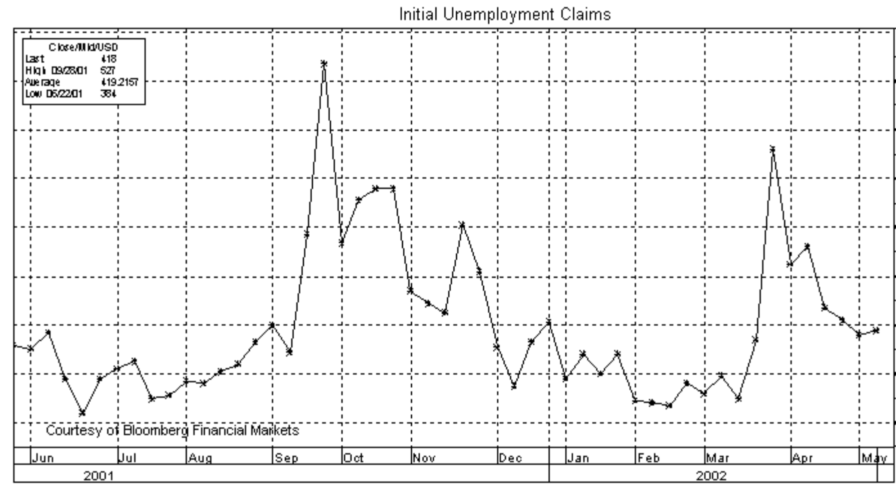
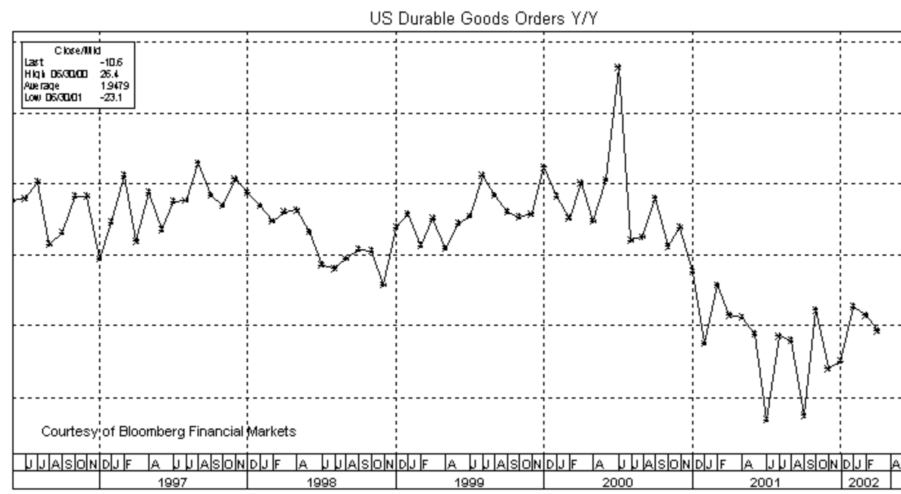
Optima INVESTMENT RESEARCH — Forex

Thursday 5/23/02 -- **Americas Comment** -- The US markets will focus on (1) this morning's US durable goods and unemployment claims reports, (2) any developments on the US government's terrorist warnings, (2) the tense situation in the Middle East and between India and Pakistan, (3) the dollar which continued to show weakness yesterday despite a round of BOJ intervention, (4) the stock market which recovered mildly yesterday, (5) the US credit market which continued to rally yesterday, and (6) gold prices which posted another new 2-year high yesterday.





Durable goods orders expected to show modest +0.5% gain -- Today's April durable goods orders report is expected to show a gain of +0.5% m/m, reversing March's -0.5% decline. March durable goods orders were down -10.6% on a year-on-year basis but should start to improve significantly on a year-on-year basis in coming months due to the weak year-earlier base. On a year-on-year basis, the series hit a cyclical low of -22.6% back in September. Durable goods orders are expected to firm up in coming months as businesses are forced to replenish low inventories and as demand is confirmed. April retail sales soared by +1.2% which depressed inventory levels. Excluding transportation orders, which are expected to be weak, April goods orders are expected to rise +1.0% after March's -0.1% decline.

Claims are expected to move lower -- Unemployment claims in the week ended 18 are expected to fall -8,000 to 410,000. Claims in the past 2 weeks have remained around the 420,000 area versus the 390,000 area seen before the mid-March surge to 492,000 tied to the extension of unemployment benefits. The slow decline in claims in the past several weeks is evidence of continued softness in the US labor market.

Gold edges to another new 2-year high -- Cash gold yesterday rallied to another new 2-year high of $319.65. Gold has rallied by about $12 in the past week and by more than $50 in the past year. June gold futures yesterday closed -$2.80 at $318.90. Gold rallied yesterday on continued strong technicals, the ongoing tensions related to terrorism and to the Middle East and Indian subcontinent, and yesterday's continued weakness in the dollar.

Crude oil continues lower from last week's 8-month high -- July crude oil prices yesterday fell -13 cents to $26.30 and posted a new 2-week low of $26.15. The market is now down $2 from last Tuesday's 8-month high of $29.45 on the weekly nearest futures chart. That sell-off was mainly due to Russia's rejection of the export restrictions it had agreed to as part of a deal with OPEC. The market slid yesterday on the late-Tuesday API report which showed a 5.6 million barrel rise (+1.8%) in US oil inventories, the first rise in 3 weeks. Gasoline inventories fell 0.5% and distillate fuel inventories fell 0.1%. Refiners were running at 91.4% of capacity, down 1.1 percentage points from the previous week.

US Interest Rates -- **US credit market continues higher** -- **Futures closes**: USM02 +0-18 at 101-26; TYM02 +0-120 at 106-000; FVM02 +0-090 at 106-225; TUM02 +0-037 at 104-247; EDZ02 +.0550 at 97.0400. Cash closes (3PM NY): cash 30-yr +0-15 at 96-13; cash 30-yr yield -.034 at 5.629; cash 10-yr +0-11 at 98-09; cash 10-yr yield -.045 at 5.102; cash 5-yr +0-08 at 99-26; cash 5-yr yield -.057 at 4.418; cash 2-yr +0-170 at

002-200; cash 2-yr yield -.059 at 3.165; 3-mo T-bill -.020 at 1.690.

June T-bonds yesterday posted a 1-1/2 week high and are now in the upper half of the range established by the early-May sell-off from the 2-1/2 month high of 103-04 (May 1) and last Tuesday's 1-month low of 99-27. Dec Euros yesterday posted a new 2-week high of 97.090 and stopped just 1 bp shy of the early-May 6-1/2 month high of 97.100.

Bullish factors included (1) early weakness in US stocks, (2) continued nervousness about the spate of terrorist warnings by US officials and about whether there may be an attack over the Memorial Day weekend, (3) additional flight-to-quality support from another suicide bombing in Israel (which increases the chances for another Israeli incursion into the Palestinian territories) and from the high tensions between India and Pakistan who continue shell each other across the Line of Control in Kashmir, (4) another coupon pass yesterday which soaked up more secondary supply, and (5) lower crude oil prices.

Bearish factors included (1) yesterday's upward rebound in stocks, (2) yesterday's new lows in the dollar which discourages foreign investment in US securities and contributes to US import inflation, (2) yesterday's continued rally in gold prices to a new 2-year high, and (3) the $2 billion boost in the size of the 2-year T-note auction to $27.0 billion.

The Treasury yesterday announced that next week's 2-year T-note auction will be $27.0 billion, up from the $25.0 billion size seen in the past 4 monthly auctions. That was on the higher end of expectations. The larger 2-year was made necessary by the Treasury's cut in this week's 4-week T-bill auction to $18 billion (from $25 billion) and by the Treasury's poor revenue situation.

US Stock Market -- **US Stock Index Settles**: Dow Industrials +52.17 at 10157.9; S&P 500 +6.14 at 1086.02; SPM2 +2.00 at 1085.10; NASDAQ Composite +9.26 at 1673.45; Russell 2000 -1.55 at 493.91. NYSE volume yesterday remained light at 1.14 billion, below the 3-month average of 1.31 bln shares. Market breadth was slightly bullish with 1,614 advancing shares versus 1,549 declining shares.

June S&Ps and the cash S&P index yesterday extended the 3-session downmove from last Friday's 1-month highs of 1109.10 and 1106.59, respectively, to new 1-1/2 week lows but then recovered modestly. The indexes are still well above the recent 7-month lows of 1045.80 and 1048.96, respectively, posted in early May. The cash Nasdaq 100 yesterday remained well below last Wednesday's 1-month high of 1350.54. The Dow Industrials remained well below last Friday's 1-1/2 month high of 10,353.43.

Bullish factors included (1) some short-covering after the sharp sell-off seen early this week, (2) a rally in Johnson & Johnson (+$1.36 to $62.00) on a positive study on its drug-coated artery stent, (3) the continued rally in the US credit market with Dec Euros nearly posting a new 6-1/2 month high.

Bearish factors included (1) continued concern about the terrorist warnings and whether they will damage consumer and business confidence, (2) underlying concerns about weaker than expected US economic growth and lackluster earnings, and (3) yesterday's continued weakness in the dollar which deters foreign investors from investing in the US stock market.

Forex -- **Dollar closes** (3PM NY): Dollar closes (3PM NY): cash dollar index -.44 at 112.33; dlr/yen +.11 at 124.21; dlr/Swiss -.0082 at 1.5686; stlg/dlr -.0017 at 1.4582; USD/CAD -.0053 at 1.5332. Euro closes: euro/dlr +.0063 at .9263; euro/yen +.85 at 115.01; euro/Swiss +.0023 at 1.4532. Futures closes: DXM02 -.48 at 112.46; JYM02 -.0020 at .8062; ECM02 +.00620 at .92520; SFM02 +.0032 at .6377; BPM02 -.0008 at 1.4566; CDM02 +.0022 at .6518.

The **dlr/yen** yesterday posted another new 5-month low of 123.53 before recovering somewhat on the BOJ's intervention. The **euro/dlr** yesterday posted a new 7-month high of .9276, which was only about 1/2 cent below the 14-month high of .9331 posted last September.

Bearish factors for the dollar included (1) continued technical weakness with the new low in the dollar/yen and the new high in the euro/dollar, (2) continued capital flows into the yen as investors seek investment bargains if the Japanese economy is in fact bottoming, and (3) underlying concerns about weaker than expected US economic growth and the massive US current account deficit.

The dollar/yen yesterday closed just slightly higher despite BOJ intervention that was confirmed by Japanese Minister Shiokawa. The inability of the dollar/yen to hold the initial gain on the intervention exposed the extent of the dollar/yen's underlying weakness and will only encourage more selling in coming days.

The BOJ's intervention yesterday was the first since last September. Yesterday's intervention was not surprising given the warnings by top Japanese officials early this week. The Japanese government is desperate to keep the yen's value down since it is relying on exports to be the engine to drive the Japanese economy out of recession. Mr. Shiokawa yesterday said that Japan sold yen because the yen's rise was "too rapid" and "abnormal." He said that, "Such a rapid rise is troublesome to everyone." He also said that Japan doesn't plan to ask other nations to join in the yen intervention effort. The US would be unlikely to join the intervention in any event given the US Treasury's hands-off policy toward the currency markets. However, the Fed could sell yen for the BOJ's account if the BOJ wants to extend the intervention into the US trading session.

European Comment -- **Euro zone** -- German March construction orders rose sharply by +5.8% m/m for the third consecutive monthly rise. On a year-on-year basis, construction orders turned positive at +5.7% y/y for the first time in the current business cycle.

UK -- The Bank of England at its meeting earlier this month on May 8-9 voted unanimously 9-0 to leave interest rates unchanged, according to the minutes of the meeting released yesterday. The minutes said, "The prospects for the world economy now appeared to be a little less strong than had seemed likely a month ago.... The rapid recovery in the United States, associated in large part with the stock cycle, had faltered in the past month and it seemed probable that the pace of the recovery there would not moderate." The minutes suggest that the MPC is not close to raising interest rates and that a rate hike is not likely until July or August.

European closes -- Closes: June Bunds +.11 at 105.80, Dec Liffe Euribor +4 bp at 95.840, June gilts +.08 at 111.59, Dec short-sterling +7 bp at 94.880, Eurotop 100 -42 at 2666 (-1.53%).

Asian Comment -- **Japan** -- Optimism that Japan's economy may have bottomed grew yesterday after Japan's all-industry index, which is designed to track GDP, rose by +1.2% in March and by +0.6% for Q1 as a whole. The services index rose sharply by +1.2% m/m in March. The report supported expectations for a positive Japanese Q1 GDP report.

However, the agency that compiles the industry index, the Ministry of Economic, Trade and Industry (METI), said that, "It's too early for us to judge whether the tertiary industry activity has hit bottom."

The BOJ in its monthly report released yesterday joined the government in upgrading its assessment of the economy for the third straight month. The BOJ said that, "The pace of deterioration in Japan's economy has moderated.... Production is starting to pick up, reflecting the increase in exports and progress" in reducing inventories. However, the BOJ said that a recovery will be "modest" because of weak consumer spending and because business investment will continue "follow a down-trend for a while." The BOJ did not go as far as the government in declaring that the recession is over.

Japan's Q1 GDP was up sharply by +2.2% q/q and 8.9% y/y, according to a survey of six research companies polled by the *Nihon Keizai* newspaper. The poll showed average expectations for a 7% y/y rise in exports and a 2% q/q rise in consumer spending. The government will release the Q1 GDP report on June 7.

Japanese Markets -- June SGX 10-year JGBs yesterday closed -.01 at 138.62, posting a new 3-week low and falling farther from last Thursday's 6-month high of 139.12. Bearish factors centered on the strong industry index report. However, JGBs were supported by the BOJ's less optimistic view of the economy than the government and by today's very strong auction of $10.4 billion in 10-year JGBs yesterday where the bid cover ratio was more than 10 to 1 versus the last auction's cover of 2.3 times. Dec SGX Euroyen yesterday closed +0.5 bp at 99.870, slightly below the contract high of 99.885.

The Nikkei index yesterday closed +161 at 11,962, edging to a new 2-month high of 11,963. That was only mildly below the 9-month high of 12,034 posted on March 11. Japanese stocks were boosted by the favorable industry index report which boosted banking, telecom and retail stocks. Stocks were also supported by the BOJ's intervention to curb the yen's strength which is hurting Japanese profits.

OPTIMA FINANCIAL NEWS SCHEDULE^ Thu 5/23/02

A. Today's News (ET & GMT release time shown)

Thu	US	0830 ET	1230	Initial unemployment claims for week ending May 18 expected 410,000 previous 418,000.
		0830 ET	1230	Apr durable goods orders expected +0.5%, Mar -0.5%, less transportation expected +1.0%, Mar -0.1%.
		0930 ET	1330	Dallas Fed president McTeer speaks on US economy in Plano, Texas.
		1000 ET	1400	Chicago Fed President Moscow speaks at Iron and Steel Institute meeting.
		n/a		Earnings expected today: Barnes & Noble, Ciena, Novell, Sun Microsystems, Williams-Sonoma, among others.
	GER	0200 ET	0600	German Q1 GDP expected +0.1% q/q and -0.3% y/y.
		n/a		German May CPI North Rhine-Westphalia, Apr +0.1% m/m, +1.4% y/y.
				German May CPI Hesse, Brandenburg (May 23-24)
	UK	0430 ET	0830	UK Apr retail sales expected +0.4% m/m, Mar +0.1%, +5.2% y/y, Mar +5.6%.
				UK Apr car production, Mar 3-months/3-months +5.3%, 3-months/yr ago +12.3%.
				UK Q1 total business investment, Q4 -0.3% q/q, previous -7.4% y/y.
				UK CBI industrial trends survey.
				UK initial unemployment claims, for week ending May 18.
		1030 ET	1430	UK Apr coincident indicator index, Mar +0.1% m/m.
				UK Apr leading Indicator index, Mar +0.3% m/m.
	JPN	1950 ET	2350	Japan Mar average lending rate, Feb 1.561%.
	FRA	0245 ET	0645	French Apr consumer spending expected -0.2% m/m Mar +1.2%, expected +2.9% y/y, Mar +2.7%.

B. Future News:

Sometime this week:				
	GER	n/a		German Mar industrial output, Feb +0.5% m/m, -5.1% y/y.
		n/a		German Apr PPI, Mar +0.3 m/m, -0.2 y/y.
Fri	US	0830 ET	1230	Q1 GDP expected to be revised to +6.0% from last +5.8% q/q, GDP price deflator expected unrevised at +0.8%.
				Q1 corporate profits.
		1000 ET	1400	Apr new home sales expected +0.8% at 885,000, from Mar at 878,000.
	UK	0430 ET	0830	UK Q1 GDP expected +0.1% q/q, previous unch, expected +1.0% y/y, previous +1.6%.
	FRA	0245 ET	0645	French Q1 GDP expected +0.4% q/q and +0.6% y/y.
		0250 ET	0650	French Apr CPI, Mar +0.5% m/m, +2.1% y/y. Apr CPI EU harmonized, Mar 0+.5% m/m, Mar +2.2% y/y.
	JPN	0100 ET	0500	Japan BOJ releases minutes of Apr 10-11 meeting.
Week of May 27-31				
Sometime this week:				
	GER	n/a		German Mar construction orders, Feb +6.1% y/y, -1.5% y/y.
				German Apr import price index, Feb +0.8% m/m, -2.5% y/y.
				German Apr wholesale sales, SA -0.7% m/m, NSA -7.4% y/y.
Sun	JPN	1950 ET	2350	Japan Apr large retailer sales, Mar -1.5%.
Mon	US			Memorial Day US Markets closed.
	GER	0400 ET	0800	German May IFO ind. survey (business climate), Apr 90.5.
				German May IFO current assessment, Apr 76.9., IFO expectations, Apr 104.6.

Tue	US	0830 ET	1230	Apr personal income expected +0.3%, Mar +0.4%.
				Apr spending expected +0.7%, Mar +0.4%.
		0900 ET	1300	Redbook weekly retailer sales.
		1000 ET	1400	May consumer confidence expected 110.0, Apr 108.8.
				Apr existing home sales expected -0.9% at 5,350,000, from Mar 5,400,000.
	UK	0430 ET	0830	UK BBA mortgage lending figures.
	JPN	1950 ET	2350	Japan Apr industrial production, Mar +0.8% m/m.
Wed	US	1300 ET	1700	Treasury sells $27 billion in 2-year T-notes for $4.9 bln new cash.
	FRA	0245 ET	0645	France May business confidence indicator, Apr 97.0.
				France Mar production outlook indicator, Apr -16.0.
Thu US		0000 ET	0400	Chicago Fed releases national activity index for Apr.
		0830 ET	1230	Initial unemployment claims for week ending May 25th.
		n/n		Earnings expected today: Costco Wholesale, Dollar General, Neiman Marcus.
	UK	0430 ET	0830	UK Mar index of distribution.
				UK Apr M4 money supply, m/m and y/y.
				UK Apr Sterling lending.
				UK Apr net consumer credit.
	JPN	1930 ET	2330	Japan Apr unemployment rate expected 5.3%, Mar 5.2%.
				Japan Apr job to applicant ratio expected .51, Mar .51.
				Japan Apr household spending, Mar -1.2% y/y.
				Japan May Tokyo consumer prices SA, Apr -0.2%, less food -0.4%.
				Japan May Tokyo consumer prices , Apr -1.3% y/y, less food -1.1% y/y.
				Japan Apr national consumer prices SA, Mar unch, less food unch.
				Japan Apr national consumer prices, Mar -1.2% y/y, less food, -0.7% y/y.
Fri	US	0830 ET	1230	Q1 final unit labor costs expected -5.5%, previous -5.4%.
				Q1 final nonfarm productivity expected 8.7%, previous +8.6%.
				Late-May University of Michigan consumer confidence expected 96.0, early-May +3.0 to 96.0.
		1000 ET	1400	May Chicago purchasing managers expected 55.0, Apr 54.7.
				Apr factory orders expected +0.3%, Mar +0.4%.
	JPN	0030 Et	0430	Japan Apr crude oil imports, Mar -6.4% y/y.
		0100 ET	0500	Japan Apr construction orders, Mar -12.9% y/y.
				Japan Apr housing starts, Mar -6.2% y/y.
	FRA	0245 ET	0645	France Apr unemployment rate Mar 9.1%, unemployment rate change, Mar 13,000.
		0250 ET	0650	France Apr PPI, Mar +0.7% m/m, -0.7% y/y.
Week of June 3-7				
Sometime this week:				
Sun	JPN	1950 ET	2350	Japan Apr average lending rate.
	US	Jun 3-4		May domestic vehicle sales, Apr 14,000,000.
Mon	US	1000 ET	1400	Apr construction spending, Mar -0.9%
				May ISM manufacturing index, Apr 53.9.
				Mar ISM prices paid, Apr 60.3.
	UK	0430 ET	0830	UK CIPS purchasing managers index.
Tue	UK	0430 ET	0830	UK CIPS construction index.
	JPN	0100 ET	0500	Japan Apr leading economic index.
				Japan Apr coincident index.
	FRA	0245 ET	0645	French May consumer confidence indicator, Apr -18.0.
Wed	US	1000 ET	1400	May ISM non-manufacturing, Apr 55.3.
	UK	0430 ET	0830	UK May M0 money supply, Apr +0.9 m/m, +8.0% y/y.
				UK May official reserve (changes).
				UK CIPS services index.
		0600 ET	1000	UK CBI quarterly distributive trades report.
		n/a		UK Bank of England monetary policy committee meets.
				UK BRC shop price index.
Thu	US	0830 ET	1230	Initial unemployment claims for week ending Jun 1.
		1525 ET	1925	San Francisco Fed pres. Parry speaks at financial analysts meeting in Oregon.
	EUR	0745 ET	1145	ECB announces interest rates, current 3.25%.
	GER	0600 ET	1000	German Apr factory orders, Mar unch m/m, -3.4% y/y.
	UK	0700 ET	1100	UK Bank of England announces rates, current 4.0%
	JPN	0030 ET	0430	Japan May consumer confidence.
		1950 ET	2350	Japan Q1 GDP preliminary, previous -1.2%.

Fri	US	0830 ET	1230	May unemployment rate, Apr 6.0%.
				May average hourly earnings, Apr +0.1%.
				May change in non-farm payrolls, Apr 43,000.
				May change in manufacturing payrolls, Apr -19,000.
				May average weekly hours, Apr 34.1.
		1000 ET	1400	Apr wholesale inventories, Mar unchanged.
		1500 ET	1900	Apr consumer credit, Mar $4.6 bln.
	GER	0355 ET	0755	German May unemployment change SA, Apr 6,000.
				German May unemployment EU-Def, Apr 8.1%, unemployment rate SA 9.6%.
	JPN	0100 ET	0500	Japan Apr household spending, Mar -1.0% y/y.
	FRA	0245 ET	0645	French Apr central government balance (Euros)
Week of June 10-14				
Sometime this week:				
	GER	n/a		German Apr retail sales SA, Mar +1.2% m/m, -4.5% y/y.
				German Mar CPI final, previous +0.1% m/m, +1.6% y/y.
	JPN	n/a		Japan Apr current account total, Mar 2202.5 bln Yen, adjusted 1547.5 bln Yen.
Sun	JPN	1950 ET	2350	Japan May bank lending, May -4.8% y/y
				Japan May domestic wholesales price index, Apr unch.
				Japan May Money Supply M2+Cd, +3.6% y/y.
Mon	UK	0430 ET	0830	UK May PPI input SA, Apr +0.9% m/m, -3.7% y/y
				UK May PPI output NSA, Apr +0.5% m/m, +0.2% y/y.
		1430 ET	1830	UK BRC retail sales monitor.
	JPN	0100 ET	0500	Japan Apr machine orders, Mar -6.2% m/m.
Tue	GER	0200 ET	0600	German Apr currant account, Mar 7.5 bln (Euro).
				German Apr trade balance, Mar 12.4 bln.
		0600 ET	1000	German Apr industrial output, m/m and y/y.
		0900 ET	1300	German Jun ZEW survey (economic sentiment).
	UK	0430 ET	0830	UK Apr visible trade balance, Mar -3004.
				UK Apr trade balance non EU, Mar -2169.
				UK Apr industrial production, +0.4% m/m, -5.9% y/y.
				UK Apr Manufacturing production, Mar -0.8% m/m, -6.8%
Wed	US	0830 ET	1230	May Imports all commodity price, Apr +1.2%.
		1400 ET	1800	Federal Reserve's beige book.
	UK	1901 ET	2301	UK Apr total housing starts NSA, Mar 18,900.
	FRA	0245 ET	0645	French May CPI, m/m and y/y.
				French May CPI EU harmonized, m/m and y/y.
Thu	US	0830 ET	1230	Initial unemployment claims for week ending Jun 8.
				May PPI, Apr -0.2%, less food and energy +0.1%.
				May retail sales, Apr +1.2%, less autos +1.0%.
	UK	0430 ET	0830	UK New construction orders.
	JPN	0030 ET	0430	Japan Apr industrial production final m/m.
				Japan Apr capacity utilization final.
	FRA	0250 ET	0650	French Apr industrial production, m/m and y/y.
				French Apr manufacturing production, m/m and y/y.

