38.00%	8.0	16	68.5	-83	15.5	27	51.5	-72	26.5	39	37.5	-60
	@37.00%	7.5	16	68.0	-83	15.0	26	50.5	-73	25.5	39	36.5	-60
	@36.00%	7.0	15	67.5	-84	14.0	26	50.0	-73	25.0	39	35.5	-60
	@35.00%	6.5	15	67.0	-84	13.5	26	49.0	-73	24.0	39	35.0	-60
97.1200	@39.00%	8.0	16	70.5	-83	16.0	26	53.5	-73	26.5	38	39.5	-61
	@38.00%	7.5	16	70.0	-83	15.0	26	52.5	-73	25.5	38	38.5	-61
	@37.00%	7.0	15	69.5	-84	14.5	26	52.0	-73	25.0	38	37.5	-61
	@36.00%	6.5	15	69.0	-84	13.5	25	51.5	-74	24.0	38	37.0	-61
	@35.00%	6.0	14	68.5	-85	13.0	25	50.5	-74	23.0	38	36.0	-61
97.1000	@39.00%	8.0	15	72.5	-84	15.5	25	55.0	-74	26.0	37	40.5	-62
	@38.00%	7.5	15	72.0	-84	14.5	25	54.0	-74	25.0	37	40.0	-62
	@37.00%	7.0	15	71.5	-84	14.0	25	53.5	-74	24.0	37	39.0	-62
	@36.00%	6.5	14	71.0	-85	13.0	24	53.0	-75	23.5	37	38.0	-62
	@35.00%	6.0	14	70.5	-85	12.5	24	52.0	-75	22.5	37	37.5	-62
97.0800	@39.00%	7.5	15	74.0	-84	15.0	25	56.5	-74	25.0	36	42.0	-63
	@38.00%	7.0	14	73.5	-85	14.0	24	55.5	-75	24.0	36	41.0	-63
	@37.00%	6.5	14	73.0	-85	13.5	24	55.0	-75	23.5	36	40.0	-63
	@36.00%	6.0	14	72.5	-86	12.5	24	54.5	-75	22.5	36	39.5	-63
	@35.00%	5.5	13	72.0	-86	12.0	23	53.5	-76	22.0	36	38.5	-63
97.0600	@39.00%	7.5	14	75.5	-85	14.5	24	58.0	-75	24.5	35	43.0	-64
	@38.00%	7.0	14	75.0	-85	13.5	24	57.0	-75	23.5	35	42.5	-64
	@37.00%	6.5	13	74.5	-86	13.0	23	56.5	-76	22.5	35	41.5	-64
	@36.00%	6.0	13	74.0	-86	12.5	23	56.0	-76	22.0	35	40.5	-64
	@35.00%	5.5	12	73.5	-87	11.5	23	55.0	-76	21.0	35	40.0	-64
97.0400	@39.00%	7.0	14	77.5	-85	14.0	23	59.5	-76	23.5	34	44.5	-65
	@38.00%	6.5	13	77.0	-86	13.0	23	58.5	-76	23.0	34	43.5	-65
	@37.00%	6.0	13	76.5	-86	12.5	23	58.0	-76	22.0	34	43.0	-65
	@36.00%	5.5	12	76.0	-87	12.0	22	57.5	-77	21.0	34	42.0	-65
	@35.00%	5.0	12	75.5	-87	11.0	22	56.5	-77	20.5	34	41.0	-65
97.0200	@39.00%	7.0	13	79.0	-86	13.5	23	61.0	-76	23.0	33	45.5	-66
	@38.00%	6.5	13	78.5	-86	12.5	22	60.0	-77	22.0	33	45.0	-66
	@37.00%	6.0	12	78.0	-87	12.0	22	59.5	-77	21.5	33	44.0	-66
	@36.00%	5.5	12	77.5	-87	11.5	21	59.0	-78	20.5	33	43.5	-66
	@35.00%	5.0	11	77.0	-88	10.5	21	58.5	-78	19.5	33	42.5	-66
97.0000	@39.00%	6.5	13	81.0	-86	13.0	22	62.5	-77	22.5	33	47.0	-66
	@38.00%	6.0	12	80.5	-87	12.5	22	62.0	-77	21.5	32	46.0	-67
	@37.00%	5.5	12	80.0	-87	11.5	21	61.0	-78	20.5	32	45.5	-67
	@36.00%	5.0	11	79.5	-88	11.0	21	60.5	-78	20.0	32	44.5	-67
	@35.00%	4.5	11	79.0	-88	10.5	20	60.0	-79	19.0	32	44.0	-67
96.9800	@39.00%	6.0	12	82.5	-87	12.5	21	64.0	-78	21.5	32	48.5	-67
	@38.00%	6.0	12	82.0	-87	12.0	21	63.5	-78	21.0	32	47.5	-67
	@37.00%	5.5	11	81.5	-88	11.0	20	62.5	-79	20.0	31	47.0	-68