Future News:
June 9 & 16: French Parliamentary elections.
Upcoming Central Bank meetings:
FOMC: June 25-26, Aug 13, Sep 24, Nov 6, Dec 10.

Last G7 monetary policy changes:

US Funds rate last cut by 25 bp to 1.75% on 12/11/01, discount rate -25 bp to 1.25%. Funds rate cut by 175 bp after Sep 11th, and by an overall 475 bp in 2001 easing cycle.

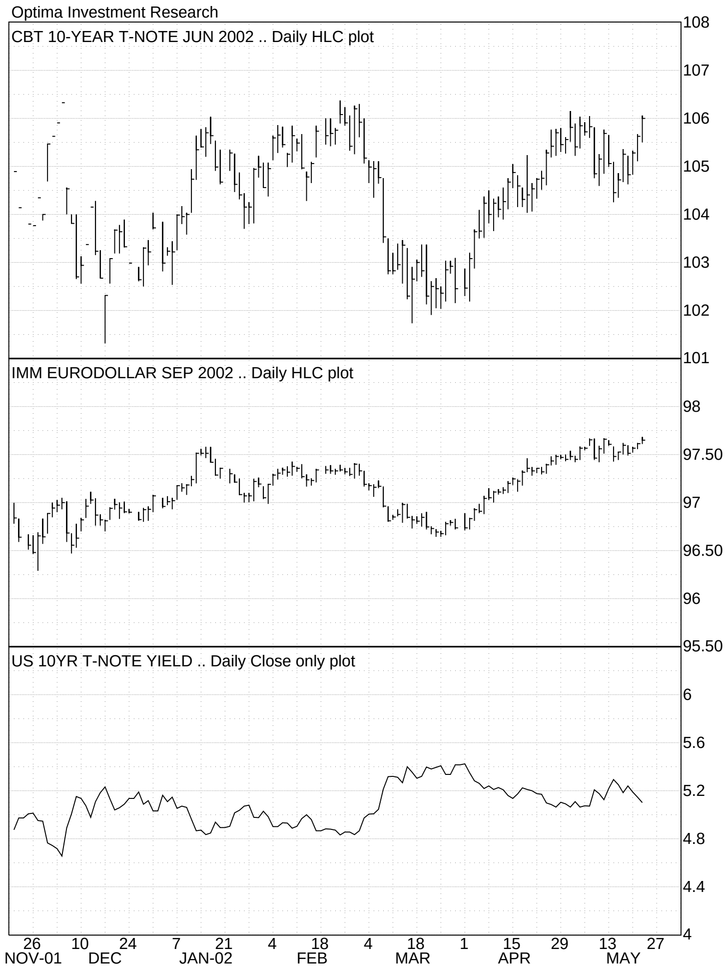
CAN Overnight rate target +25 bp to 2.25% on 4/16/02, up from 40-year low of 2.00%. Prior to 4/02 rate hike, BOC had cut by total of 3.75 bp since Jan 2000.

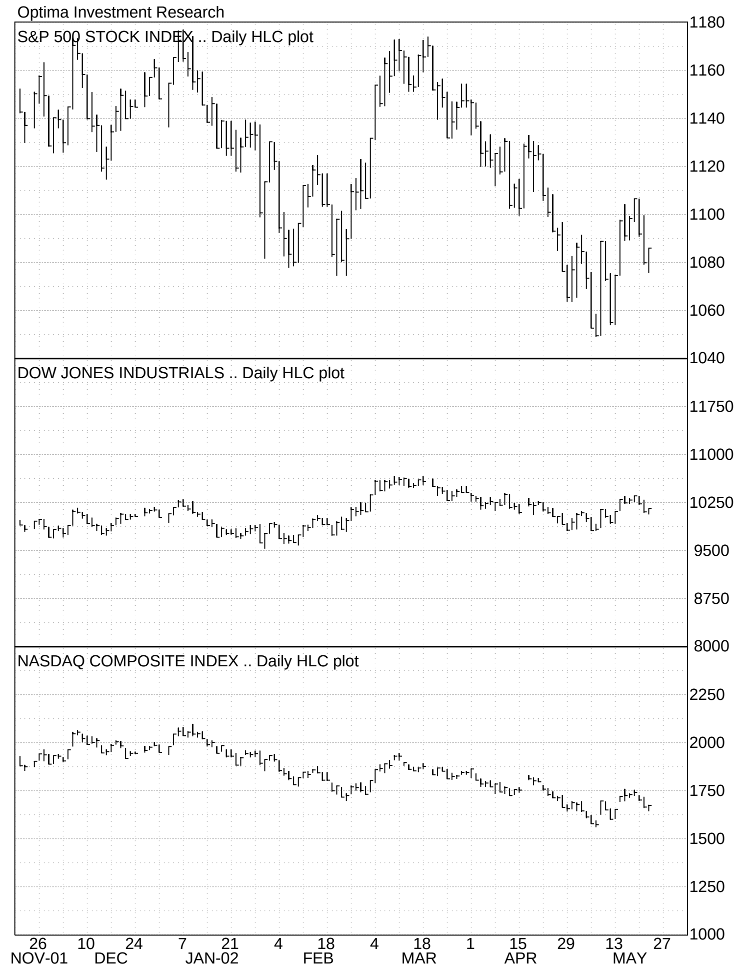
UK Base rate cut by a total of 200 bp in 2001 cycle to current 4.0%. Last change -50 bp to 4.00% on 11/02/01.

ECB Refinancing rate currently at 3.25%, last cut by 50 bp on 11/8/01. Overall ECB rate cut was 150 bp in 2001.

JPN Discount rate at .10%, unsecured overnight call loan rate near zero. BOJ boosted monthly JGB purchases by 25% to 1 trillion yen at Feb 28 meeting.

DAILY U.S MARKET OVERVIEW





OPTIMA TECHNICAL PICTURE -- JAPANESE YEN ^ Thu 5/23/02

The June Japanese Yen posted a 5-1/2 month high of 8109 and an overall low 8005 during Tuesday night's Globex session. JYM opened lower yesterday morning and traded sideways for most of the day to finally settle -20 bp at 8062 where it completed a bearish hook reversal. JYM posted an IMM high at 8072 and an IMM low at 8047. The 9-day RSI fell to 72.6 from the previous session's 76.2 where it is high. The short-term trend is bullish with yesterday's 5-1/2 month high. The intermediate-term trend is neutral as the contract has been in a basing pattern since late January. The long-term trend remains bearish as JYM continues to post new lows, and the cash Yen posted a new 3-1/2 year high at 135.14 on Jan 31. Primary resistance levels for JYM are: 8109 and 8219. Primary support levels for JYM are: 8005, 7814, 7777, 7761, 7576, and 7501. Theoretical basis for today: -10 IMM bp.

SUPPORT/RESISTANCE LEVELS -- CASH DOLLAR-YEN

147.62 11-3/4 year high (8/11/98)	128.77 3-week high settle (May 8)	114.36 1-1/4 year low (2/6/01)
135.14 3-1/2 year high (Jan 31)	125.06 Yesterday's high	113.55 1-1/3 year low (1/4/01)
135.02 3-1/2 year high settle (Jan 31)	***124.21 Previous settle (Wed 2pm)**	106.87 1-1/2 year low (11/3/00)
135.01 3-3/4 month high (Feb 11)	124.10 5-1/2 month lo settle (Tue 2pm)	104.77 1-3/4 year low (9/14/00)
134.98 3-1/4 month high (Feb 27)	123.53 5-1/2 month low (Yesterday)	103.93 2-year low (6/23/00)
133.84 2-3/4 month high (Apr 1)	122.83 6-month low (Nov 30)	102.07 2-1/4 year low (3/31/00)
132.39 1-1/2 month high (Apr 15)	119.75 6-3/4 month low (Nov 12)	101.33 6-1/2 year low (12/23/99)
129.07 3-week high (May 9)	115.83 14-3/4 month low (9/20/01)	96.04 6-3/4 year low (8/24/95)
		79.78 All-time low (4/19/95)

RETRACEMENTS -- CASH DOLLAR-YEN

3-1/2 year 46.29 point downmove from 147.62 (8/11/98) to 101.33 (12/23/99)

73% retrace (Jan 31 high) 135.14

HIGH	3/4	2/3	.618	1/2	.382	1/3	1/4	LOW
147.62	136.05	132.19	129.94	124.47	119.01	116.76	112.90	101.33

SUPPORT/RESISTANCE LEVELS--YEN FUTURES (JYM02)

8776 Contract high & high settle (9/20/01)	8047 Yesterday's IMM low	7731 50-day moving average
8430 7-1/2 month high (Nov 8)	8005 Yesterday's overall low (Globex)	7663 100-day moving average
8426 7-1/2 month high settle (Nov 8)	8001 200-day moving average	7576 1-1/4 month low (Apr 15)
8219 6-month high & high settle (Nov 28)	7814 Last Friday's low	7525 2-1/2 month lo sttl (Apr 1 & Apr 2)
8109 5-1/2 month high (Yesterday-Glbx)	7804 30-day average	7501 2-1/2 month low (Apr 1)
8082 5-1/2 month high settle (Tuesday)	7782 3-week low settle (May 8)	7469 Contract low settle (Feb 26)
8072 Yesterday's IMM high	7777 1-week low (Last Tue)	7449 Contract low (Feb 27)
***8062 Previous settle (Wednesday)**	7761 3-week low (May 9)	7371 3-yr low weekly nrst (9/21/98 Z98)
8058 Pivot Point		

RETRACEMENTS--YEN FUTURES (JYM02)

8-month 1327 bp downmove from 8776 (9/20/01) to 7449 (2/27/02)

50% retrace (Yesterday's high) 8109

HIGH	3/4	2/3	.618	1/2	.382	1/3	1/4	LOW
8776	8444	8334	8269	8113	7956	7891	7784	7449

OPTIMA TECHNICAL PICTURE -- EURO/DOLLAR FX ^ Thu 5/23/02

The June European Currency posted an 8-month high at 9268 and an overall low at 9172 during Tuesday night's Globex session. ECM opened higher yesterday morning, traded sideways early to post the session low, traded higher, and then drifted lower to settle +62 bp at 9252. The contract posted an IMM high at 9267 and an IMM low at 9231. The 9-day RSI rose to 69.8 from the previous session's 64.5 where it is now moderately high. The short-term and intermediate term trends are bullish as ECM posted an 8-month high and contract high settlement yesterday. The long-term trend is bearish as the cash Euro has been trending lower ever since it was introduced. Primary resistance levels for ECM are: 9268, 9275 and 9310. Primary support levels for ECM are: 9172 9151, 9101, 8987, 8973, 8897, 8842, 8751 & 8710. Theoretical basis for today: +9 IMM bp.

SUPPORT/RESISTANCE LEVELS -- CASH EURO/DOLLAR FX

1.2407 5-1/4 year high (10/8/98)
1.1956 3-1/2 year high (12/14/98)
1.0909 3-year high (10/15/99)
1.0414 2-1/2 year high (1/6/00)
1.0086 2-1/4 year high (2/23/00)
.9699 2-year high (6/8/00)
.9594 1-3/4 year high (1/5/01)
.9481 15-1/2 month high (2/2/01)
.9331 14-1/2 month high (9/17/01)
.9276 8-month high (Yesterday)
***.9263 8-month high settle (Wed 2pm)**
.9178 Yesterday's low
.8996 3-week low (Last Wednesday)
.8989 3-week low (May 1)
.8863 1-month low (Apr 23)
.8775 1-1/4 month low (Apr 12)
.8735 1-1/2 month low (Apr 8)
.8712 2-1/2 month low settle (Mar 28)
.8700 2-1/2 month low (Mar 28)
.8615 3-3/4 month low (Feb 26)
.8565 10-1/4 month low (Feb 1)
.8352 1-1/2 year low (July 6)
.8284 All-time low settle (10/25/00)
.8230 All-time low (10/26/00)

RETRACEMENTS -- CASH EURO/DOLLAR FX

3-1/2 year .4177 point downmove from 1.2407 (10/8/98) to .8230 (10/26/00)

33% retrace (1/5/01 high) .9594

HIGH	3/4	2/3	.618	1/2	.382	1/3	1/4	LOW
1.2407	1.1363	1.1015	1.0811	1.0318	.9826	.9622	.9274	.8230

SUPPORT/RESISTANCE EURO/DOLLAR FX FUTURES (ECM02)

9310 14-month hi wkly nrst (9/17/01 Z01)
9275 Contract high (9/19/01)
9268 8-month high (Wednesday-Glbx)
9267 Yesterday's IMM high
***9252 Contract high settle (Wednesday)**
9231 Yesterday IMM low and Pivot Point
9172 Yesterday's overall low (Globex)
9151 Tuesday's low
9101 Last Friday's low
9010 3-week low stl (Last Tue & May 2)
8987 2-1/2 week low (Last Wednesday)
9010 30-day moving average
8973 3-week low (Apr 30)
8911 50-day moving average
8897 May 25 low
8883 200-day moving average
8842 1-month low (Apr 23)
8817 100-day moving average
8751 1-1/4 month low (Apr 12)
8716 1-1/2 month low settle (Apr 8)
8710 1-1/2 month low (Apr 8)
8682 2-1/2 month low settle (Mar 28)
8673 2-1/4 month low (Mar 28)
8672 2-1/2 month low (Mar 12)
8600 3-1/2 month low settle (Feb 26)
8582 3-3/4 month low (Feb 26)
8537 10-1/4 month low settle (Jan 31)
8528 10-1/4 month low (Jan 28)
8349 Contract low & low settle (July 5)

RETRACEMENTS -- EURO/DOLLAR FX FUTURES (ECM02)

3-1/2 month 740 bp upmove from 8528 (1/28/02) to 9268 (Yesterday)

HIGH	1/4	1/3	.382	1/2	.618	2/3	3/4	LOW
9268	9083	9021	8955	8898	8811	8775	8713	8528

OPTIMA TECHNICAL PICTURE -- SWISS FRANC ^ Thu 5/23/02

The June Swiss Franc posted an overall contract high at 6390 and an overall low at 6333 during yesterday's Globex session. SFM opened higher yesterday and traded sideways for most of the day to finally settle +32 bp at a contract high settlement at 6377. SFM posted an IMM high at 6389 and an IMM low at 6362. The 9-day RSI rose to 70.9 from the previous session's 67.3 where it is high. The short and intermediate-term trends are bullish with yesterday contract high and contract high settlement. The long-term trend is neutral with SFM in the middle of a wide 10-month range. Primary resistance levels for SFM are: 6390 and 6536. Primary support levels for SFM are: 6333, 6254, 6183, 6039, 5965, 5934, and 5918. Theoretical basis for today: -2 IMM bp.

SUPPORT/RESISTANCE LEVELS -- CASH DOLLAR-SWISS FRANC

1.8298 23-month high (10/26/00)
1.8223 19-month high (7/6/01)
1.7392 10-1/4 month high (7/23/01)
1.7225 9-3/4 month high (Feb 1)
1.7132 3-1/2 month high (Mar 12)
1.6861 2-1/2 month high (Mar 28)
1.6785 1-3/4 month high (Apr 9)
1.6715 1-1/2 month high (Apr 16)
1.6673 1-1/2 month high settle (Apr 15)
1.6194 3-week high (Last Wed)
1.6149 3-week high settle (Last Tue)
1.5808 Yesterday's high
***1.5686 1-1/3 year low settle (Wed 2pm)**
1.5661 1-1/3 year low (Yesterday)
1.5427 2-1/2 year low (1/5/00)
1.4540 3-year low (10/15/99)
1.3404 3-1/2 year low (1/13/99)
1.2747 5-1/2 year low (10/8/98)
1.1850 6-year low (7/31/96)

RETRACEMENTS -- CASH DOLLAR-SWISS FRANC

10-month .2562 downmove from 1.8223 (7/6/01) to 1.5661 (Yesterday)

HIGH	3/4	2/3	.618	1/2	.382	1/3	1/4	LOW
1.8223	1.7582	1.7369	1.7244	1.6942	1.6640	1.6515	1.6301	1.5661

SUPPORT/RESISTANCE LEVELS -- SWISS FRANC FUTURES (SFM02)

6536 2-1/2 yr high wkly nrst (1/3/00 H00)
6390 Contract high (Yesterday-Globex)
6389 Yesterday's IMM high
***6377 Contract high settle (Wednesday)**
6366 Pivot Point
6362 Yesterday's IMM low
6333 Yesterday's overall low (Globex)
6254 Last Friday's low
6196 3-week low settle (Last Tue)
6189 30-day moving average
6183 2-1/2 week low (Last Wednesday)
6118 50-day moving average
6051 200-day moving average
6039 1-month low (Apr 23)
6031 100-day moving average
5972 1-3/4 month low settle (Apr 15)
5965 1-1/2 month low (Apr 16)
5943 2-1/2 month low settle (Mar 28)
5934 2-1/4 month low (Mar 27)
5918 2-3/4 month low (Mar 8)
5857 3-3/4 month low settle (Feb 26)
5842 3-3/4 month low (Feb 26)
5813 10-month low & low sttl (Jan 31)
5488 5-yr lo wkly nearest (10/23/00 Z00)

RETRACEMENTS -- SWISS FRANC FUTURES (SFM02)

3-1/2 month 577 bp upmove from 5813 (1/31/02) to 6390 (Yesterday)

HIGH	1/4	1/3	.382	1/2	.618	2/3	3/4	LOW
6390	6246	6198	6170	6101	6033	6005	5957	5813

OPTIMA TECHNICAL PICTURE -- BRITISH POUND ^ Thu 5/23/02

BPM posted a 1-week high at 1.4610 and an overall low at 1.4546 during Tuesday night's Globex session. The June British Pound opened higher yesterday morning, sold off and then consolidated for the rest of the session to finally settle -8 bp at 1.4566 to complete a bearish hook reversal. The contract posted an IMM high at 1.4590 and an IMM low at 1.4550. The 9-day RSI fell to 54.2 from the previous session's 55.7 where it remains neutral. The short-term trend is neutral as the contract posted a 3-week low and low settlement last Tuesday. The intermediate-term trend is bullish as the contract posted a new contract high on May 3rd and a new contract high settlement on May 6th. The long-term trend is bullish with BPM breaking out above a wide 8-month range. Primary resistance levels for BPM are: 1.4610, 1.4664, 1.4760 and 1.5700. Primary support levels for BPM are: 1.4546, 1.4510, 1.4426, 1.4410, 1.4282, 1.4226, 1.4148, and 1.4122. Theoretical basis for today: +20 IMM bp.

SUPPORT/RESISTANCE LEVELS -- CASH BRITISH POUND

2.6437 All-time high (3/9/72)
1.7325 9-1/2 year high (10/8/98)
1.6943 3-1/2 year high (12/14/98)
1.6791 3-1/4 year high (10/22/99)
1.6593 2-1/2 year high (1/20/00)
1.6193 2-1/4 year high (2/22/00)
1.6077 26-1/2 month high (4/4/00)
1.5313 2-year high (6/6/00)
1.5217 23-3/4 mo hi (7/26/00 & 7/25/00)
1.5101 1-3/4 year high (1/8/01)
1.4834 1-1/4 year high (2/2/01 & 10/8/01)
1.4700 7-1/4 month high (My 3)
1.4682 7-1/4 month high settle (May 3)
1.4633 1-week high (Yesterday)
1.4599 1-week high settle (Tue 2pm & Last Wed)
***1.4582 Previous Settle (Wednesday)**
1.4571 Yesterday's low
1.4536 1-week low (Tuesday)
1.4493 3-week low settle (Last Tue)
1.4468 3-week low (Last Tue)
1.4456 1-1/4 month low (Apr 24 & Apr 19)
1.4289 1-3/4 month low (Apr 8)
1.4246 2-1/4 month low settle (Mar 27)
1.4214 2-1/4 month low (Mar 27)
1.4089 3-1/2 month low (Mar 19)
1.4044 9-3/4 mo lo (Jan 28,Feb 1,Nov 23)
1.3932 10-3/4 month low (7/17/01)
1.3682 15-1/3 year low (6/12/01)
1.0345 All-time low (2/26/85)

CASH RETRACEMENT BRITISH POUND

2-1/2 year .3109 point downmove from 1.6791 (10/22/99) to 1.3682 (6/12/01)
37% retrace (10/8/01) 1.4834

HIGH	3/4	2/3	.618	1/2	.382	1/3	1/4	LOW
1.6791	1.6014	1.5755	1.5603	1.5236	1.4870	1.4718	1.4459	1.3682

SUPPORT/RESISTANCE LEVELS -- BRITISH POUND FUTURES (BPM02)

1.5700 2-year high (9/11/01) (U01)
1.4760 8-month high weekly nearest (Z01)
1.4664 Contract high (May 3)
1.4646 Contract high settle (May 6)
1.4610 1-week high (Yesterday-Globex)
1.4590 Yesterday's IMM high
1.4574 1-week high settle (Tuesday) & Pivot Point
***1.4566 Previous Settle (Wednesday)**
1.4550 Yesterday's IMM low
1.4546 Yesterday's overall low (Globex)
1.4510 1-week low (Tuesday)
1.4506 30-day moving average
1.4462 3-week low settle (Last Tuesday)
1.4426 3-week low (Last Tuesday)
1.4410 1-month low (Apr 24)
1.4392 50-day moving average
1.4282 1-1/4 month low (April 11)
1.4278 100-day moving average
1.4276 200-day moving average
1.4248 1-3/4 month low settle (Apr 8)
1.4226 1-3/4 month low (Apr 8)
1.4182 2-1/4 month low settle (Mar 27)
1.4148 2-month low (Mar 27)
1.4122 2-1/4 month low (Mar 20)
1.4080 3-1/4 mo low stl(Mar 19 & Feb 26)
1.4010 3-1/2 mo low (Mar 19 & Feb 28)
1.3970 3-3/4 month low (Feb 7)
1.3954 5-3/4 mo low and low sttl (Jan 28)
1.3944 10-1/2 month low settle (11/23/01)
1.3910 10-1/2 month low (11/27/01)
1.3782 11-1/2 mo lo and lo sttl (7/17/01)
1.3546 Contract low & low settle (Jun 12)
1.1528 All time low settle (Z84 10/1/84)

RETRACEMENTS -- BRITISH POUND FUTURES (BPM02)

5-3/4 month 754 bp upmove from 1.3910 (11/27/01) to 1.4664 (5/3/02)
32% retrace (Last Tuesday's low) 1.4426

HIGH	1/4	1/3	.382	1/2	.618	2/3	3/4	LOW
1.4664	1.4476	1.4412	1.4376	1.4288	1.4198	1.4162	1.4098	1.3910

OPTIMA TECHNICAL PICTURE - CANADIAN DOLLAR ^ Thu 5/23/02

The June Canadian Dollar opened steady yesterday and zigzagged higher for most of the day to finally settle +22 bp at a 9-1/4 month high settlement at 6518. CDM posted a 9-1/4 month high at 6521 and a low at 6486. The 9-day RSI rose to 85.1 from the previous session's 82.4 where it is overbought. Both the short-term and intermediate-term trends are bullish as the contract has posted a 9-1/4 month high and high settlement yesterday. The long-term trend is bearish as the Canadian dollar has been in a bear channel since Jan on 2000 on the weekly nearest chart. Primary resistance levels for CDM are: 6521, 6533, 6593, and 6700. Primary support levels for CDM are: 6486, 6396, 6355, 6277, 6248, and 6235. Theoretical basis for today: +3 IMM bp.

SUPPORT/RESISTANCE LEVELS CASH -- US DOLLAR-CANADIAN DOLLAR

1.6193 All-time high (Jan 21)	***1.5332 9-1/4 month low sttl (Wed 2pm)**	1.4629 2-year low (6/19/00
1.6121 3-3/4 month high (Feb 26)	1.5328 9-1/4 month low (Yesterday)	1.4320 4-year low (1/27/00)
1.6119 All-time high settle (Jan 21)	1.5249 10-1/4 month low (Aug 7)	1.4048 4-1/2 year low (3/13/98)
1.6023 2-3/4 month high (Apr 1)	1.5069 15-3/4 month low (July 3)	1.3665 4-3/4 year low (7/15/97)
1.5988 1-1/2 month high (Apr 9)	1.4901 1-1/2 year low (Jan 3)	1.3617 5-year low (5/21/97)
1.5722 3-week high (May 8)	1.4687 1-3/4 year low (9/1/00)	1.3346 5-1/2 year low (1/22/97)
1.5710 3-week high settle (May 8)	1.4631 23-1/2 month low (7/24/00)	1.3265 8-year low (11/8/96)
1.5405 Yesterday's high		

RETRACEMENTS -- US DOLLAR-CANADIAN DOLLAR

2-year 1873 bp upmove from 1.4320 (1/27/00) to 1.6193 (1/21/02)

46% retrace (Yesterday's low) 1.5328

HIGH	1/4	1/3	.382	1/2	.618	2/3	3/4	LOW
1.6193	1.5725	1.5569	1.5478	1.5257	1.5035	1.4944	1.4788	1.4320

SUPPORT/RESISTANCE LEVELS -- CANADIAN DOLLAR FUTURES (CDM02)

6992 3-1/4 yr high wkly nrst (1/24/00 H00)	6486 Yesterday's low	6255 1-3/4 month low settle (Apr 9)
6922 1-1/2 yr high wkly nrst (4/3/00 M00)	6396 1-week low (Last Tuesday)	6250 2-3/4 month low settle (Apr 1)
6700 Contract high & high settle (1/30/01)	6387 30-day moving average	6248 1-1/2 month low (Apr 9)
6593 15-month high (7/3 & 7/5/01)	6366 3-week low settle (May 8)	6235 2-3/4 month low (Apr 1 & Mar 1)
6533 10-1/4 month high (8/6/01)	6355 3-week low (May 8)	6207 3-3/4 month low settle (Feb 26)
6521 9-1/4 month high (Yesterday)	6347 50-day moving average	6202 Contract low settle (Jan 17 & 25)
***6518 9-1/4 month high settle (Wed)**	6334 200-day moving average	6200 3-3/4 month low (Feb 26)
6508 Pivot Point	6305 100-day moving average	6190 4-month low (Jan 28)
6491 Approx. 1.5400 USD/CD	6277 1-1/4 month low (Apr 15)	6180 Contract low (Jan 18)

RETRACEMENTS-CANADIAN DOLLAR FUTURES (CDM02)

15-month 520 bp downmove from 6700 (1/30/01) to 6180 (1/18/02)

66% retrace (Yesterday's high) 6521

HIGH	3/4	2/3	.618	1/2	.382	1/3	1/4	LOW
6700	6570	6527	6501	6440	6379	6353	6310	6180

CURRENCIES

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OPTIMA TECHNICAL INDICATORS - CURRENCY FUTURES ^

As of: 052202	JYM02	ECM02	SFM02	BPM02	CDM02	MQM02
High:	.8109	.92680	.6390	1.4610	.6521	10.5025
Low:	.8005	.91720	.6333	1.4546	.6486	10.4250
Settle:	.8062s	.92520s	.6377s	1.4566s	.6518s	10.4275s
Change:	-.0020	+.00620	+.0032	-.0008	+.0022	-.0500
Pivot R2:	.8162	.93266	.6423	1.4638	.6543	10.5291
Analysis R1:	.8112	.92893	.6400	1.4602	.6530	10.4783
Pivot:	.8058	.92306	.6366	1.4574	.6508	10.4516
S1:	.8008	.91933	.6343	1.4538	.6495	10.4008
S2:	.7954	.91346	.6309	1.4510	.6473	10.3741
Momentum 1-10 Day:	+.0280	+.02150	+.0153	+.0044	+.0152	-.1250
[Settle 1-20 Day:	+.0322	+.03500	+.0288	+.0130	+.0146	-.2700
- prev. 1-30 Day:	+.0383	+.04720	+.0374	+.0258	+.0244	-.5175
x-day 1-100 Day:	+.0402	+.04740	+.0416	+.0196	+.0257	-.1250
settle]1-200 Day:	-.0184	+.05340	+.0548	+.0504	+.0006	+.3500
Moving 3 Day:	.8045	.92180	.6357	1.4570	.6498	10.4616
Averages 4 Day:	.8024	.92142	.6352	1.4570	.6489	10.4737
5 Day:	.7982	.91926	.6335	1.4564	.6478	10.4780
9 Day:	.7916	.91445	.6299	1.4554	.6451	10.4766
10 Day:	.7905	.91376	.6295	1.4556	.6445	10.4790
18 Day:	.7875	.91059	.6273	1.4570	.6417	10.4998
20 Day:	.7869	.90931	.6261	1.4566	.6415	10.5143
30 Day:	.7804	.90102	.6189	1.4506	.6387	10.5990
50 Day:	.7731	.89107	.6118	1.4392	.6347	10.7247
100 Day:	.7663	.88169	.6031	1.4278	.6305	10.7056
200 Day:	.8001	.88826	.6051	1.4276	.6334	10.4390
Contract 5-D:	.8024	.92142	.6352	1.4570	.6489	10.4737
crosses MA 10-D:	.7916	.91445	.6299	1.4554	.6451	10.4766
today at 20-D:	.7873	.91001	.6267	1.4568	.6416	10.5077
price of: 30-D:	.7810	.90173	.6195	1.4512	.6391	10.5889
Moving Avg 3-9:	+.0129	+.00734	+.0058	+.0016	+.0046	-.0150
Oscillators 5-20:	+.0113	+.00994	+.0074	+.0000	+.0063	-.0364
MA Osc zero 3-9:	.7479	.89265	.6121	1.4490	.6304	10.5675
cross today 5-20:	.7070	.84913	.5814	1.4558	.6025	10.6891
RSI 9-Day RSI:	72.6	69.8	70.9	54.2	85.1	32.3
Prev 9-Day RSI:	76.2	64.5	67.3	55.7	82.4	38.9
Close today for80:	.8203	.94406	.6494	1.4904	.6510	11.0507
new 9-RSI of: 20:	.7054	.83317	.5719	1.4118	.6106	10.2675
Simulated +3 Unit:	80.3	78.5	81.6	78.7	93.2	35.9
9-Day RSI +2 Unit:	78.3	76.2	79.0	74.0	91.7	34.8
for settle+1 Unit:	75.8	73.4	75.6	66.9	89.3	33.5
today of: -1 Unit:	64.2	61.5	59.4	39.2	61.0	31.6
-2 Unit:	57.6	54.9	51.1	30.7	47.6	31.1
-3 Unit:	52.2	49.6	44.9	25.3	39.0	30.5
1 Unit = :	.0050	.00500	.0050	.0100	.0050	.0050
Stochastics :						
9-Day Range Raw K:	85.8	94.3	93.7	70.7	97.8	15.0
3-Day EMA K: %K:	82.2	86.1	86.8	65.8	90.0	35.2
3-Day EMA %K: %D:	71.7	77.2	78.1	59.5	83.7	38.4
Price today for :						
%K & %D xover :	.7944	.91534	.6308	1.4516	.6484	10.4776
%K,%D at xover :	71.7	77.2	78.1	59.5	83.7	38.4

OPTIMA TECHNICAL INDICATORS - DOLLAR vs. MAJOR CURRENCIES ^

As of: 052202	MEXICO USD/MXP MEY	JAPAN USD/JPY YDY	EUROZONE EUR/USD E$Y	SWISS USD/CHF UWY	UK GBP/USD BPY	CANADA USD/CAD DCY
High:	9.5435	125.06	.9276	1.5808	1.4633	1.5405
Low:	9.5065	123.53	.9178	1.5661	1.4571	1.5328
Settle:	9.5375s	124.21s	.9263s	1.5686s	1.4582s	1.5332s
Change:	+.0450	+.11	+.0063	-.0082	-.0017	-.0053
Pivot Analysis R2:	9.5661	125.79	.9337	1.5865	1.4657	1.5432
R1:	9.5518	125.00	.9300	1.5775	1.4620	1.5382
Pivot:	9.5291	124.26	.9239	1.5718	1.4595	1.5355
S1:	9.5148	123.47	.9202	1.5628	1.4558	1.5305
S2:	9.4921	122.73	.9141	1.5571	1.4533	1.5278
Momentum 1-10 Day:	+.1220	-4.56	+.0214	-.0407	+.0020	-.0378
[Settle 1-20 Day:	+.2550	-5.30	+.0336	-.0746	+.0096	-.0358
- prev. 1-30 Day:	+.5070	-6.61	+.0457	-.0973	+.0209	-.0630
x-day 1-100 Day:	+.3800	-7.35	+.0351	-.0899	+.0130	-.0586
settle]1-200 Day:	+.4475	+1.76	+.0287	-.1212	+.0297	-.0040
Moving Averages 3 Day:	9.5068	124.55	.9228	1.5736	1.4593	1.5380
4 Day:	9.4961	124.87	.9225	1.5750	1.4593	1.5401
5 Day:	9.4914	125.53	.9204	1.5793	1.4588	1.5427
9 Day:	9.4899	126.58	.9157	1.5883	1.4581	1.5492
10 Day:	9.4868	126.76	.9151	1.5893	1.4583	1.5509
18 Day:	9.4633	127.26	.9120	1.5954	1.4603	1.5575
20 Day:	9.4498	127.35	.9108	1.5985	1.4599	1.5580
30 Day:	9.3653	128.43	.9028	1.6173	1.4546	1.5650
50 Day:	9.2361	129.81	.8931	1.6367	1.4445	1.5748
100 Day:	9.1811	131.23	.8848	1.6604	1.4353	1.5855
200 Day:	9.2200	126.71	.8929	1.6535	1.4418	1.5790
Contract 5-D:	9.4961	124.87	.9225	1.5750	1.4593	1.5401
crosses MA 10-D:	9.4899	126.58	.9157	1.5883	1.4581	1.5492
today at 20-D:	9.4562	127.29	.9114	1.5969	1.4601	1.5577
price of: 30-D:	9.3764	128.35	.9036	1.6156	1.4551	1.5640
Moving Avg 3-9:	+.0169	-2.03	+.0071	-.0147	+.0011	-.0112
Oscillators 5-20:	+.0416	-1.82	+.0096	-.0192	-.0011	-.0153
MA Osc zero 3-9:	9.4037	133.38	.8944	1.6338	1.4529	1.5850
cross today 5-20:	9.2435	140.22	.8522	1.7139	1.4646	1.6519
RSI 9-Day RSI:	71.2	25.9	69.3	29.3	51.3	15.8
Prev 9-Day RSI:	64.7	24.7	63.8	32.9	54.4	18.6
Close today for80:	9.6323	140.21	.9461	1.7398	1.4961	1.6344
new 9-RSI of: 20:	8.9836	122.45	.8349	1.5370	1.4170	1.5348
Simulated +3 Unit:	71.2	50.8	69.3	42.2	77.2	43.0
9-Day RSI +2 Unit:	71.2	44.6	69.3	38.4	72.3	36.1
for settle+1 Unit:	71.2	36.6	69.3	34.2	64.7	27.3
today of: -1 Unit:	71.2	22.2	69.3	27.3	37.2	13.7
-2 Unit:	71.2	19.4	69.3	25.6	29.1	12.0
-3 Unit:	71.2	17.2	69.3	24.0	24.0	10.7
1 Unit = :	.0000	1.00	.0000	.0050	.0100	.0050
Stochastics :						
9-Day Range Raw K:	93.1	12.9	95.4	4.7	61.3	1.2
3-Day EMA K: %K:	71.9	17.9	86.1	12.6	59.1	9.5
3-Day EMA %K: %D:	64.4	28.3	76.8	22.2	54.0	16.5
Price today for :						
%K & %D xover :	9.4614	126.11	.9159	1.5880	1.4547	1.5419
%K,%D at xover :	64.4	28.3	76.8	22.2	54.0	16.5

**TABLE CURRENCY}

OPTIMA CURRENCY FUTURES - CASH EQUIVALENT TABLE^ for 05/23/02

	Theo Basis	3PM Basis	3PM NY Spot	Futures Settle	Theoretical Futures	Futures Delta	Hedge Ratio	Euro Rates
JYM	-10	-11	124.21	8062	8061	1.00129	.99871	.0575
ECM	9	11	.9263	92520	92530	.99898	1.00102	3.3830
SFM	-2	-2	1.5686	6377	6378	1.00050	.99950	1.2000
BPM	20	16	1.4582	14566	14562	.99861	1.00139	3.9734
CDM	3	4	1.5332	6518	6519	.99951	1.00049	2.6167
	Days to Expiration = 25					U.S. Euro Rate		1.9167

CURRENCY CASH TO FUTURES EQUIVALENTS

124.21 Yen -10 basis		.9263 EuroFx 9 basis		1.5686 S-Franc -2 basis		1.4582 B-Pound 20 basis		1.5332 Canada 3 basis	
Cash	Futures	Cash	Futures	Cash	Futures	Cash	Futures	Cash	Futures
125.90	7953	.9600	9591	1.6030	6240	1.4920	14900	1.5670	6379
125.85	7956	.9590	9581	1.6020	6244	1.4910	14890	1.5660	6383
125.80	7959	.9580	9571	1.6010	6248	1.4900	14880	1.5650	6387
125.75	7962	.9570	9561	1.6000	6252	1.4890	14870	1.5640	6391
125.70	7965	.9560	9551	1.5990	6256	1.4880	14860	1.5630	6395
125.65	7969	.9550	9541	1.5980	6260	1.4870	14850	1.5620	6399
125.60	7972	.9540	9531	1.5970	6264	1.4860	14840	1.5610	6403
125.55	7975	.9530	9521	1.5960	6268	1.4850	14830	1.5600	6407
125.50	7978	.9520	9511	1.5950	6272	1.4840	14820	1.5590	6411
125.45	7981	.9510	9501	1.5940	6276	1.4830	14810	1.5580	6415
125.40	7984	.9500	9491	1.5930	6279	1.4820	14800	1.5570	6420
125.35	7988	.9490	9481	1.5920	6283	1.4810	14790	1.5560	6424
125.30	7991	.9480	9471	1.5910	6287	1.4800	14780	1.5550	6428
125.25	7994	.9470	9461	1.5900	6291	1.4790	14770	1.5540	6432
125.20	7997	.9460	9451	1.5890	6295	1.4780	14760	1.5530	6436
125.15	8000	.9450	9441	1.5880	6299	1.4770	14750	1.5520	6440
125.10	8004	.9440	9431	1.5870	6303	1.4760	14740	1.5510	6444
125.05	8007	.9430	9421	1.5860	6307	1.4750	14730	1.5500	6449
125.00	8010	.9420	9411	1.5850	6311	1.4740	14720	1.5490	6453
124.95	8013	.9410	9401	1.5840	6315	1.4730	14710	1.5480	6457
124.90	8016	.9400	9391	1.5830	6319	1.4720	14700	1.5470	6461
124.85	8020	.9390	9381	1.5820	6323	1.4710	14690	1.5460	6465
124.80	8023	.9380	9371	1.5810	6327	1.4700	14680	1.5450	6469
124.75	8026	.9370	9361	1.5800	6331	1.4690	14670	1.5440	6474
124.70	8029	.9360	9351	1.5790	6335	1.4680	14660	1.5430	6478
124.65	8032	.9350	9341	1.5780	6339	1.4670	14650	1.5420	6482
124.60	8036	.9340	9331	1.5770	6343	1.4660	14640	1.5410	6486
124.55	8039	.9330	9321	1.5760	6347	1.4650	14630	1.5400	6491
124.50	8042	.9320	9311	1.5750	6351	1.4640	14620	1.5390	6495
124.45	8045	.9310	9301	1.5740	6355	1.4630	14610	1.5380	6499
124.40	8049	.9300	9291	1.5730	6359	1.4620	14600	1.5370	6503
124.35	8052	.9290	9281	1.5720	6363	1.4610	14590	1.5360	6507
124.30	8055	.9280	9271	1.5710	6367	1.4600	14580	1.5350	6512
124.25	8058	.9270	9261	1.5700	6371	1.4590	14570	1.5340	6516
124.20	8062	.9260	9251	1.5690	6375	1.4580	14560	1.5330	6520
124.15	8065	.9250	9241	1.5680	6380	1.4570	14550	1.5320	6524
124.10	8068	.9240	9231	1.5670	6384	1.4560	14540	1.5310	6529
124.05	8071	.9230	9221	1.5660	6388	1.4550	14530	1.5300	6533
124.00	8075	.9220	9211	1.5650	6392	1.4540	14520	1.5290	6537
123.95	8078	.9210	9201	1.5640	6396	1.4530	14510	1.5280	6542
123.90	8081	.9200	9191	1.5630	6400	1.4520	14500	1.5270	6546
123.85	8084	.9190	9181	1.5620	6404	1.4510	14490	1.5260	6550
123.80	8088	.9180	9171	1.5610	6408	1.4500	14480	1.5250	6554
123.75	8091	.9170	9161	1.5600	6412	1.4490	14470	1.5240	6559
123.70	8094	.9160	9151	1.5590	6416	1.4480	14460	1.5230	6563
123.65	8097	.9150	9141	1.5580	6420	1.4470	14450	1.5220	6567
123.60	8101	.9140	9131	1.5570	6425	1.4460	14440	1.5210	6572
123.55	8104	.9130	9121	1.5560	6429	1.4450	14430	1.5200	6576
123.50	8107	.9120	9111	1.5550	6433	1.4440	14420	1.5190	6580
123.45	8110	.9110	9101	1.5540	6437	1.4430	14410	1.5180	6585
123.40	8114	.9100	9091	1.5530	6441	1.4420	14400	1.5170	6589
123.35	8117	.9090	9081	1.5520	6445	1.4410	14390	1.5160	6593
123.30	8120	.9080	9071	1.5510	6449	1.4400	14380	1.5150	6598
123.25	8124	.9070	9061	1.5500	6454	1.4390	14370	1.5140	6602
123.20	8127	.9060	9051	1.5490	6458	1.4380	14360	1.5130	6606
123.15	8130	.9050	9041	1.5480	6462	1.4370	14350	1.5120	6611
123.10	8133	.9040	9031	1.5470	6466	1.4360	14340	1.5110	6615
123.05	8137	.9030	9021	1.5460	6470	1.4350	14330	1.5100	6620
123.00	8140	.9020	9011	1.5450	6474	1.4340	14320	1.5090	6624
122.95	8143	.9010	9001	1.5440	6479	1.4330	14310	1.5080	6628
122.90	8147	.9000	8991	1.5430	6483	1.4320	14300	1.5070	6633
122.85	8150	.8990	8981	1.5420	6487	1.4310	14290	1.5060	6637
122.80	8153	.8980	8971	1.5410	6491	1.4300	14280	1.5050	6642
122.75	8157	.8970	8961	1.5400	6496	1.4290	14270	1.5040	6646
122.70	8160	.8960	8951	1.5390	6500	1.4280	14260	1.5030	6650
122.65	8163	.8950	8941	1.5380	6504	1.4270	14250	1.5020	6655
122.60	8167	.8940	8931	1.5370	6508	1.4260	14240	1.5010	6659
122.55	8170	.8930	8921	1.5360	6512	1.4250	14230	1.5000	6664