	@36.00%	5.0	11	81.0	-88	10.5	20	62.0	-79	19.0	31	46.0	-68
	@35.00%	4.5	10	80.5	-89	10.0	20	61.5	-79	18.5	31	45.0	-68
96.9600	@39.00%	6.0	12	84.0	-87	12.0	21	65.5	-78	21.0	31	49.5	-68
	@38.00%	5.5	11	84.0	-88	11.5	20	65.0	-79	20.0	31	49.0	-68
	@37.00%	5.0	11	83.5	-88	11.0	20	64.0	-79	19.5	31	48.0	-68
	@36.00%	4.5	11	83.0	-88	10.0	19	63.5	-80	18.5	30	47.5	-69
	@35.00%	4.5	10	82.5	-89	9.5	19	63.0	-80	18.0	30	46.5	-69
96.9400	@39.00%	6.0	12	86.0	-88	11.5	20	67.0	-79	20.5	30	51.0	-69
	@38.00%	5.5	11	85.5	-88	11.0	20	66.5	-79	19.5	30	50.5	-69
	@37.00%	5.0	11	85.0	-88	10.5	19	66.0	-80	19.0	30	49.5	-69
	@36.00%	4.5	10	84.5	-89	10.0	19	65.0	-80	18.0	30	48.5	-69
	@35.00%	4.0	10	84.5	-89	9.0	18	64.5	-81	17.0	29	48.0	-70
96.9201	@39.00%	5.5	11	87.5	-88	11.5	19	68.5	-80	20.0	29	52.5	-70
	@38.00%	5.0	11	87.5	-88	10.5	19	68.0	-80	19.0	29	51.5	-70
	@37.00%	4.5	10	87.0	-89	10.0	19	67.5	-80	18.0	29	51.0	-70
	@36.00%	4.5	10	86.5	-89	9.5	18	67.0	-81	17.5	29	50.0	-70
	@35.00%	4.0	9	86.0	-90	9.0	18	66.0	-81	16.5	28	49.5	-71
96.9001	@39.00%	5.5	11	89.5	-88	11.0	19	70.5	-80	19.0	29	54.0	-70
	@38.00%	5.0	10	89.0	-89	10.5	18	69.5	-81	18.5	28	53.0	-71
	@37.00%	4.5	10	88.5	-89	9.5	18	69.0	-81	17.5	28	52.5	-71
	@36.00%	4.0	9	88.5	-90	9.0	17	68.5	-82	17.0	28	51.5	-71
	@35.00%	3.5	9	88.0	-90	8.5	17	68.0	-82	16.0	28	51.0	-71
96.8801	@39.00%	5.0	10	91.5	-89	10.5	18	72.0	-81	18.5	28	55.5	-71
	@38.00%	4.5	10	91.0	-89	10.0	18	71.5	-81	18.0	28	54.5	-71
	@37.00%	4.5	9	90.5	-90	9.5	17	70.5	-82	17.0	27	53.5	-72
	@36.00%	4.0	9	90.0	-90	8.5	17	70.0	-82	16.5	27	53.0	-72
	@35.00%	3.5	8	89.5	-91	8.0	16	69.5	-83	15.5	27	52.0	-72

MAR 03 IMM EURODOLLAR OPTIONS
 Evaluation date: 05/23/02 Expiration date: 03/17/03 # days: 298
 Futures last:96.4450 Implied volatility: 33.95% Interest rate: 1.72%

	97.2500				97.0000				96.7500				96.5000				96.2500				96.0000				
	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put	Call	Put			
96.6000	@36.00%	15.0	20	79.0	-78	24.0	29	63.5	-70	35.5	38	50.0	-61	49.0	46	39.0	-52	65.0	55	30.5	-44	82.5	62	23.5	-36
	@35.00%	14.0	20	78.5	-79	23.0	29	62.5	-70	34.0	38	49.0	-61	48.0	47	38.0	-52	63.5	55	29.0	-44	81.5	63	22.0	-36
	@34.00%	13.5	20	77.5	-79	22.0	28	61.5	-70	33.0	38	48.0	-61	46.5	47	37.0	-52	62.5	56	28.0	-43	80.0	64	21.0	-35
	@33.00%	12.5	19	76.5	-79	21.0	28	60.5	-71	32.0	38	46.5	-61	45.5	47	35.5	-51	61.5	56	26.5	-42	79.0	64	20.0	-34
	@32.00%	11.5	19	76.0	-80	20.0	28	59.5	-71	30.5	38	45.5	-61	44.0	48	34.5	-51	60.0	57	25.5	-42	78.0	65	19.0	-33