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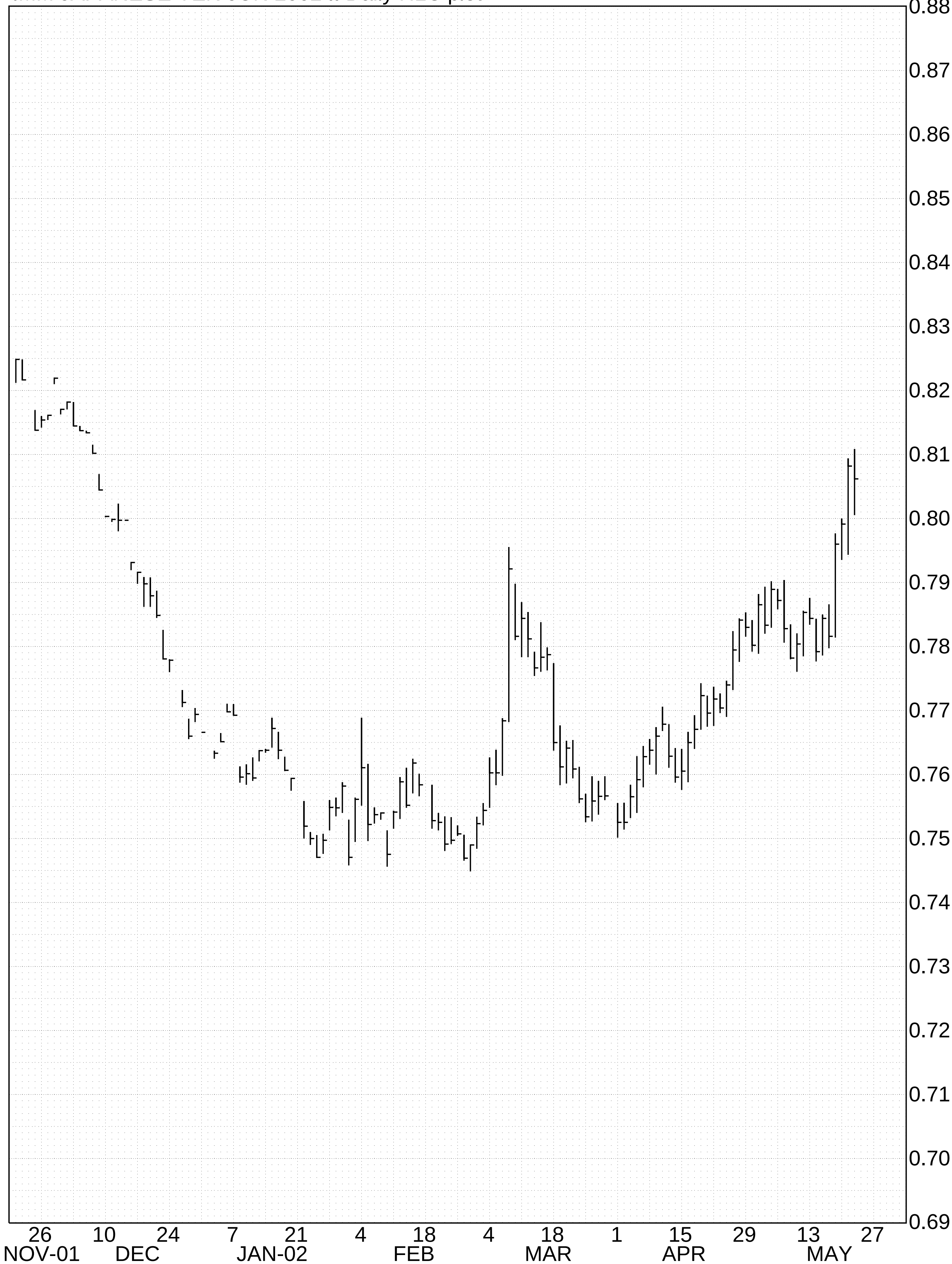
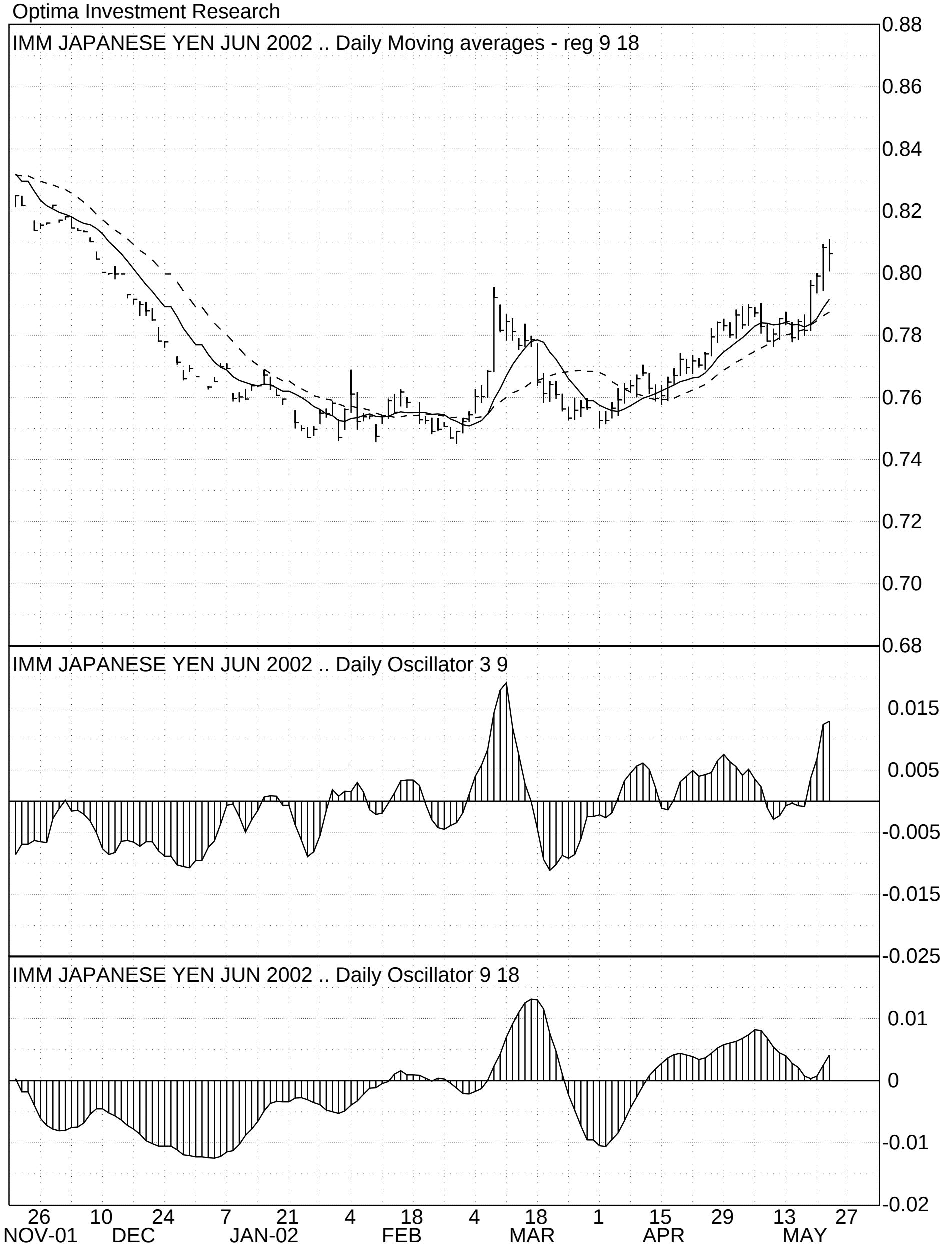
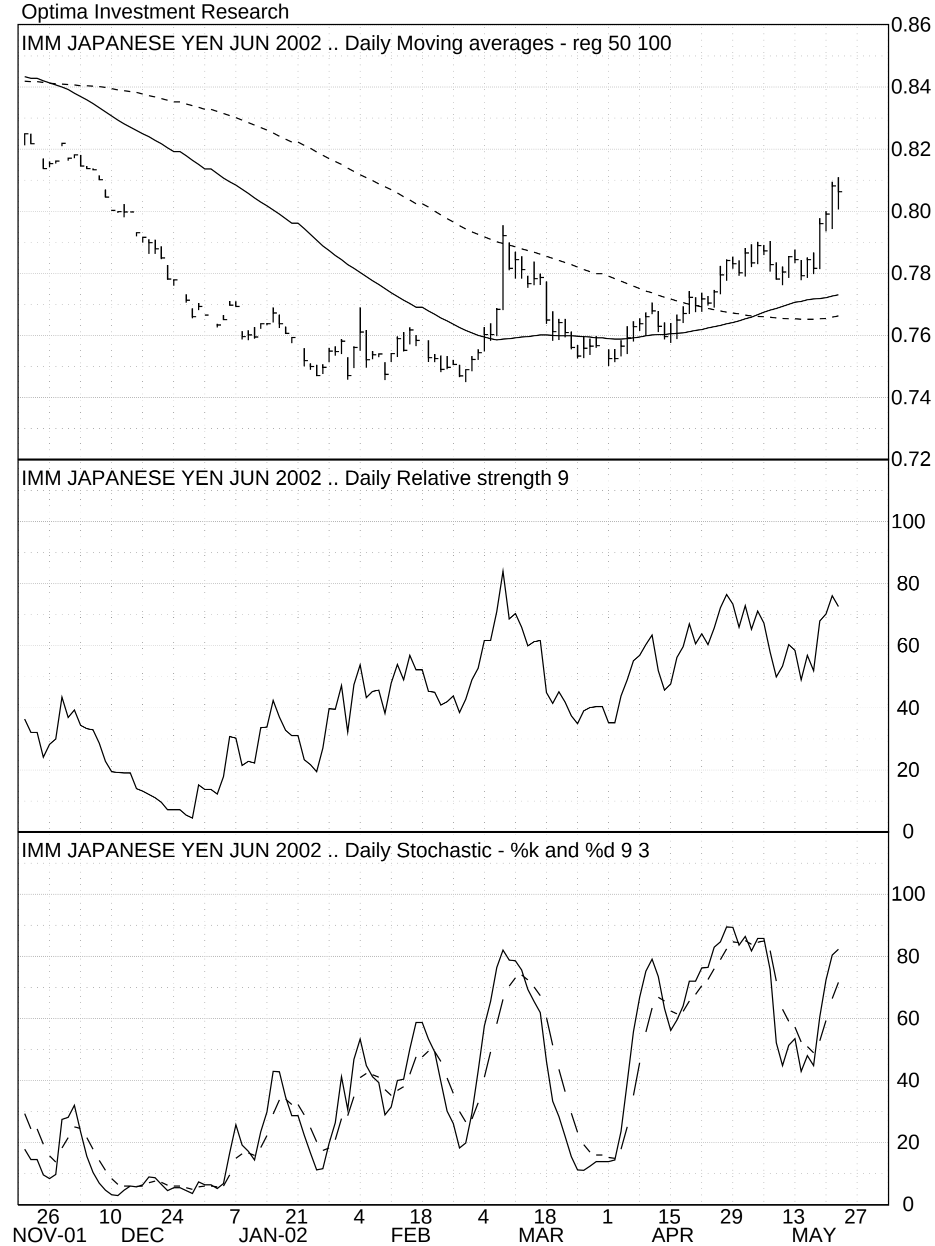
IMM JAPANESE YEN JUN 2002 .. Daily HLC plot



OSCILLATORS - JY





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IMM EURO FX JUN 2002 .. Daily HLC plot

OSCILLATORS - EURO FX

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IMM SWISS FRANC JUN 2002 .. Daily HLC plot

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STERLING/DOLLAR JUN 2002 .. Daily HLC plot

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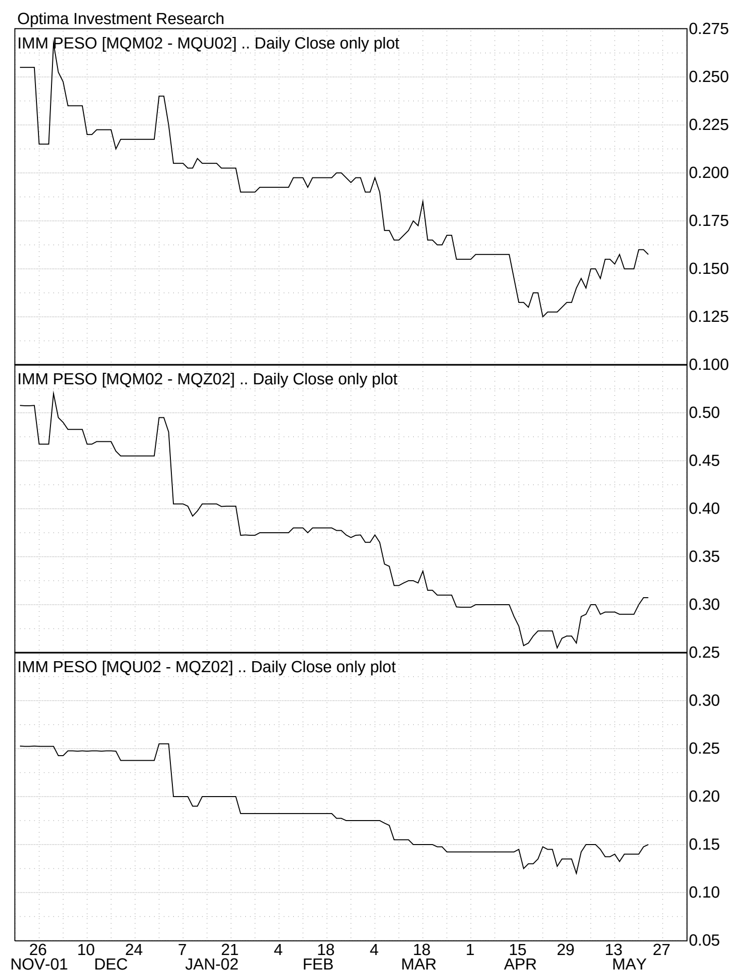
IMM CANADIAN DOLLAR JUN 2002 .. Daily HLC plot

IMM MEXICAN PESO - SPOT & SPREADS



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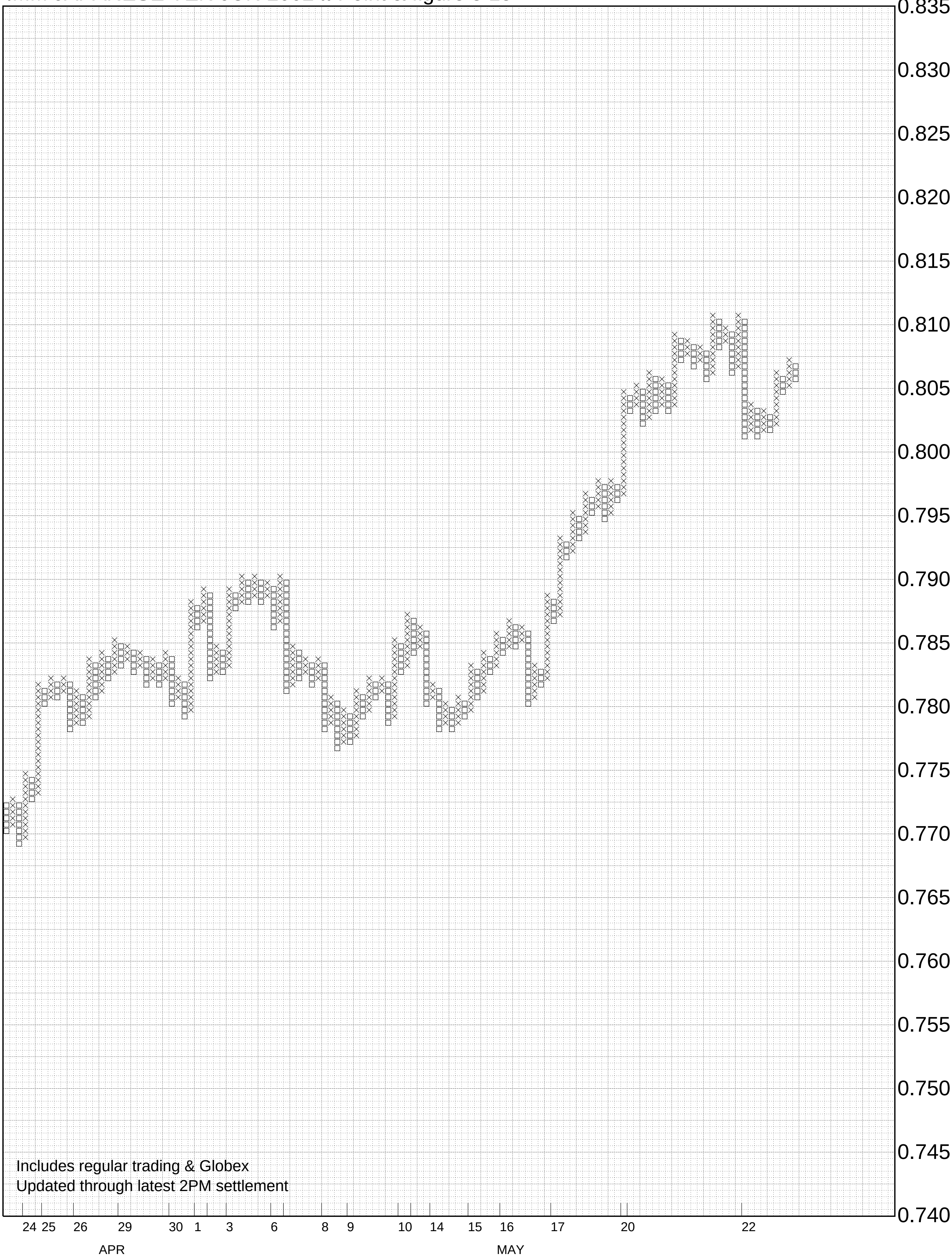

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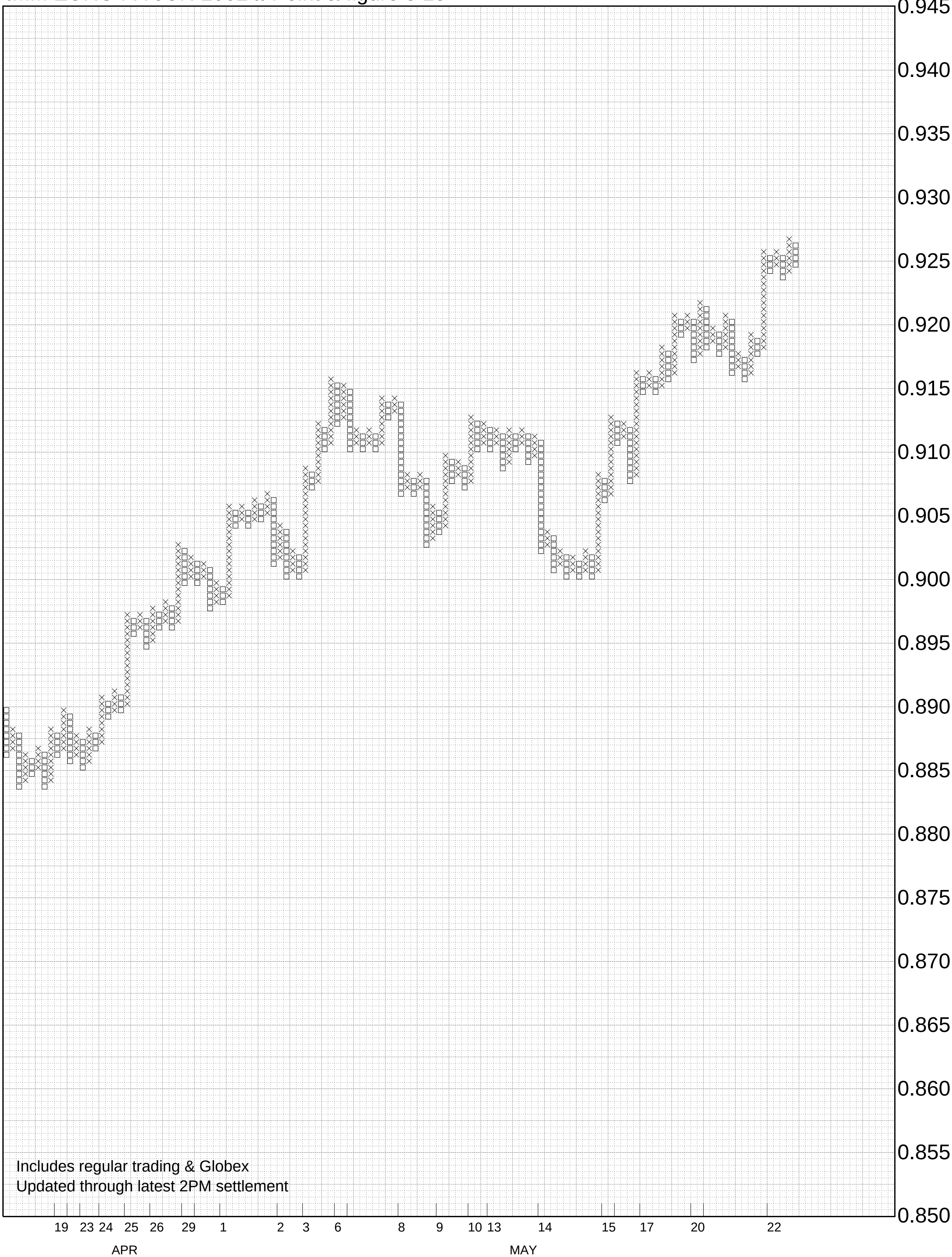

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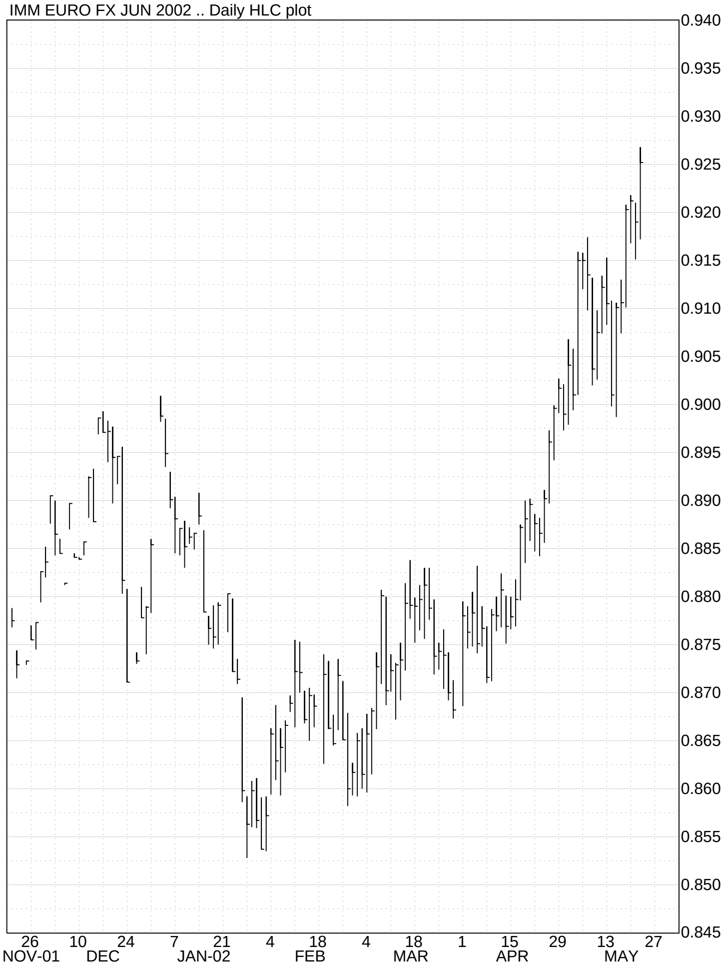
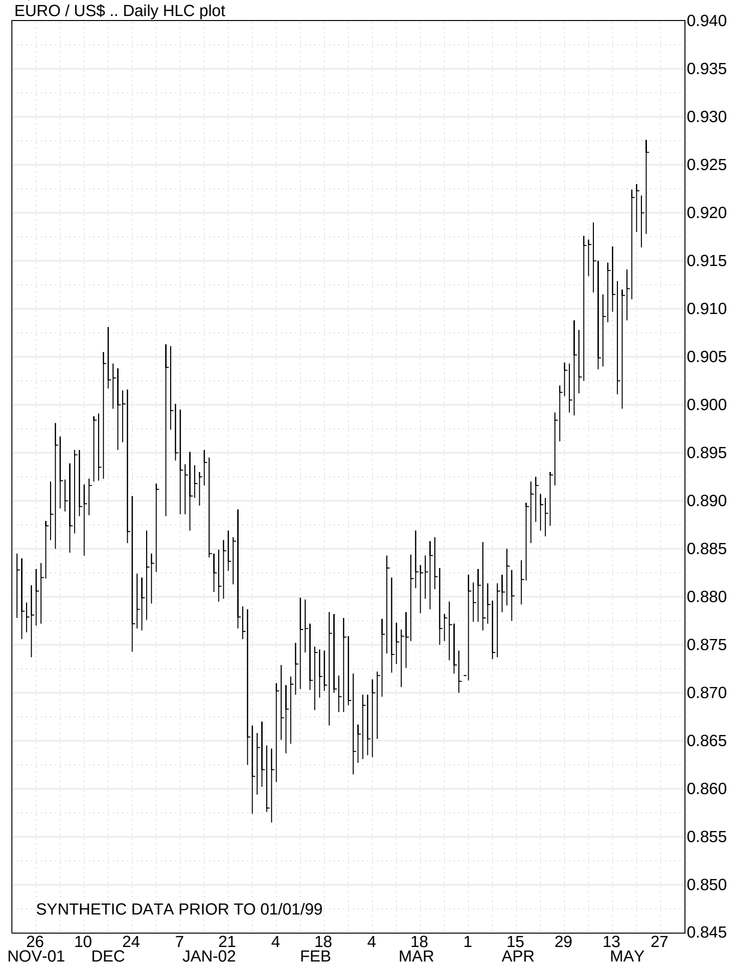
IMM EURO FX JUN 2002 .. Daily HLC plot



Optima Investment Research
EURO / US$ .. Daily HLC plot



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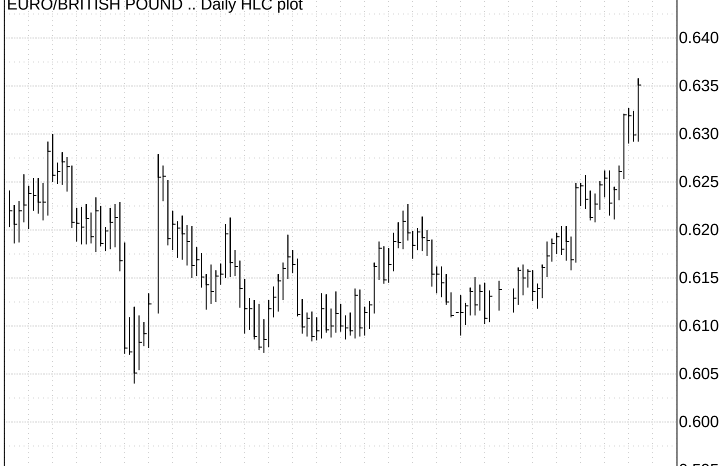
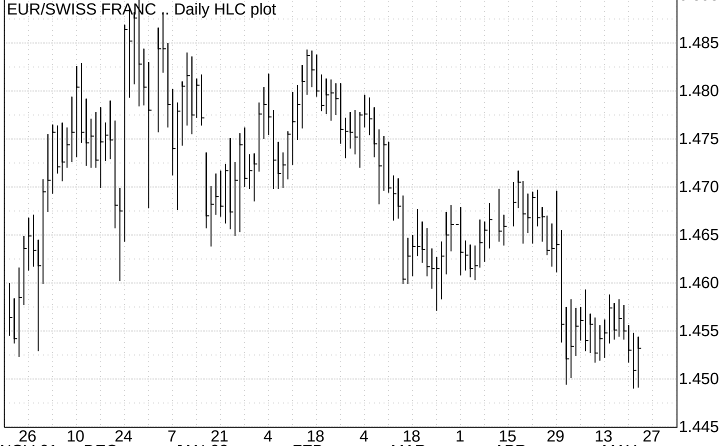
EURO/BRITISH POUND .. Daily HLC plot



EUR/SWISS FRANC .. Daily HLC plot



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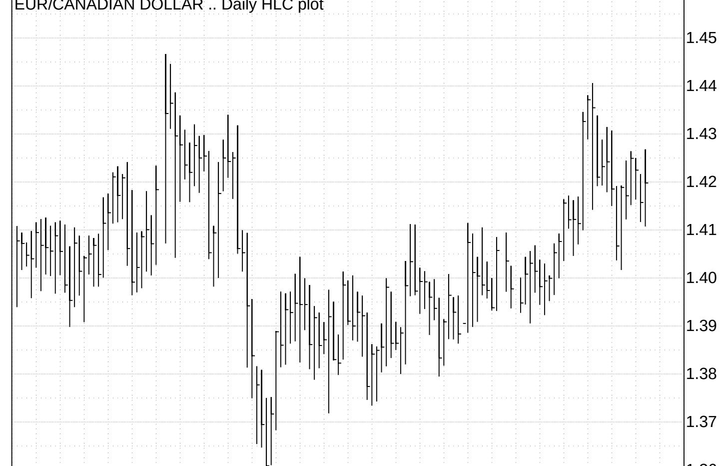
EUR/CANADIAN DOLLAR .. Daily HLC plot