96.5800	@36.00%	14.5	20	80.5	-79	23.5	28	65.0	-70	34.5	37	51.5	-62	48.0	46	40.0	-53	63.5	54	31.0	-45	81.0	62	24.0	-37
	@35.00%	14.0	20	80.0	-79	22.5	28	64.0	-71	33.5	37	50.0	-62	47.0	46	39.0	-53	62.5	55	30.0	-44	80.0	62	23.0	-36
	@34.00%	13.0	19	79.0	-79	21.5	28	63.0	-71	32.5	37	49.0	-62	45.5	46	38.0	-52	61.5	55	29.0	-44	79.0	63	21.5	-36
	@33.00%	12.0	19	78.0	-80	20.5	27	62.0	-71	31.0	37	48.0	-62	44.5	46	36.5	-52	60.0	56	27.5	-43	77.5	64	20.5	-35
	@32.00%	11.5	18	77.5	-80	19.5	27	60.5	-71	30.0	37	47.0	-62	43.5	47	35.5	-52	59.0	56	26.5	-42	76.5	65	19.5	-34
96.5600	@36.00%	14.5	19	82.5	-79	23.0	28	66.5	-71	34.0	36	52.5	-62	47.0	45	41.5	-54	62.5	53	32.0	-45	80.0	61	24.5	-38
	@35.00%	13.5	19	81.5	-80	22.0	27	65.0	-71	32.5	36	51.5	-62	46.0	45	40.0	-53	61.5	54	31.0	-45	79.0	62	23.5	-37
	@34.00%	12.5	19	80.5	-80	21.0	27	64.0	-72	31.5	36	50.5	-62	45.0	45	39.0	-53	60.0	54	29.5	-44	77.5	62	22.5	-36
	@33.00%	12.0	18	80.0	-80	20.0	27	63.0	-72	30.5	36	49.0	-62	43.5	46	37.5	-53	59.0	55	28.5	-44	76.5	63	21.5	-36
	@32.00%	11.0	18	79.0	-81	19.0	26	62.0	-72	29.5	36	48.0	-62	42.5	46	36.5	-53	58.0	55	27.5	-43	75.5	64	20.0	-35
96.5400	@36.00%	14.0	19	84.0	-80	22.5	27	67.5	-72	33.0	36	54.0	-63	46.5	44	42.5	-54	61.5	53	33.0	-46	78.5	60	25.5	-38
	@35.00%	13.0	19	83.0	-80	21.5	27	66.5	-72	32.0	36	52.5	-63	45.0	45	41.0	-54	60.5	53	32.0	-46	77.5	61	24.5	-38
	@34.00%	12.0	18	82.0	-80	20.5	26	65.5	-72	31.0	36	51.5	-63	44.0	45	40.0	-54	59.0	54	30.5	-45	76.5	62	23.0	-37
	@33.00%	11.5	18	81.5	-81	19.5	26	64.5	-72	29.5	35	50.5	-63	42.5	45	38.5	-54	58.0	54	29.5	-45	75.0	62	22.0	-36
	@32.00%	10.5	17	80.5	-81	18.5	26	63.5	-73	28.5	35	49.5	-63	41.5	45	37.5	-53	56.5	55	28.0	-44	74.0	63	21.0	-36
96.5200	@36.00%	13.5	19	85.5	-80	22.0	26	69.0	-72	32.5	35	55.0	-64	45.5	44	43.5	-55	60.5	52	34.0	-47	77.5	60	26.5	-39
	@35.00%	12.5	18	84.5	-81	21.0	26	68.0	-72	31.5	35	54.0	-64	44.0	44	42.5	-55	59.5	52	32.5	-46	76.5	60	25.0	-38
	@34.00%	12.0	18	84.0	-81	20.0	26	67.0	-73	30.0	35	53.0	-64	43.0	44	41.0	-55	58.0	53	31.5	-46	75.0	61	24.0	-38
	@33.00%	11.0	17	83.0	-81	19.0	26	66.0	-73	29.0	35	51.5	-64	42.0	44	40.0	-54	57.0	53	30.0	-45	74.0	62	22.5	-37
	@32.00%	10.5	17	82.5	-82	18.0	25	65.0	-73	28.0	35	50.5	-64	40.5	44	38.5	-54	55.5	54	29.0	-45	73.0	62	21.5	-36
96.5000	@36.00%	13.0	18	87.0	-81	21.5	26	70.5	-73	32.0	34	56.5	-64	44.5	43	44.5	-56	59.5	51	35.0	-47	76.5	59	27.0	-40
	@35.00%	12.5	18	86.5	-81	20.5	26	69.5	-73	30.5	34	55.5	-64	43.5	43	43.5	-55	58.5	52	33.5	-47	75.0	60	26.0	-39