EURO/YEN .. Daily HLC plot

CASH - JAPANESE YEN & EURO FX

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YEN - EURO SPRD [JYM02 - ECM02] .. Daily Close only plot

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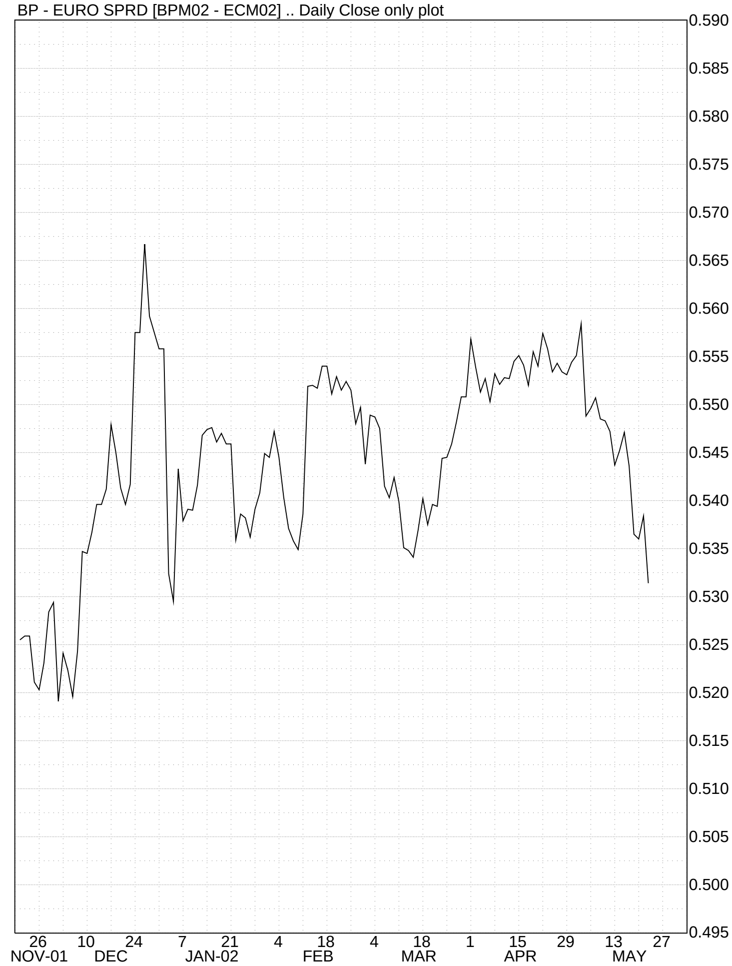
BP - EURO SPRD [BPM02 - ECM02] .. Daily Close only plot



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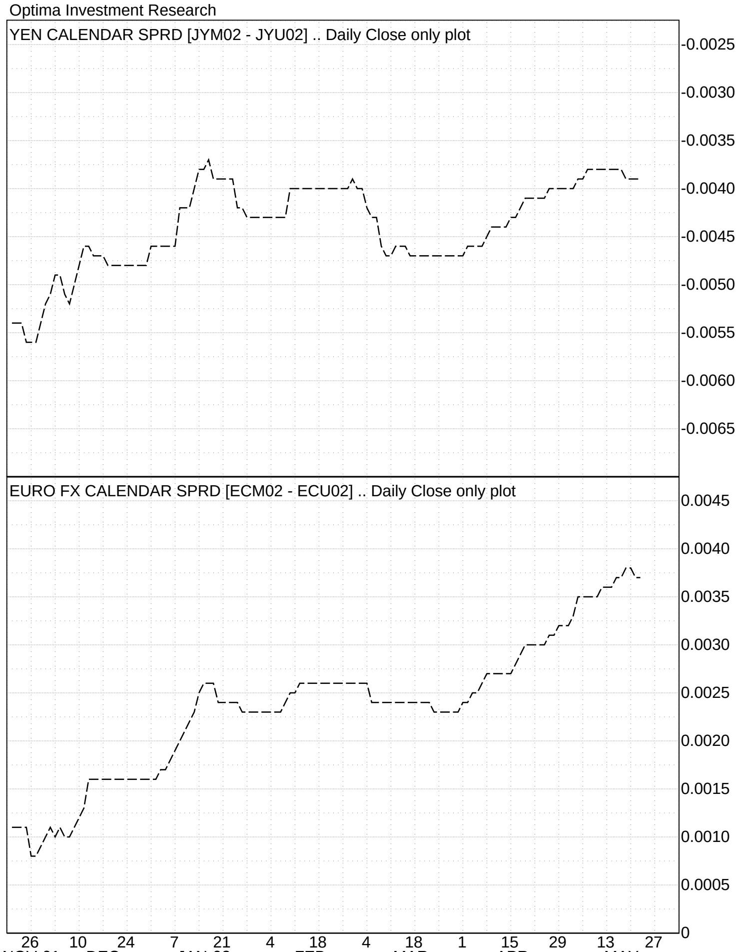

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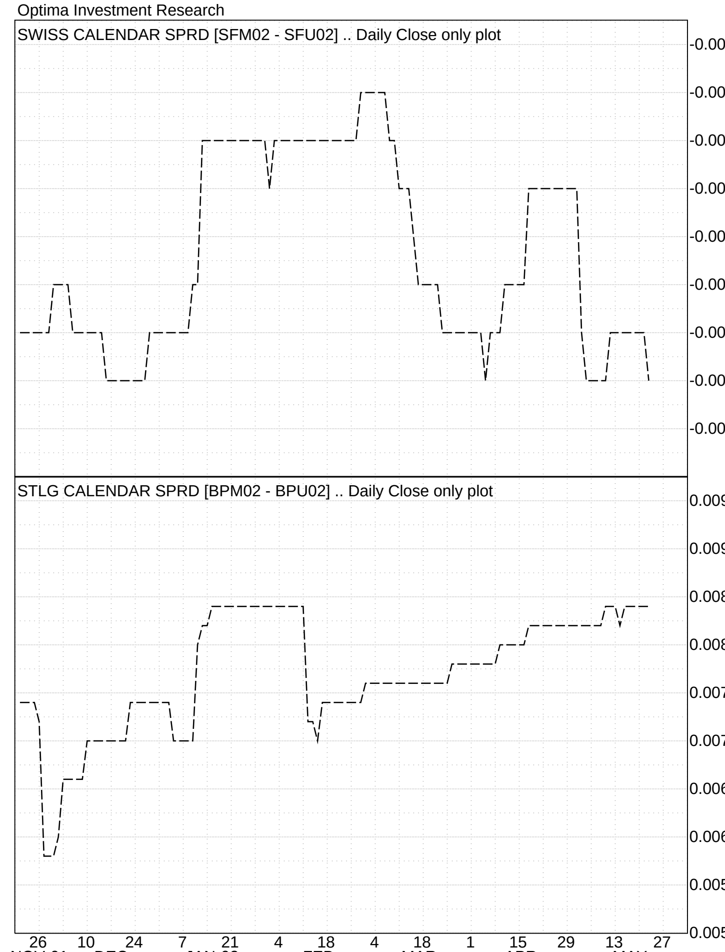

INTERNATIONAL 3-MO EURO RATES

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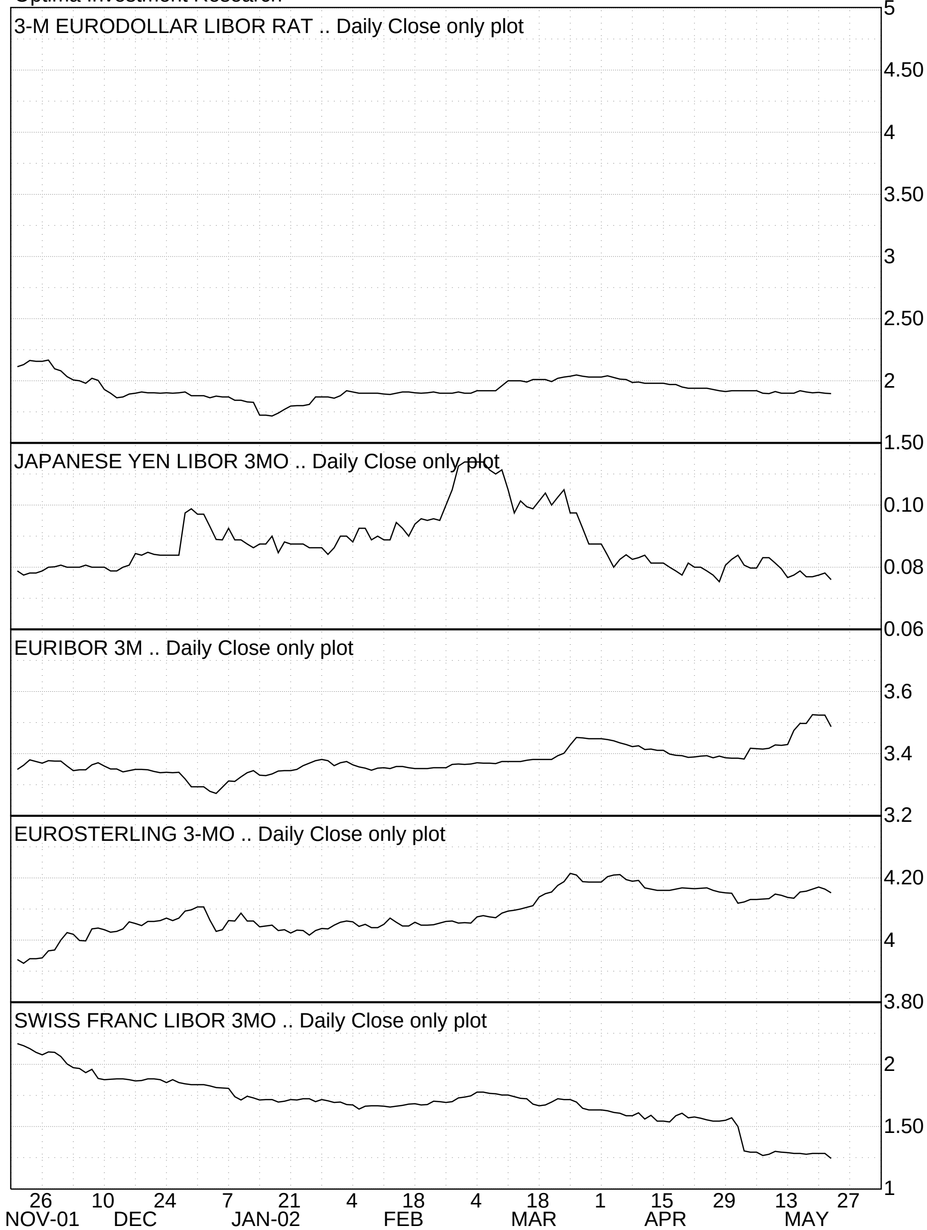

3-MONTH EURO RATE DIFFERENTIALS

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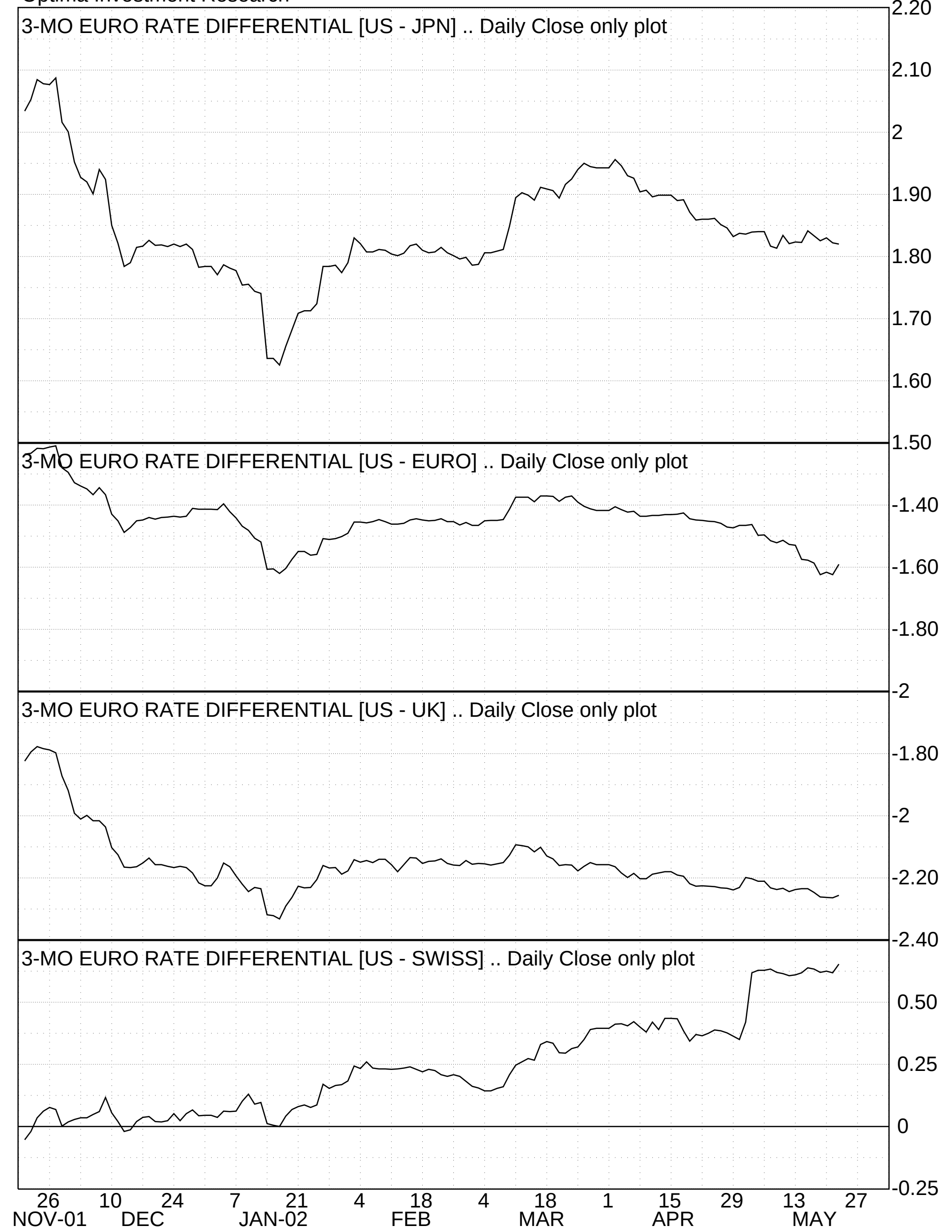
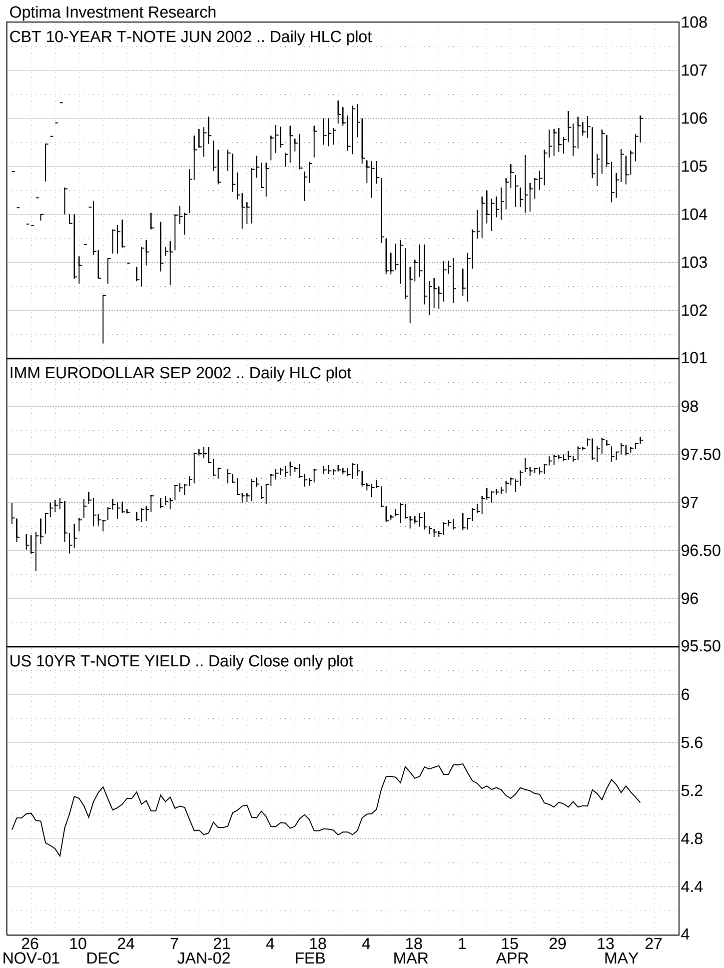
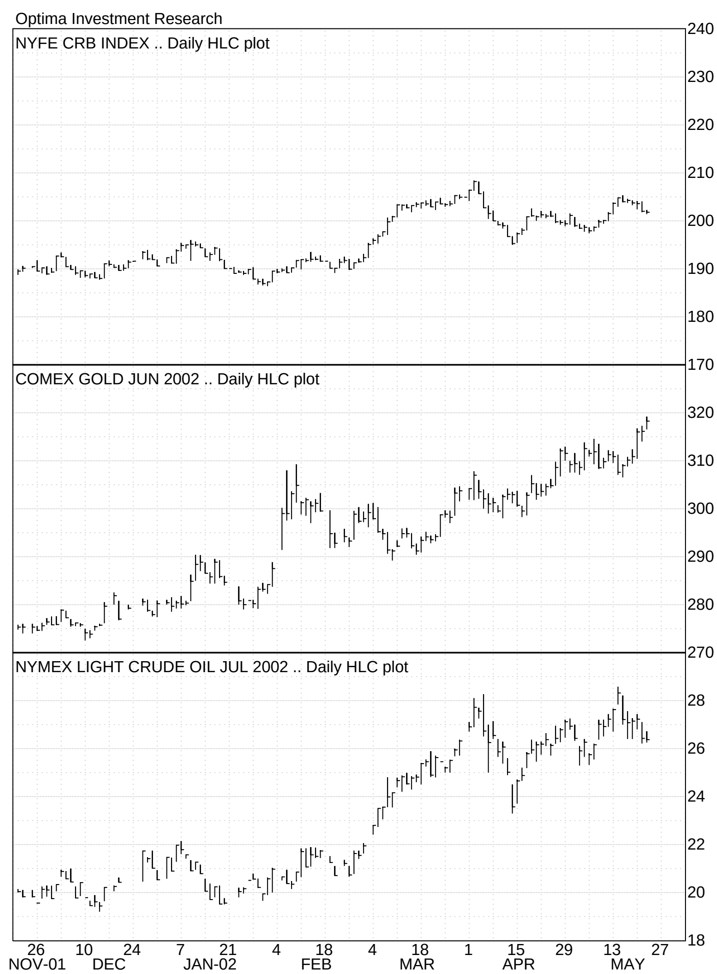


DAILY U.S MARKET OVERVIEW





OPTIMA VOLATILITY PICTURE -- FOREX Thu 5/23/02

IMPLIED VOLATILITY OVERVIEW -- The JYU volatility was -.04 at 9.37 as the dollar index was -.44 at 112.33.

JY IMPLIED VOLATILITY -- JYU implied volatility finished -.04 at 9.37. The JYU futures contract finished -20 ticks at 8001. The short-term trend has shifted to neutral with yesterday's 1-month high settle. The intermediate-term trend is bearish as volatility has continued to trade lower since September of 1999. The long-term trend is neutral as the contract has traded sideways to lower over the past year.

MATURITY STRUCTURE OF IMPLIED VOLATILITY -- The maturity structure is inverted in shape. Imp vol: JYU was -.04 at 9.37.

RICH/CHEAP ANALYSIS -- The JY Volatility Cheapness Indices were lower with JYU at a mildly cheap 39.9.

SIGMA BOUNDARY -- A 1-standard deviation move today for JYU is +/-48 ticks.

SUPPORT/RESISTANCE LEVELS -- JAPANESE YEN IMPLIED VOLATILITY (JYU02)

15.75	13-1/4 month high (Apr 3 wkly-nrst H00)	9.42	1-month high (Tuesday)
11.72	Contract high (1/08/02)	***9.37**	**Previous (Wednesday)**
11.06	4-3/4 month high (1/22/02)	8.88	20-day implied volatility average
10.68	4-1/4 month high (2/11/02)	8.53	Contract low (Last Wednesday)
10.66	3-1/4 month high (2/27/02)	8.21	4-yr low weekly nrst (11/13/00 Z00)
10.57	2-1/2 month high (3/7/02)	7.07	6-year low (wkly-nrst 11/25/96 Z96)
10.05	1-1/2 month high (4/1&2/02)	6.59	12-year low (wkly-nrst 8/19/96 U96)
9.65	60-day implied volatility average		

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

OPTIMA VOLATILITY SUMMARY - CURRENCY FUTURES

As of: 052202	JYM02	ECM02	SFM02	BPM02	CDM02
Underlying Settle:	.8062s	.92520s	.6377s	1.4566s	.6518s
Change:	-.0020	+.00620	+.0032	-.0008	+.0022
Implied Volatility	10.44s	9.18s	10.76s	5.60s	6.00s
Change from Prev:	-.03	+.59	+.64	-.40	+.11
last 20Days High:	10.47	9.43	10.76	6.25	6.00
Avg:	8.72	8.63	9.54	5.74	5.64
Low:	8.19	7.43	8.16	5.34	5.47
last 60Days High:	10.96	9.43	10.76	6.64	6.25
Avg:	9.42	8.48	9.16	6.00	5.85
Low:	8.19	7.43	8.16	5.34	5.47
Historical 20 Day:	10.63%	10.45%	10.85%	5.61%	3.92%
Volatility 30 Day:	9.56%	9.03%	9.37%	4.81%	3.60%
50 Day:	9.34%	8.23%	8.99%	4.77%	4.71%
100 Day:	10.75%	8.58%	9.03%	5.62%	4.98%
200 Day:	9.86%	9.38%	10.29%	7.36%	5.05%

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

OPTIMA VOLATILITY CHEAPNESS INDEX

Historical Volatility					
Max :	27.5	N/A	29.0	30.5	11.7
Median :	8.9	N/A	11.1	8.8	4.4
Min :	3.2	N/A	3.8	2.7	1.4
Vol Cheapness Ind:	64.7	N/A	47.2	20.7	83.8
change :	-.1	N/A	+6.9	-3.0	+1.0
Last 20 sess :					
High :	64.8	N/A	47.2	23.7	83.8
Avg :	47.1	N/A	35.1	18.1	78.4
Low :	37.8	N/A	28.1	13.8	74.2
Last 60 sess :					
High :	64.8	N/A	47.2	23.7	88.7
Avg :	44.5	N/A	22.6	13.2	82.7
Low :	32.4	N/A	13.1	7.4	74.2
Days to Expiration	16	16	16	16	16

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

OPTIMA SIGMA BOUNDARY

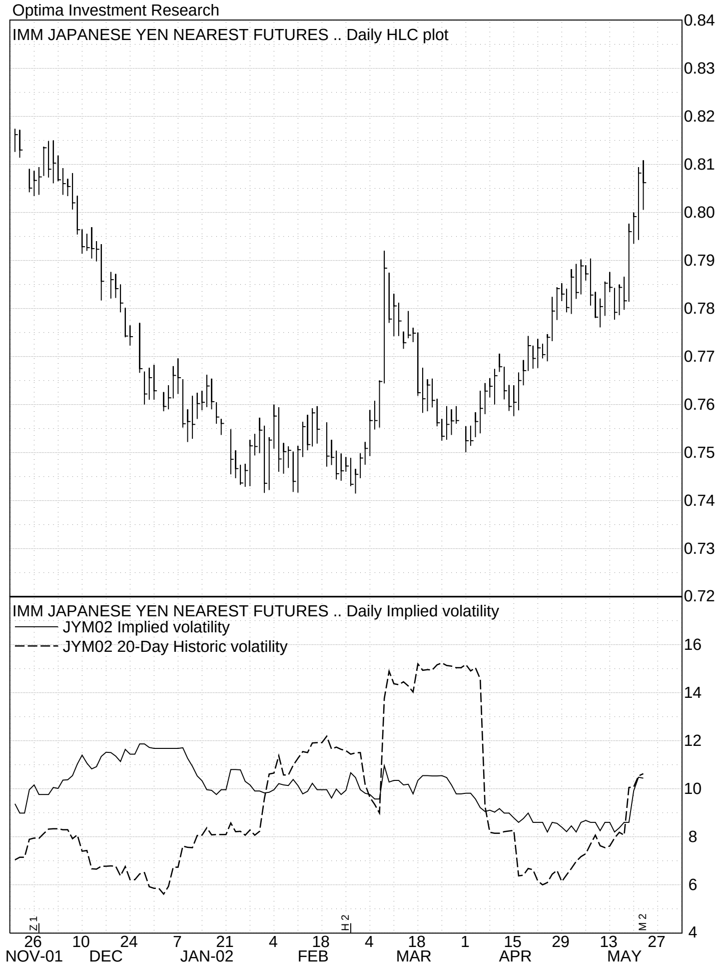
Today: +1 Std Dev:	.0053	.00537	.0043	.0052	.0024
-1 Std Dev:	.0053	.00534	.0043	.0052	.0024
68% H:	.8115	.93057	.6420	1.4618	.6542
L:	.8009	.91986	.6334	1.4514	.6493
95% H:	.8168	.93594	.6463	1.4668	.6567
L:	.7956	.91452	.6291	1.4464	.6469
99% H:	.8221	.94131	.6507	1.4720	.6592
L:	.7903	.90918	.6248	1.4412	.6444
20Days +1 Std Dev:	N/A	N/A	N/A	N/A	N/A
Out: -1 Std Dev:	N/A	N/A	N/A	N/A	N/A
To +1 Std Dev:	.0178	.01797	.0145	.0172	.0082
Expir- -1 Std Dev:	.0174	.01762	.0142	.0170	.0081
ation 68% H:	.8240	.94317	.6522	1.4738	.6600
L:	.7887	.90757	.6235	1.4396	.6436
95% H:	.8418	.96114	.6667	1.4910	.6683
L:	.7713	.88994	.6093	1.4226	.6355
99% H:	.8597	.97911	.6813	1.5082	.6765
L:	.7539	.87232	.5951	1.4056	.6274

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

OPTIMA - CURRENCY OPTIONS PACKAGE

Optima Investment Research
IMM JAPANESE YEN JUN 2002 .. Daily Implied volatility

Optima Investment Research



Optima Investment Research
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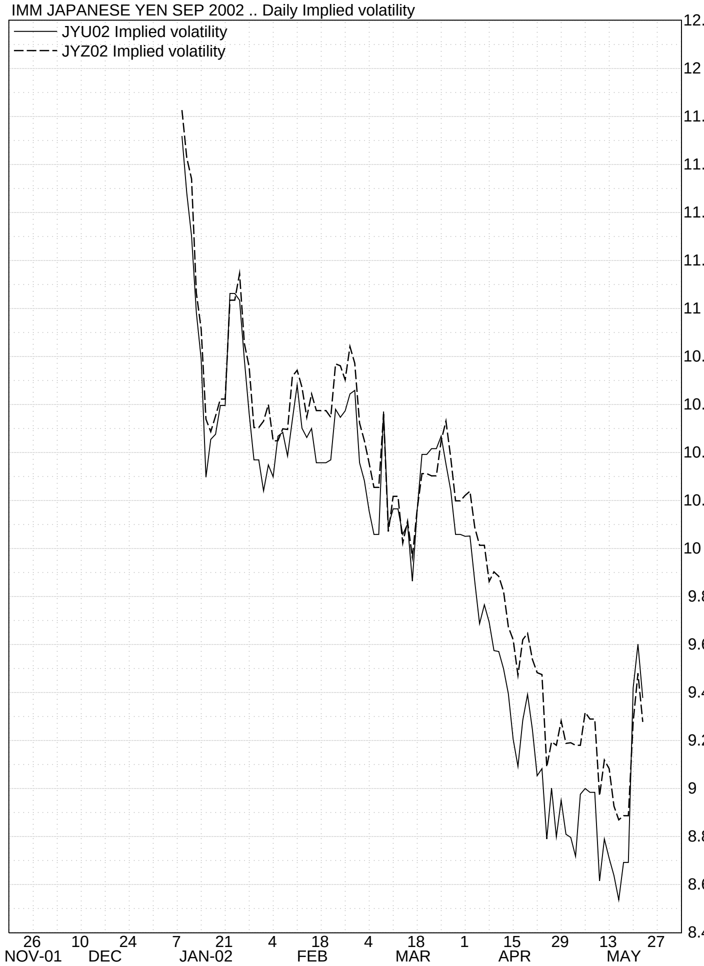

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Optima Investment Research
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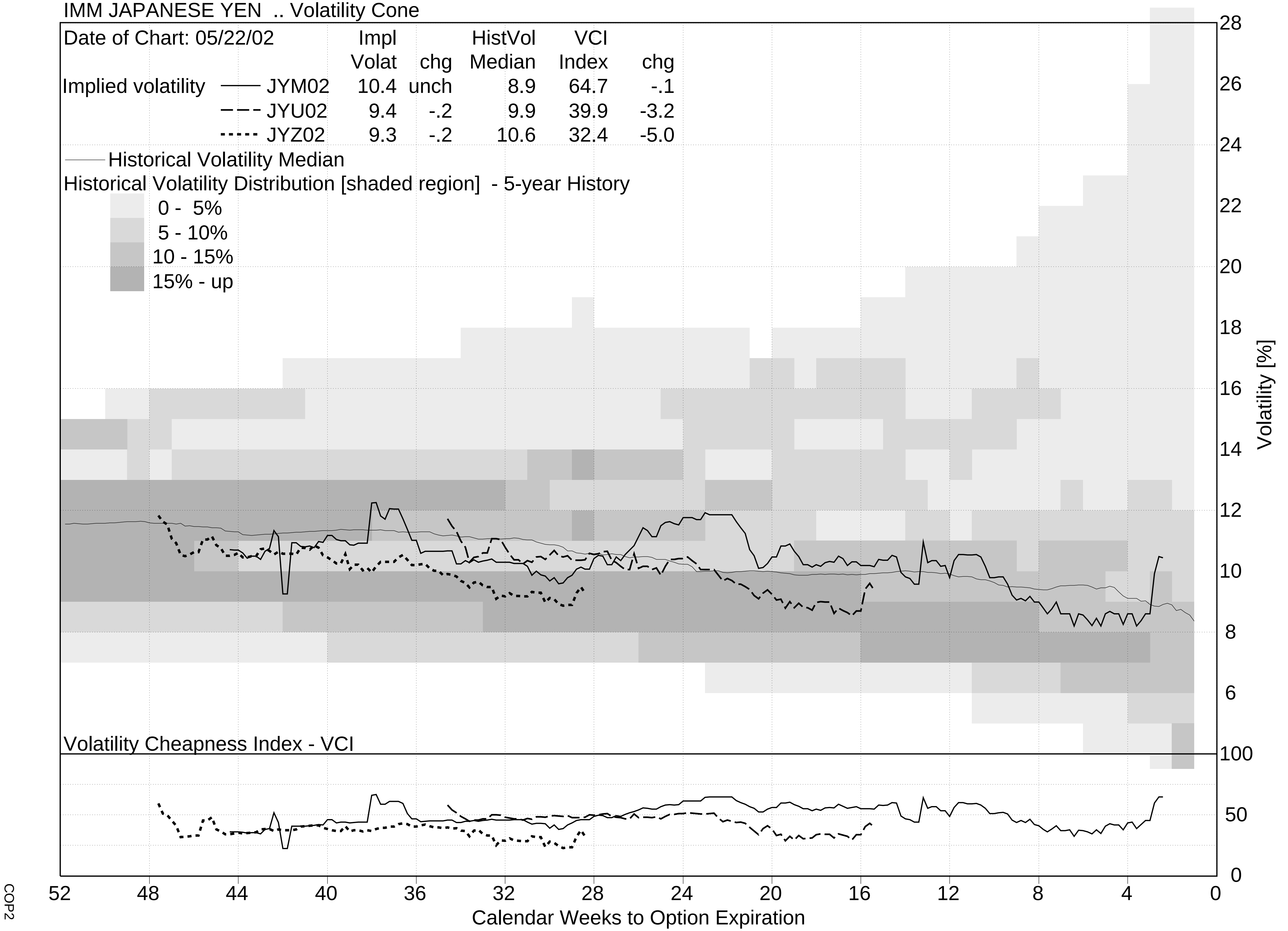
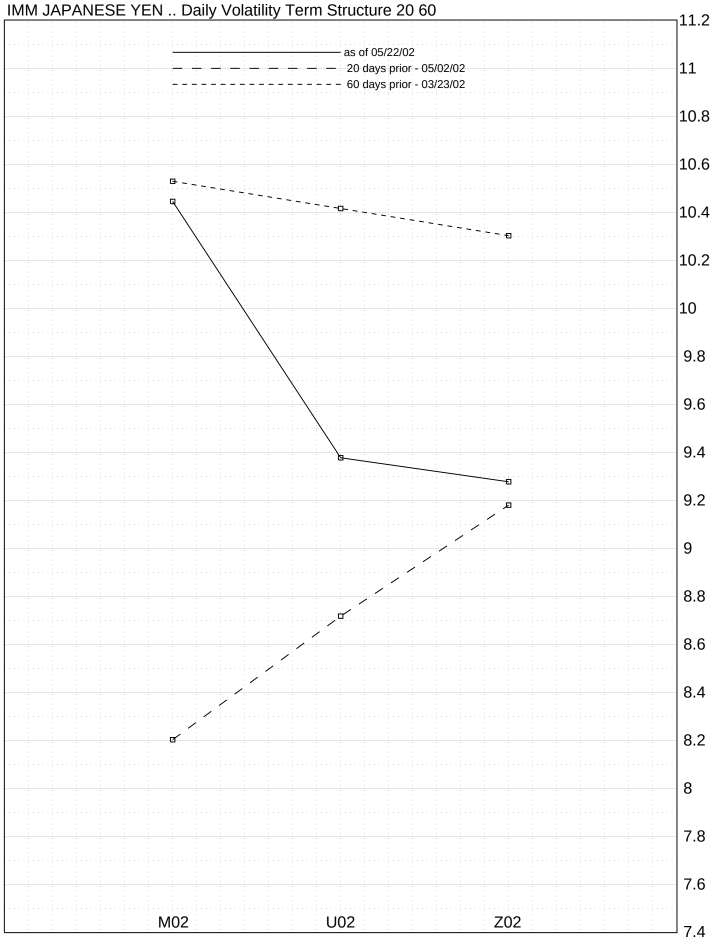


YEN VOLATILITY CALENDAR SPREADS

Optima Investment Research

IMM JAPANESE YEN .. Daily Volatility Term Structure 20 60



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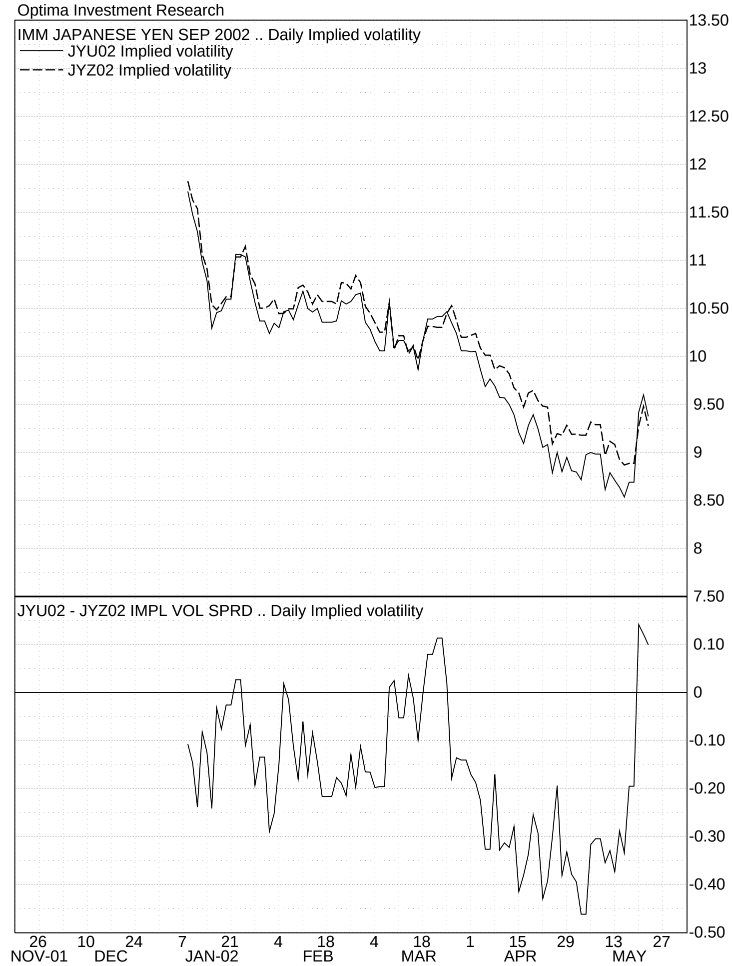
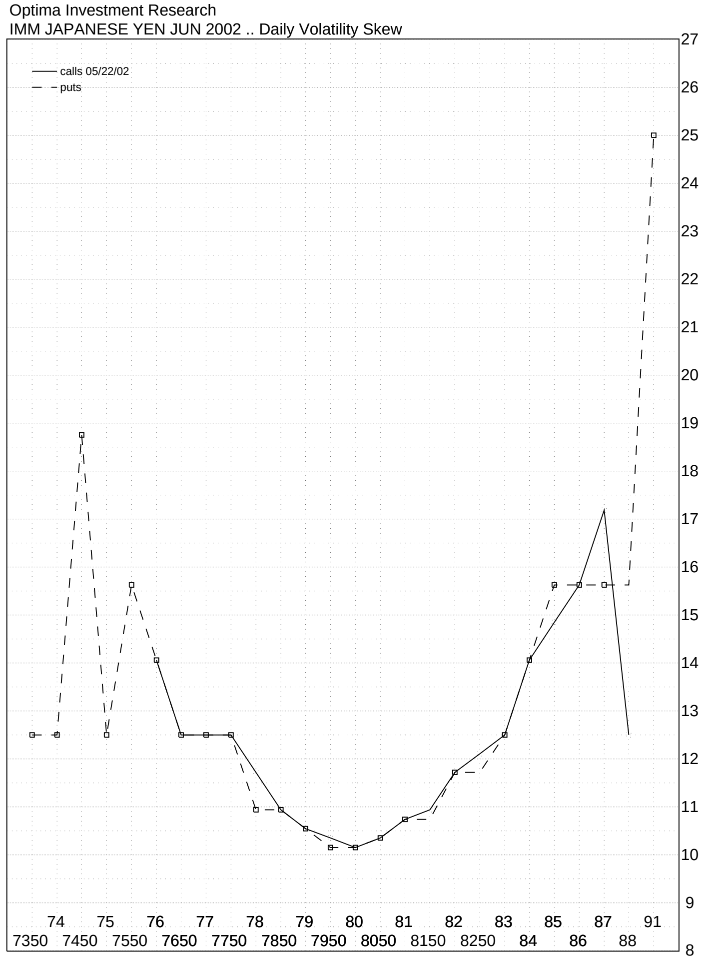


JUNE 02 IMM JAPANESE YEN OPTIONS
05/22/02 days to exp: 16 int. rate: 1.72% calc. imp vol of *: 10.45%

strike	last	imp vol	delta	gamma	theta-7	vega	prem	iv-skew
JYM02	0.8062							
0.8800C	0.00010s	12.50	.00	0.00070	.0000020	.0000040	.000100	+2.05
0.8700C	0.00020s	17.19	.02	0.01520	.0001700	.0000840	.000200	+6.74
0.8600C	0.00030s	15.63	.03	0.02220	.0002200	.0001110	.000300	+5.18
0.8500C	0.00050s	14.84	.05	0.03840	.0003900	.0001780	.000500	+4.40
0.8400C	0.00080s	14.06	.08	0.06480	.0006750	.0002770	.000800	+3.62
0.8300C	0.00140s	12.50	.14	0.10330	.0009450	.0003850	.001400	+2.05
0.8250C	0.00200s	12.11	.18	0.13050	.0011920	.0004650	.002000	+1.66
0.8200C	0.00280s	11.72	.25	0.16000	.0014470	.0005440	.002800	+1.27
0.8150C	0.00390s	10.94	.32	0.19400	.0015920	.0006100	.003900	+.49
0.8100C	0.00550s	10.74*	.42	0.21560	.0017580	.0006610	.005500	+.30
0.8050C	0.00760s	10.35*	.53	0.22740	.0017330	.0006710	.006400	-.09
0.8000C	0.01040s	10.16	.65	0.21690	.0015560	.0006310	.004200	-.29
0.7950C	0.01390s	10.35	.74	0.18390	.0013070	.0005530	.002700	-.09
0.7900C	0.01790s	10.55	.82	0.14530	.0009990	.0004530	.001700	+.10
0.7850C	0.02230s	10.94	.88	0.10830	.0007370	.0003570	.001100	+.49
0.7800C	0.02690s	11.72	.91	0.08010	.0005820	.0002870	.000700	+1.27
0.7750C	0.03170s	12.50	.94	0.05940	.0004560	.0002300	.000500	+2.05
0.7700C	0.03650s	12.50	.96	0.03960	.0002670	.0001580	.000300	+2.05
0.7650C	0.04140s	12.50	.98	0.02470	.0001410	.0001020	.000200	+2.05
0.7600C	0.04640s	14.06	.98	0.02190	.0001580	.0001000	.000200	+3.62
0.7550C	0.05130s	12.50	.99	0.00790	.0000010	.0000360	.000100	+2.05
0.7500C	0.05630s	12.50	1.00	0.00400	.0000000	.0000360	.000100	+2.05
0.7400C	0.06620s	.00	1.00	0.00000	.0000000	.0000000	.000000	
0.7300C	0.07620s	.00	1.00	0.00000	.0000000	.0000000	.000000	
0.7200C	0.08620s	12.50	1.00	0.00000	.0000000	.0000000	.000000	+2.05
0.7000C	0.10620s	.00	1.00	0.00000	.0000000	.0000000	.000000	
0.6900C	0.11620s	.00	1.00	0.00000	.0000000	.0000000	.000000	
0.6700C	0.13620s	.00	1.00	0.00000	.0000000	.0000000	.000000	
0.9600P	0.15380s	25.00	1.00	0.00040	.0000000	.0000000	.000000	+14.55
0.9500P	0.14380s	25.00	1.00	0.00080	.0000000	.0000000	.000000	+14.55
0.9300P	0.12380s	25.00	1.00	0.00240	.0000000	.0000000	.000000	+14.55
0.9100P	0.10380s	25.00	.99	0.00690	.0000790	.0000550	.000000	+14.55
0.9000P	0.09380s	12.50	1.00	0.00000	.0000000	.0000000	.000000	+2.05
0.8900P	0.08380s	12.50	1.00	0.00020	.0000000	.0000000	.000000	+2.05
0.8800P	0.07380s	12.50	1.00	0.00070	.0000000	.0000000	.000000	+2.05
0.8700P	0.06390s	15.63	.99	0.01040	.0000440	.0000550	.000100	+5.18
0.8600P	0.05400s	15.63	.97	0.02220	.0002030	.0001110	.000200	+5.18
0.8500P	0.04430s	15.63	.94	0.04200	.0004770	.0002020	.000500	+5.18
0.8400P	0.03460s	14.06	.92	0.06480	.0006640	.0002770	.000800	+3.62
0.8300P	0.02520s	12.50	.86	0.10330	.0009370	.0003850	.001400	+2.05
0.8200P	0.01660s	11.72	.75	0.16000	.0014420	.0005440	.002800	+1.27
0.8150P	0.00180	.00	1.00	0.00000	.0000000	.0000000	.007000	
0.8100P	0.00930s	10.74*	.58	0.21560	.0017570	.0006610	.005500	+.30
0.8050P	0.00640s	10.35*	.47	0.22740	.0017330	.0006710	.006400	-.09
0.8000P	0.00420s	10.16	.35	0.21690	.0015580	.0006310	.004200	-.29
0.7950P	0.00270s	10.16	.25	0.18600	.0012720	.0005490	.002700	-.29
0.7900P	0.00170s	10.55	.18	0.14530	.0010040	.0004530	.001700	+.10
0.7850P	0.00110s	10.94	.12	0.10830	.0007440	.0003570	.001100	+.49
0.7800P	0.00070s	10.94	.07	0.07500	.0004640	.0002550	.000700	+.49
0.7750P	0.00050s	12.50	.06	0.05940	.0004670	.0002300	.000500	+2.05
0.7700P	0.00035s	12.50	.04	0.03960	.0002790	.0001580	.000350	+2.05
0.7650P	0.00025s	12.50	.02	0.02470	.0001550	.0001020	.000250	+2.05
0.7600P	0.00020s	14.06	.02	0.02190	.0001730	.0001000	.000200	+3.62
0.7550P	0.00015s	15.63	.02	0.01960	.0001910	.0000990	.000150	+5.18
0.7500P	0.00010s	12.50	.00	0.00400	.0000170	.0000190	.000100	+2.05
0.7450P	0.00020s	18.75	.02	0.01600	.0002250	.0000950	.000200	+8.30
0.7400P	0.00010c	12.50	.00	0.00090	.0000030	.0000050	.000100	+2.05
0.7350P	0.00010c	12.50	.00	0.00040	.0000010	.0000020	.000100	+2.05