	@34.00%	11.5	17	85.5	-81	19.0	25	68.5	-73	29.5	34	54.0	-64	42.0	43	42.0	-55	57.0	52	32.5	-47	74.0	60	24.5	-38
	@33.00%	10.5	17	84.5	-82	18.0	25	67.5	-74	28.5	34	53.0	-65	41.0	43	41.0	-55	56.0	53	31.0	-46	73.0	61	23.5	-38
	@32.00%	10.0	16	84.0	-82	17.5	25	66.5	-74	27.0	34	52.0	-65	39.5	44	39.5	-55	54.5	53	30.0	-46	71.5	62	22.5	-37
96.4800	@36.00%	13.0	18	88.5	-81	21.0	25	72.0	-73	31.0	34	57.5	-65	43.5	42	45.5	-56	58.5	51	36.0	-48	75.0	58	28.0	-40
	@35.00%	12.0	17	88.0	-81	19.5	25	71.0	-74	30.0	34	56.5	-65	42.5	42	44.5	-56	57.5	51	34.5	-48	74.0	59	26.5	-40
	@34.00%	11.0	17	87.0	-82	18.5	25	70.0	-74	29.0	33	55.5	-65	41.5	43	43.0	-56	56.0	51	33.5	-47	73.0	60	25.5	-39
	@33.00%	10.5	16	86.5	-82	18.0	24	69.0	-74	27.5	33	54.5	-65	40.0	43	42.0	-56	55.0	52	32.0	-47	71.5	60	24.0	-38
	@32.00%	9.5	16	85.5	-83	17.0	24	68.0	-75	26.5	33	53.0	-65	39.0	43	41.0	-56	53.5	52	31.0	-46	70.5	61	23.0	-38
96.4600	@36.00%	12.5	17	90.5	-81	20.5	25	73.5	-74	30.5	33	59.0	-66	43.0	42	47.0	-57	57.5	50	37.0	-49	74.0	58	28.5	-41
	@35.00%	11.5	17	89.5	-82	19.5	24	72.5	-74	29.5	33	58.0	-66	41.5	42	45.5	-57	56.5	50	35.5	-48	73.0	58	27.5	-40
	@34.00%	11.0	16	88.5	-82	18.5	24	71.5	-75	28.0	33	56.5	-66	40.5	42	44.5	-57	55.0	51	34.5	-48	71.5	59	26.0	-40
	@33.00%	10.0	16	88.0	-83	17.5	24	70.5	-75	27.0	33	55.5	-66	39.0	42	43.0	-57	53.5	51	33.0	-48	70.5	59	25.0	-39
	@32.00%	9.5	15	87.0	-83	16.5	23	69.5	-75	26.0	33	54.5	-66	38.0	42	42.0	-56	52.5	51	32.0	-47	69.0	60	24.0	-39
96.4400	@36.00%	12.0	17	92.0	-82	20.0	24	75.0	-74	30.0	32	60.5	-66	42.0	41	48.0	-58	56.5	49	38.0	-49	73.0	57	29.5	-42
	@35.00%	11.5	16	91.0	-82	19.0	24	74.0	-75	28.5	32	59.0	-66	41.0	41	47.0	-58	55.5	50	36.5	-49	71.5	58	28.0	-41
	@34.00%	10.5	16	90.5	-83	18.0	24	73.0	-75	27.5	32	58.0	-66	39.5	41	45.5	-57	54.0	50	35.5	-49	70.5	58	27.0	-40
	@33.00%	10.0	15	89.5	-83	17.0	23	72.0	-75	26.5	32	57.0	-67	38.5	41	44.5	-57	52.5	50	34.0	-48	69.0	59	26.0	-40
	@32.00%	9.0	15	89.0	-84	16.0	23	71.0	-76	25.0	32	56.0	-67	37.0	41	43.0	-57	51.5	51	32.5	-48	68.0	59	24.5	-39
96.4200	@36.00%	12.0	16	93.5	-82	19.5	24	76.5	-75	29.0	32	61.5	-67	41.5	40	49.0	-58	55.5	49	39.0	-50	71.5	56	30.5	-42
	@35.00%	11.0	16	93.0	-83	18.5	23	75.5	-75	28.0	32	60.5	-67	40.0	40	48.0	-58	54.5	49	37.5	-50	70.5	57	29.0	-42
	@34.00%	10.0	15	92.0	-83	17.5	23	74.5	-76	27.0	32	59.5	-67	39.0	40	46.5	-58	53.0	49	36.0	-49	69.0	57	28.0	-41
	@33.00%	9.5	15	91.5	-84	16.5	23	73.5	-76	25.5	31	58.0	-67	37.5	41	45.5	-58	51.5	50	35.0	-49	68.0	58	26.5	-41
	@32.00%	8.5	14	90.5	-84	15.5	22	72.5	-76	24.5	31	57.0	-67	36.5	41	44.0	-58	50.							