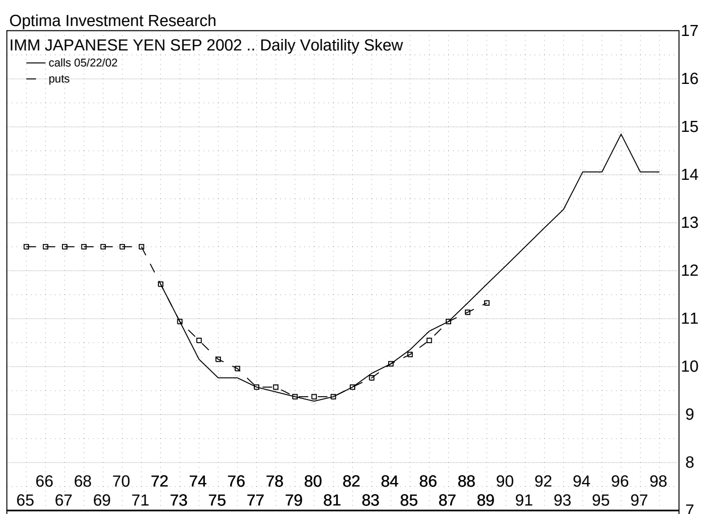


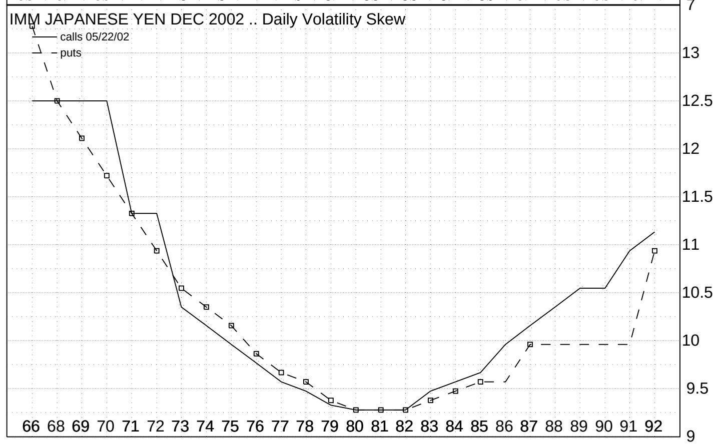
SEPTEMBER 02 IMM JAPANESE YEN OPTIONS
05/22/02 days to exp: 107 int. rate: 1.72% calc. imp vol of *: 9.38%

strike	last	imp vol	delta	gamma	theta-7	vega	prem	iv-skew
JYU02	0.8101							
0.8900C	0.00160s	11.72	.07	0.02700	.0002280	.0006630	.001600	+2.34
0.8800C	0.00210s	11.33	.09	0.03350	.0002660	.0007860	.002100	+1.95
0.8700C	0.00280s	10.94	.12	0.04150	.0003090	.0009280	.002800	+1.56
0.8600C	0.00380s	10.74	.16	0.05120	.0003700	.0011060	.003800	+1.37
0.8500C	0.00500s	10.35	.20	0.06200	.0004180	.0012750	.005000	+.97
0.8400C	0.00680s	10.06	.26	0.07340	.0004700	.0014490	.006800	+.68
0.8300C	0.00920s	9.86	.33	0.08370	.0005170	.0016040	.009200	+.49
0.8200C	0.01230s	9.57*	.42	0.09250	.0005380	.0017080	.012300	+.19
0.8100C	0.01630s	9.38*	.51	0.09650	.0005380	.0017400	.016200	+.00
0.8000C	0.02160s	9.28	.61	0.09390	.0005100	.0016810	.011500	-.10
0.7900C	0.02800s	9.38	.70	0.08430	.0004630	.0015390	.007900	+.00
0.7800C	0.03540s	9.47	.77	0.07140	.0003940	.0013350	.005300	+.10
0.7700C	0.04340s	9.57	.84	0.05700	.0003150	.0010990	.003300	+.19
0.7600C	0.05210s	9.77	.89	0.04330	.0002410	.0008710	.002000	+.39
0.7500C	0.06120s	9.77	.93	0.03080	.0001610	.0006400	.001100	+.39
0.7400C	0.07070s	10.16	.95	0.02200	.0001150	.0004860	.000600	+.78
0.8900P	0.08100s	11.33	.93	0.02580	.0001770	.0006200	.001100	+1.95
0.8800P	0.07150s	11.13	.91	0.03300	.0002300	.0007640	.001600	+1.76
0.8700P	0.06230s	10.94	.88	0.04150	.0002890	.0009280	.002400	+1.56
0.8600P	0.05330s	10.55	.84	0.05110	.0003390	.0010870	.003400	+1.17
0.8500P	0.04460s	10.25	.80	0.06210	.0003980	.0012670	.004700	+.88
0.8400P	0.03650s	10.06	.73	0.07340	.0004600	.0014490	.006600	+.68
0.8300P	0.02890s	9.77	.66	0.08440	.0005040	.0016010	.009000	+.39
0.8200P	0.02210s	9.57*	.58	0.09250	.0005350	.0017080	.012200	+.19
0.8100P	0.01620s	9.38*	.49	0.09650	.0005380	.0017400	.016200	+.00
0.8000P	0.01160s	9.38	.39	0.09300	.0005190	.0016820	.011600	+.00
0.7900P	0.00810s	9.38	.30	0.08430	.0004700	.0015390	.008100	+.00
0.7800P	0.00550s	9.57	.22	0.07100	.0004110	.0013410	.005500	+.19
0.7700P	0.00360s	9.57	.16	0.05700	.0003280	.0010990	.003600	+.19
0.7600P	0.00240s	9.96	.11	0.04370	.0002700	.0008920	.002400	+.58
0.7500P	0.00150s	10.16	.08	0.03210	.0002040	.0006850	.001500	+.78
0.7400P	0.00100s	10.55	.05	0.02330	.0001590	.0005290	.001000	+1.17

DECEMBER 02 IMM JAPANESE YEN OPTIONS
05/22/02 days to exp: 198 int. rate: 1.72% calc. imp vol of *: 9.28%

strike	last	imp vol	delta	gamma	theta-7	vega	prem	iv-skew
JYZ02	0.8149s							
0.9200C	0.00210s	11.13	.07	0.02100	.0001630	.0009240	.002100	+1.86
0.9100C	0.00260s	10.94	.09	0.02490	.0001870	.0010610	.002600	+1.66
0.9000C	0.00320s	10.55	.11	0.02890	.0002030	.0011810	.003200	+1.27
0.8900C	0.00410s	10.55	.14	0.03420	.0002410	.0013760	.004100	+1.27
0.8800C	0.00520s	10.35	.16	0.03970	.0002690	.0015500	.005200	+1.07
0.8700C	0.00650s	10.16	.20	0.04570	.0002990	.0017290	.006500	+.88
0.8600C	0.00810s	9.96	.24	0.05180	.0003260	.0019060	.008100	+.68
0.8500C	0.01010s	9.67	.29	0.05830	.0003460	.0020650	.010100	+.39
0.8400C	0.01270s	9.57	.34	0.06360	.0003700	.0022130	.012700	+.29
0.8300C	0.01590s	9.47	.41	0.06770	.0003850	.0023190	.015900	+.20
0.8200C	0.01970s	9.28*	.47	0.07090	.0003850	.0023690	.019700	+.00
0.8100C	0.02440s	9.28*	.54	0.07050	.0003820	.0023550	.019500	+.00
0.8000C	0.03000s	9.28	.61	0.06780	.0003650	.0022730	.015100	+.00
0.7900C	0.03630s	9.33	.68	0.06270	.0003380	.0021290	.011400	+.05
0.7800C	0.04340s	9.47	.74	0.05580	.0003060	.0019410	.008500	+.20
0.7700C	0.05110s	9.57	.79	0.04840	.0002660	.0017200	.006200	+.29
0.7600C	0.05930s	9.77	.83	0.04070	.0002280	.0014950	.004400	+.49
0.7500C	0.06790s	9.96	.87	0.03340	.0001880	.0012720	.003000	+.68
0.7400C	0.07690s	10.16	.90	0.02690	.0001500	.0010610	.002000	+.88
0.7300C	0.08610s	10.35	.92	0.02120	.0001150	.0008690	.001200	+1.07
0.7100C	0.10520s	11.33	.95	0.01390	.0000770	.0006330	.000300	+2.05
0.6900C	0.12490s	12.50	.96	0.00950	.0000000	.0002790	.000000	+3.22
0.6600C	0.15490s	12.50	.98	0.00340	.0000000	.0000000	.000000	+3.22
0.9200P	0.10620s	10.94	.92	0.02060	.0001200	.0008920	.001100	+1.66
0.8700P	0.06090s	9.96	.80	0.04590	.0002700	.0017070	.005800	+.68
0.8500P	0.04470s	9.57	.71	0.05870	.0003300	.0020590	.009600	+.29
0.8400P	0.03740s	9.47	.65	0.06420	.0003570	.0022100	.012300	+.20
0.8300P	0.03080s	9.38	.59	0.06840	.0003760	.0023170	.015700	+.10
0.8200P	0.02470s	9.28*	.52	0.07090	.0003840	.0023690	.019600	+.00
0.8100P	0.01960s	9.28*	.45	0.07050	.0003830	.0023550	.019600	+.00
0.8000P	0.01530s	9.28	.38	0.06780	.0003700	.0022730	.015300	+.00
0.7900P	0.01180s	9.38	.31	0.06250	.0003480	.0021310	.011800	+.10
0.7800P	0.00900s	9.57	.25	0.05550	.0003220	.0019480	.009000	+.29
0.7700P	0.00680s	9.67	.20	0.04820	.0002860	.0017300	.006800	+.39
0.7600P	0.00510s	9.86	.16	0.04060	.0002500	.0015070	.005100	+.59
0.7500P	0.00380s	10.16	.12	0.03360	.0002190	.0012990	.003800	+.88
0.7400P	0.00280s	10.35	.10	0.02720	.0001840	.0010900	.002800	+1.07
0.7300P	0.00210s	10.55	.07	0.02170	.0001510	.0008990	.002100	+1.27
0.7200P	0.00160s	10.94	.06	0.01740	.0001300	.0007560	.001600	+1.66
0.7100P	0.00120s	11.33	.04	0.01390	.0001110	.0006330	.001200	+2.05
0.7000P	0.00100s	11.72	.04	0.01100	.0000940	.0005280	.001000	+2.44
0.6900P	0.00080s	12.11	.03	0.00880	.0000800	.0004380	.000800	+2.83
0.6800P	0.00060s	12.50	.02	0.00700	.0000670	.0003630	.000600	+3.22
0.6600P	0.00040s	13.28	.01	0.00440	.0000470	.0002470	.000400	+4.00





Optima Investment Research
IMM JAPANESE YEN JUN 2002 .. Sigma Boundary

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IMM JAPANESE YEN SEP 2002 .. Sigma Boundary

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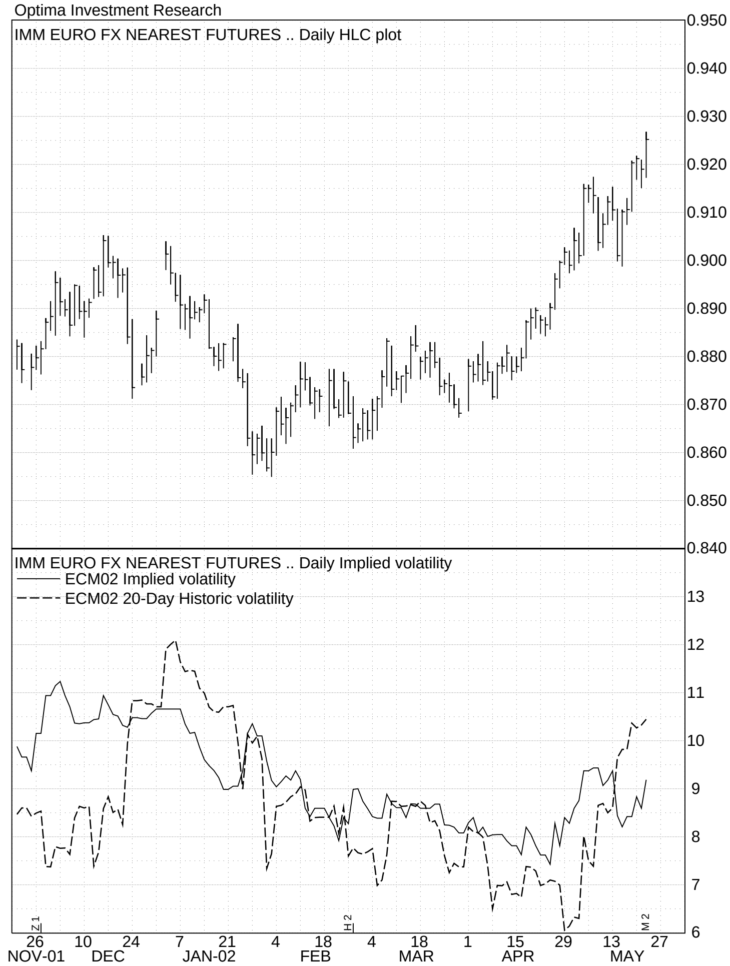
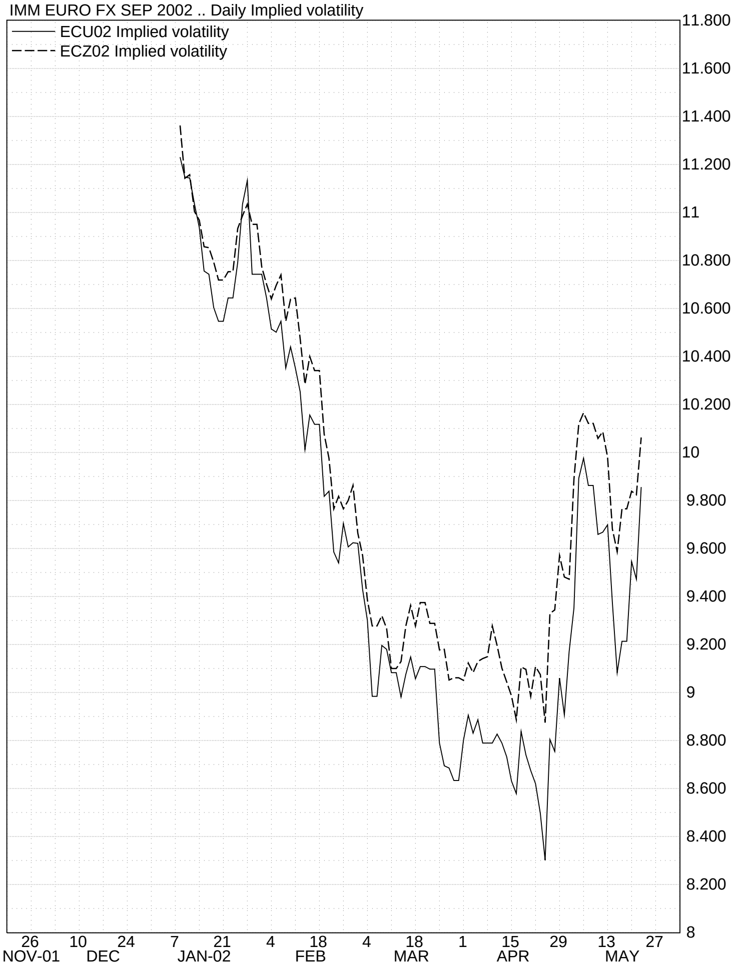
OPTIMA - EUROFX OPTIONS PACKAGE

Optima Investment Research
IMM EURO FX JUN 2002 .. Daily Implied volatility

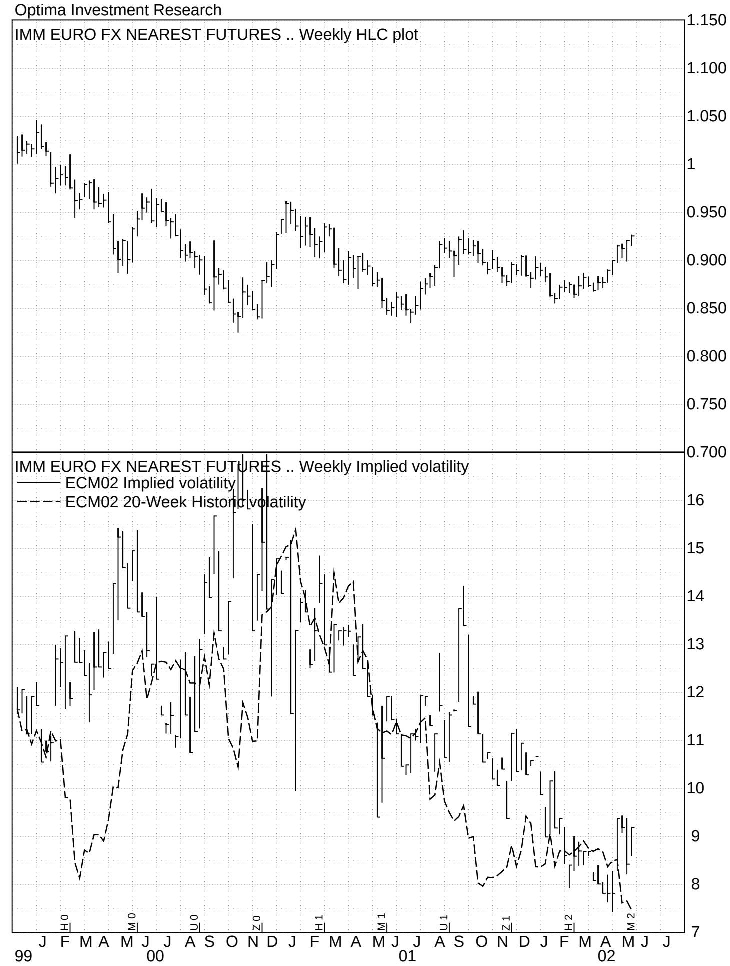
Optima Investment Research



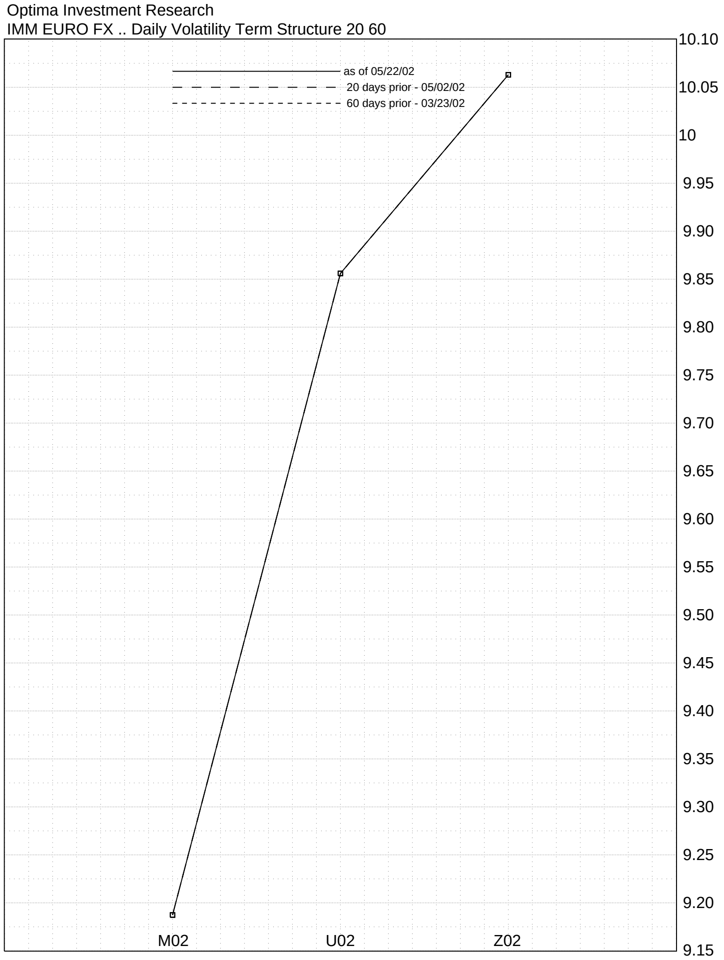
Optima Investment Research
IMM EURO FX SEP 2002 .. Daily Implied volatility

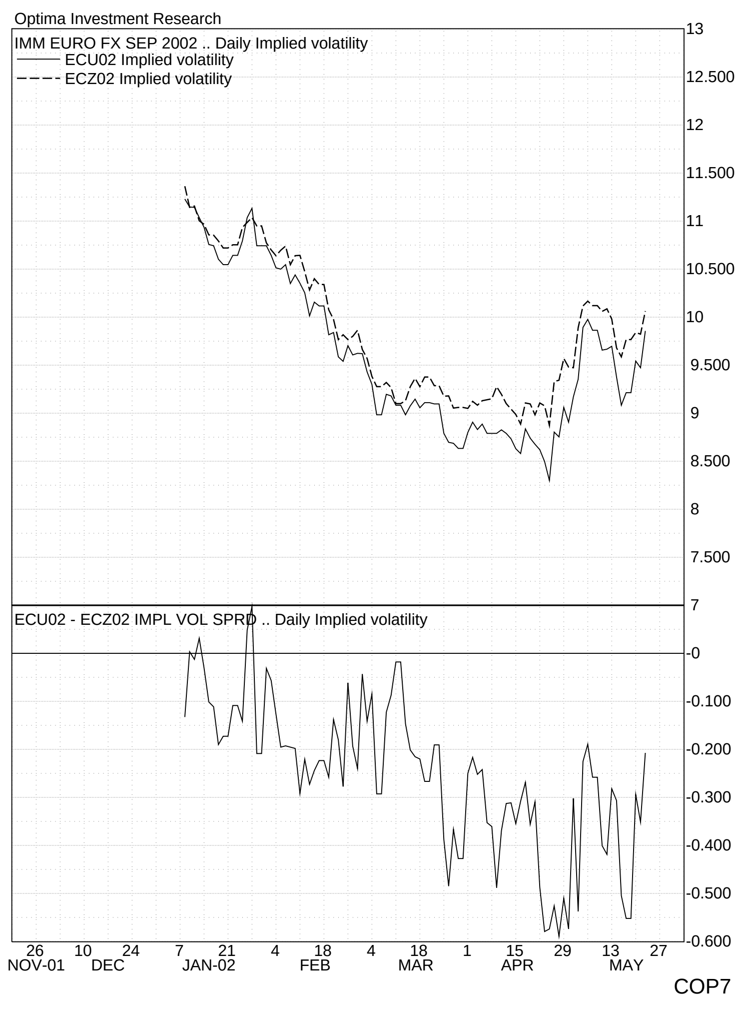


Optima Investment Research



EUROFX VOLATILITY CALENDAR SPREADS





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JUNE 02 IMM EURO FX OPTIONS
05/22/02 days to exp:  16   int. rate:  1.72%   calc. imp vol of *:  9.19%
  strike    last imp vol   delta   gamma theta-7    vega    prem iv-skew
   ECM02 0.92520
0.98000C 0.00010s  12.50     .01  1.51090.0001130.0000850.000100   +3.31
0.97000C 0.00030s  12.50     .04  3.29510.0002980.0001750.000300   +3.31
0.96500C 0.00040s  11.72     .04  4.10940.0003410.0002030.000400   +2.53
0.96000C 0.00060s  11.72     .07  5.76450.0005250.0002770.000600   +2.53
0.95000C 0.00100s  10.16     .11  9.47080.0007180.0003870.001000    +.97
0.94500C 0.00170s  10.16     .16 12.47220.0010290.0004970.001700    +.97
0.94000C 0.00250s   9.96     .23 15.58890.0013200.0005980.002500    +.77
0.93500C 0.00360s   9.77     .31 18.54950.0015880.0006880.003600    +.58
0.93000C 0.00510s   9.38*    .40 21.25560.0017310.0007500.005100    +.19
0.92500C 0.00720s   9.18*    .51 22.41360.0017700.0007720.007000    -.01
0.92000C 0.00990s   8.98     .62 21.83770.0016260.0007400.004700    -.20
0.91500C 0.01320s   8.98     .72 19.14690.0013650.0006570.003000    -.20
0.91000C 0.01710s   9.38     .80 15.24690.0011150.0005550.001900    +.19
0.90500C 0.02130s   9.38     .87 11.53440.0007710.0004310.001100    +.19
0.90000C 0.02590s   9.38     .92  8.04690.0004800.0003120.000700    +.19
0.89500C 0.03070s  10.16     .94  5.89610.0003840.0002510.000500    +.97
0.89000C 0.03550s  10.94     .96  4.39590.0003100.0002040.000300   +1.75
0.88500C 0.04040s  10.94     .97  2.80350.0001690.0001350.000200   +1.75
0.88000C 0.04530s  10.94     .99  1.67780.0000710.0000850.000100   +1.75
0.87500C 0.05020s   6.25    1.00  0.00360.0000000.0000000.000000   -2.94
0.87000C 0.05520s  12.50     .99  1.00780.0000320.0000580.000000   +3.31
0.86000C 0.06520s  12.50    1.00  0.32180.0000000.0000000.000000   +3.31
0.85000C 0.07520s  12.50    1.00  0.08310.0000000.0000000.000000   +3.31
0.84000C 0.08520s    .00    1.00  0.00000.0000000.0000000.000000
0.83000C 0.09520s    .00    1.00  0.00000.0000000.0000000.000000
0.77000C 0.15520s    .00    1.00  0.00000.0000000.0000000.000000
0.76000C 0.16520s  25.00    1.00  0.00640.0000000.0000000.000000  +15.81
0.98000P 0.05490s  12.50     .98  1.51090.0000810.0000850.000100   +3.31
0.97000P 0.04510s  12.50     .96  3.29510.0002840.0001750.000300   +3.31
0.96000P 0.03540s  11.72     .93  5.76450.0005130.0002770.000600   +2.53
0.95000P 0.02580s  10.16     .89  9.47080.0007100.0003870.001000    +.97
0.94000P 0.01730s   9.96     .77 15.58890.0013150.0005980.002500    +.77
0.93000P 0.00990s   9.38*    .60 21.25560.0017300.0007500.005100    +.19
0.92500P 0.00700s   9.18*    .49 22.41360.0017700.0007720.007000    -.01
0.92000P 0.00470s   8.98     .38 21.83770.0016280.0007400.004700    -.20
0.91500P 0.00300s   8.98     .27 19.14690.0013690.0006570.003000    -.20
0.91000P 0.00190s   9.18     .19 15.33470.0010740.0005480.001900    -.01
0.90500P 0.00110s   9.38     .13 11.53440.0007780.0004310.001100    +.19
0.90000P 0.00070s   9.38     .08  8.04690.0004880.0003120.000700    +.19
0.89500P 0.00050s  10.16     .06  5.89610.0003940.0002510.000500    +.97
0.89000P 0.00030s  10.94     .04  4.39590.0003210.0002040.000300   +1.75
0.88500P 0.00020s  10.94     .03  2.80350.0001830.0001350.000200   +1.75
0.88000P 0.00010s   6.25     .00  0.02110.0000000.0000020.000100   -2.94
0.87500P 0.00010c  12.50     .02  1.65090.0001280.0000920.000100   +3.31
0.87000P 0.00010c  12.50     .01  1.00780.0000700.0000580.000100   +3.31
0.86500P 0.00020c  15.63     .02  1.53630.0001930.0001030.000200   +6.44
0.86000P 0.00010   12.50     .00  0.32180.0000180.0000200.000100   +3.31
0.85500P 0.00010   12.50     .00  0.16800.0000080.0000110.000100   +3.31
0.85000P 0.00010c  12.50     .00  0.08310.0000040.0000060.000100   +3.31
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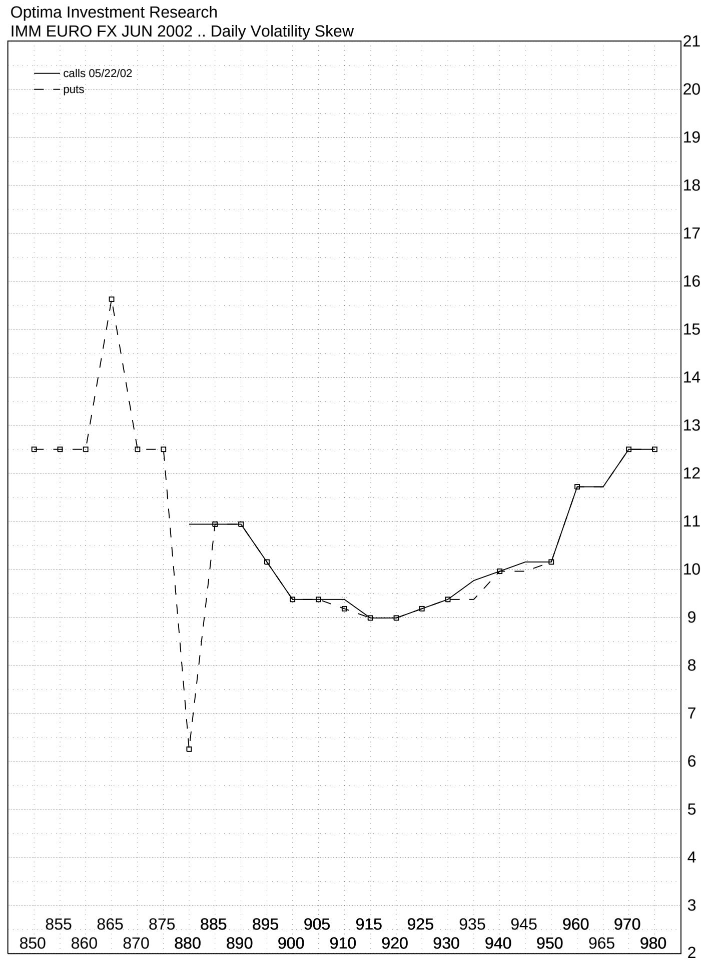


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SEPTEMBER 02 IMM EURO FX OPTIONS
05/22/02 days to exp: 107   int. rate:  1.72%   calc. imp vol of *:  9.86%
  strike    last imp vol   delta   gamma theta-7    vega    prem iv-skew
   ECU02 0.92150
1.00000C 0.00200s  10.74     .08  2.87170.0002650.0008360.002000    +.89
0.99000C 0.00290s  10.74     .11  3.58880.0003330.0010240.002900    +.89
0.98000C 0.00390s  10.55     .15  4.34980.0003920.0012010.003900    +.69
0.97000C 0.00510s  10.35     .19  5.18520.0004520.0013870.005100    +.50
0.96000C 0.00690s  10.16     .24  6.05850.0005110.0015700.006900    +.30
0.95000C 0.00920s  10.16     .30  6.81980.0005760.0017480.009200    +.30
0.94000C 0.01200s   9.96     .36  7.53420.0006140.0018800.012000    +.10
0.93000C 0.01560s   9.86*    .44  7.98140.0006380.0019620.015600    +.01
0.92000C 0.02020s   9.86*    .52  8.05280.0006420.0019770.018700    +.01
0.91000C 0.02550s   9.77     .60  7.86770.0006130.0019180.014000    -.09
0.90000C 0.03170s   9.77     .68  7.28470.0005630.0017870.010200    -.09
0.89000C 0.03880s   9.86     .75  6.40970.0005000.0016050.007300    +.01
0.88000C 0.04650s   9.96     .81  5.41610.0004240.0013890.005000    +.10
0.87000C 0.05470s   9.96     .86  4.39360.0003360.0011480.003200    +.10
0.86000C 0.06350s   9.96     .90  3.39670.0002500.0009080.002000    +.10
0.94000P 0.03030s   9.86     .63  7.59860.0006010.0018780.011800    +.01
0.93000P 0.02400s   9.77*    .56  8.05880.0006280.0019620.015500    -.09
0.92000P 0.01870s   9.86*    .47  8.05280.0006430.0019770.018700    +.01
0.91000P 0.01410s   9.77     .39  7.86770.0006160.0019180.014100    -.09
0.90000P 0.01040s   9.86     .32  7.22670.0005770.0017900.010400    +.01
0.89000P 0.00750s   9.86     .25  6.40970.0005100.0016050.007500    +.01
0.88000P 0.00530s   9.96     .19  5.41610.0004380.0013890.005300    +.10
0.87000P 0.00360s   9.96     .14  4.39360.0003530.0011480.003600    +.10
0.86000P 0.00240s  10.16     .10  3.43710.0002850.0009330.002400    +.30
0.85000P 0.00160s  10.16     .07  2.55740.0002100.0007130.001600    +.30
0.84000P 0.00100s  10.16     .04  1.81090.0001470.0005210.001000    +.30
0.83000P 0.00070s  10.55     .03  1.33780.0001160.0004070.000700    +.69
0.82000P 0.00050s  10.94     .02  0.98400.0000910.0003160.000500   +1.08
0.81000P 0.00030s  10.94     .01  0.63630.0000580.0002130.000300   +1.08
0.80000P 0.00020s  10.94     .01  0.39170.0000350.0001370.000200   +1.08
0.79000P 0.00010s   6.25     .00  0.00040.0000000.0000000.000100   -3.61
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DECEMBER 02 IMM EURO FX OPTIONS
05/22/02 days to exp: 198   int. rate:  1.72%   calc. imp vol of *: 10.06%
  strike    last imp vol   delta   gamma theta-7    vega    prem iv-skew
   ECZ02 0.91820s
1.02000C 0.00360s  11.04     .10  2.41560.0002350.0013080.003600    +.97
1.00000C 0.00550s  10.84     .15  3.17530.0002990.0016520.005500    +.78
0.99000C 0.00670s  10.64     .18  3.59220.0003270.0018200.006700    +.58
0.98000C 0.00820s  10.55     .21  4.02480.0003600.0020020.008200    +.48
0.97000C 0.01010s  10.45     .25  4.45470.0003920.0021770.010100    +.39
0.96000C 0.01220s  10.35     .29  4.86450.0004200.0023380.012200    +.29
0.95000C 0.01490s  10.25     .34  5.23350.0004430.0024760.014900    +.19
0.94000C 0.01790s  10.11     .39  5.56300.0004570.0025830.017900    +.04
0.93000C 0.02180s  10.16     .44  5.70350.0004730.0026530.021800    +.09
0.92000C 0.02600s  10.06*    .50  5.80990.0004710.0026720.026000    +.00
0.91000C 0.03110s  10.06*    .56  5.73810.0004630.0026410.022900    +.00
0.90000C 0.03660s  10.06     .61  5.54230.0004450.0025580.018400    +.00
0.89000C 0.04280s  10.06     .67  5.23150.0004170.0024260.014600    +.00
0.88000C 0.04950s  10.06     .72  4.82200.0003810.0022510.011300    +.00
0.87000C 0.05670s  10.06     .77  4.33660.0003380.0020430.008500    +.00
0.86000C 0.06450s  10.16     .81  3.79380.0002960.0018240.006300    +.09
0.85000C 0.07260s  10.16     .85  3.24920.0002470.0015830.004400    +.09
0.73000C 0.18820s  12.50     .99  0.18690.0000000.0000000.000000   +2.44
1.00000P 0.08630s  10.64     .85  3.16600.0002610.0016220.004500    +.58
0.95000P 0.04630s  10.21     .65  5.25350.0004300.0024740.014500    +.14
0.94000P 0.03940s  10.06     .60  5.58740.0004480.0025820.017600    +.00
0.93000P 0.03340s  10.11     .55  5.73030.0004670.0026520.021600    +.04
0.92000P 0.02780s  10.06*    .49  5.80990.0004710.0026720.026000    +.00
0.91000P 0.02300s  10.11*    .43  5.71070.0004680.0026410.023000    +.04
0.90000P 0.01870s  10.11     .38  5.51740.0004530.0025590.018700    +.04
0.89000P 0.01500s  10.16     .32  5.18990.0004310.0024290.015000    +.09
0.88000P 0.01180s  10.16     .27  4.79060.0003980.0022580.011800    +.09
0.87000P 0.00920s  10.16     .22  4.31670.0003590.0020520.009200    +.09
0.86000P 0.00710s  10.25     .18  3.78500.0003200.0018350.007100    +.19
0.85000P 0.00530s  10.25     .14  3.25080.0002750.0015970.005300    +.19
0.84000P 0.00390s  10.35     .11  2.72950.0002340.0013730.003900    +.29
0.83000P 0.00280s  10.35     .09  2.23090.0001910.0011420.002800    +.29
0.82000P 0.00200s  10.35     .06  1.77380.0001510.0009260.002000    +.29
0.81000P 0.00140s  10.55     .05  1.41360.0001250.0007650.001400    +.48
0.80000P 0.00100s  10.55     .03  1.07150.0000940.0005940.001000    +.48
0.79000P 0.00070s  10.55     .02  0.78850.0000690.0004490.000700    +.48
0.78000P 0.00050s  10.94     .02  0.63340.0000590.0003780.000500    +.87
0.77000P 0.00040s  10.94     .01  0.44920.0000420.0002760.000400    +.87
0.75000P 0.00030s  12.50     .01  0.37720.0000460.0002590.000300   +2.44
0.73000P 0.00010s  12.50     .01  0.18690.0000220.0001360.000100   +2.44
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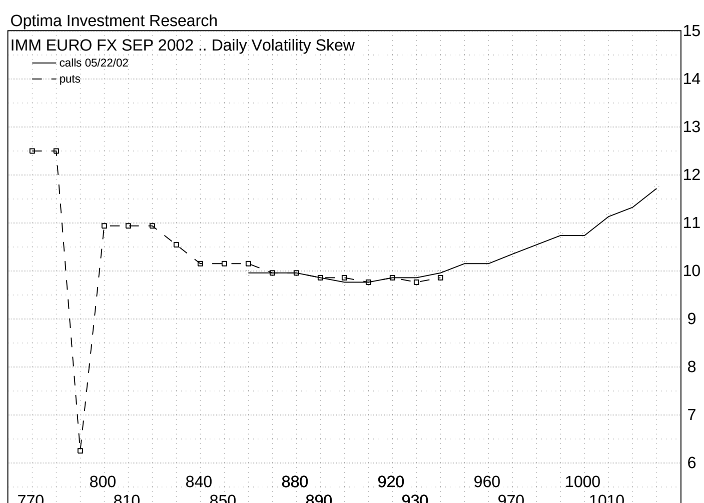
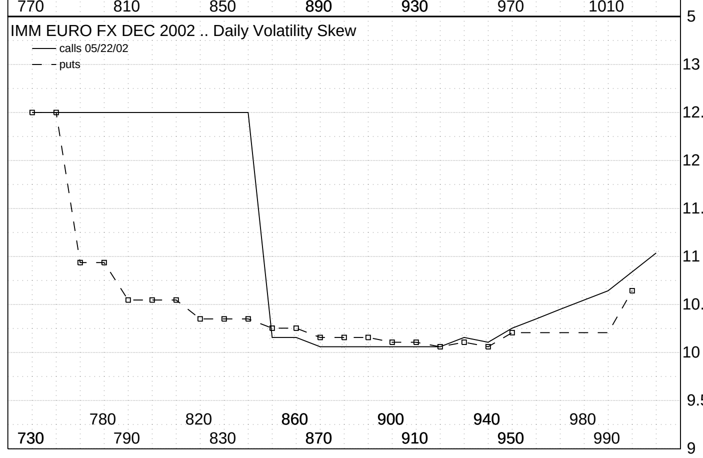




Optima Investment Research
IMM EURO FX JUN 2002 .. Sigma Boundary

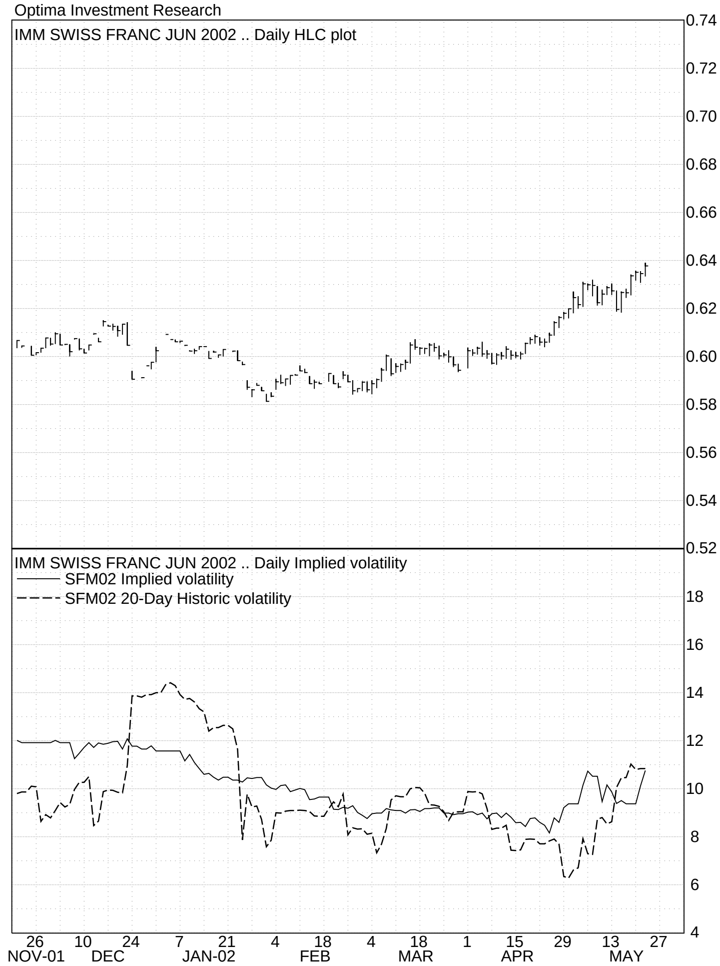
Optima Investment Research
IMM EURO FX SEP 2002 .. Sigma Boundary

COP9

OPTIMA - SWISS FRANC OPTIONS PACKAGE

Optima Investment Research
IMM SWISS FRANC JUN 2002 .. Daily Implied volatility

Optima Investment Research



Optima Investment Research
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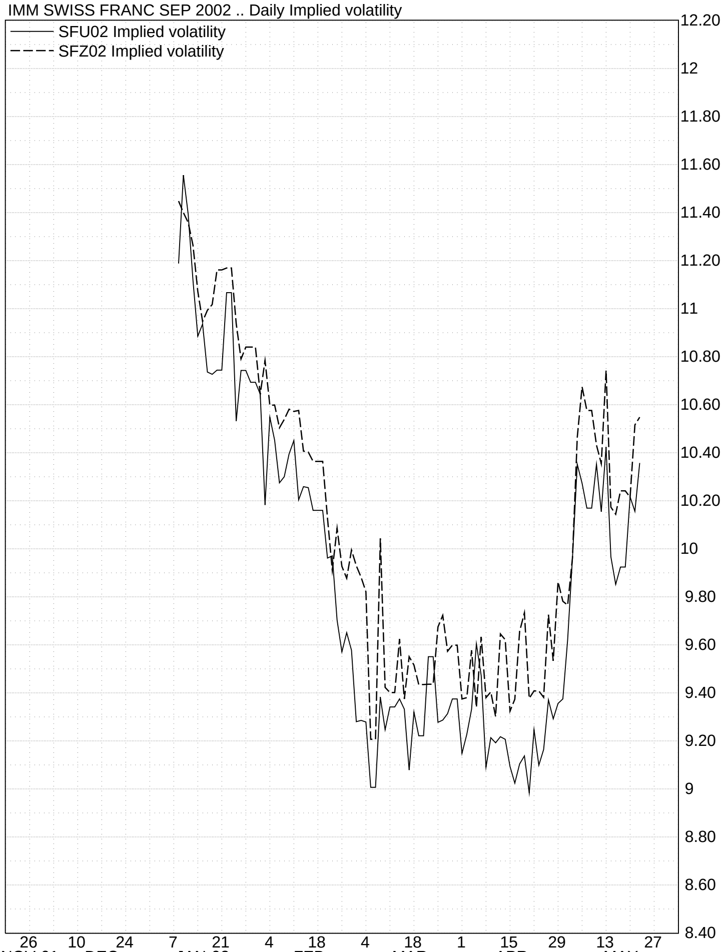
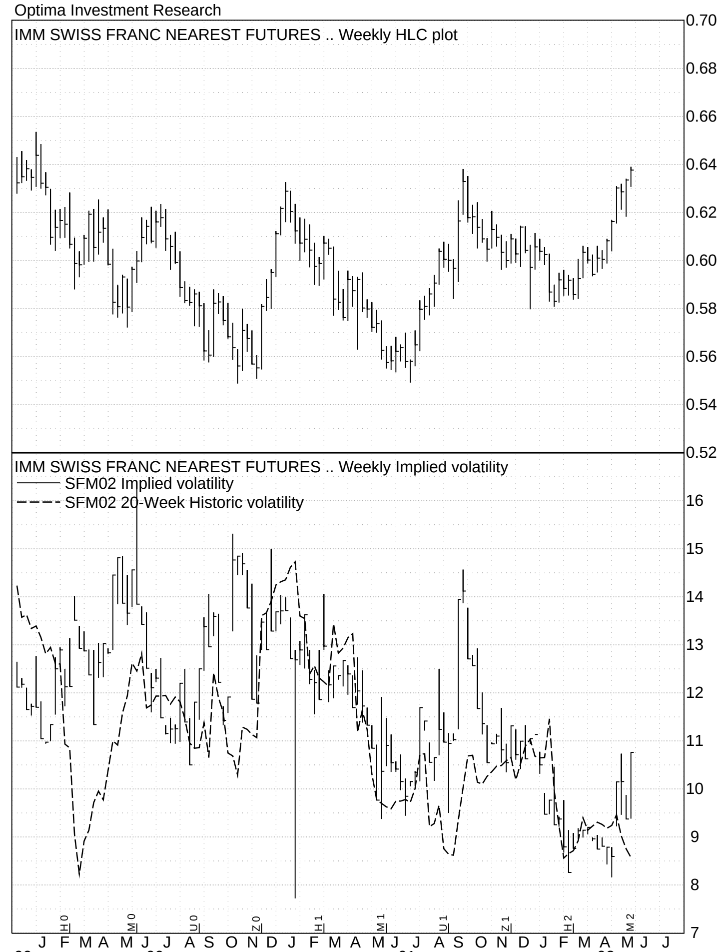


Optima Investment Research



JUNE 02 IMM SWISS FRANC OPTIONS

05/22/02 days to exp: 16 int. rate: 1.72% calc. imp vol of *: 10.76%

strike	last	imp vol	delta	gamma theta-7 vega prem	iv-skew
SFM02	0.6377				
0.6600C	0.00090s	13.28	.11	0.10650.0006580.0002660.000900	+2.52
0.6500C	0.00180s	11.33	.21	0.19240.0009900.0003990.001800	+.57
0.6450C	0.00300s	10.94	.31	0.24260.0012410.0004780.003000	+.18
0.6400C	0.00470s	10.94*	.44	0.27010.0014330.0005270.004700	+.18
0.6350C	0.00700s	10.55*	.58	0.27730.0013640.0005220.004300	-.21
0.6300C	0.01030s	10.55	.71	0.24180.0011380.0004610.002600	-.21
0.6250C	0.01430s	11.33	.80	0.18210.0009220.0003790.001600	+.57
0.6200C	0.01860s	11.72	.88	0.13010.0006400.0002860.000900	+.96
0.6150C	0.02320s	11.72	.93	0.08400.0003600.0001910.000500	+.96
0.6100C	0.02800s	12.50	.96	0.05540.0002410.0001380.000300	+1.74
0.6050C	0.03290s	12.50	.98	0.03080.0001090.0000800.000200	+1.74
0.6000C	0.03780s	12.50	.99	0.01540.0000260.0000420.000100	+1.74
0.5900C	0.04770s	.00	1.00	0.00000.0000000.0000000.000000	
0.5800C	0.05770s	.00	1.00	0.00000.0000000.0000000.000000	
0.5600C	0.07770s	.00	1.00	0.00000.0000000.0000000.000000	
0.6400P	0.00700s	10.94*	.56	0.27010.0014320.0005270.004700	+.18
0.6350P	0.00440s	10.55*	.42	0.27730.0013650.0005220.004400	-.21
0.6300P	0.00260s	10.55	.29	0.24180.0011400.0004610.002600	-.21
0.6250P	0.00160s	10.94	.19	0.18370.0008640.0003700.001600	+.18
0.6200P	0.00090s	11.72	.12	0.13010.0006460.0002860.000900	+.96
0.6150P	0.00050s	11.72	.07	0.08400.0003680.0001910.000500	+.96
0.6100P	0.00030s	12.50	.04	0.05540.0002510.0001380.000300	+1.74
0.6050P	0.00020s	12.50	.02	0.03080.0001200.0000800.000200	+1.74
0.6000P	0.00010s	12.50	.01	0.01540.0000510.0000420.000100	+1.74
0.5950P	0.00020c	15.63	.02	0.01960.0001130.0000630.000200	+4.87
0.5900P	0.00010c	12.50	.00	0.00280.0000070.0000090.000100	+1.74
0.5850P	0.00010c	12.50	.00	0.00100.0000020.0000030.000100	+1.74

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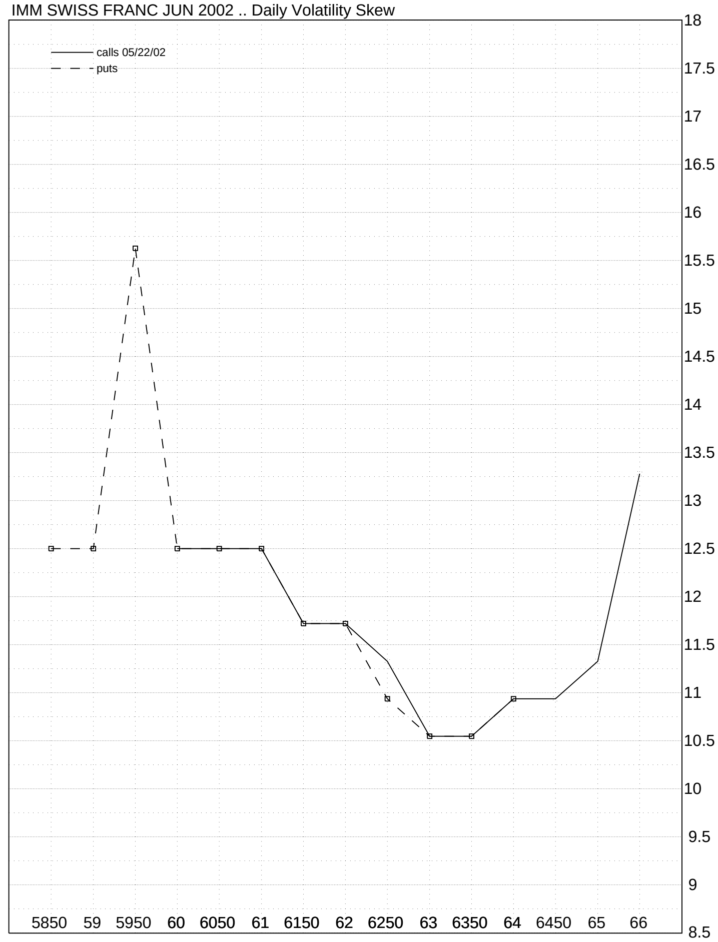
IMM SWISS FRANC JUN 2002 .. Daily Volatility Skew



SEPTEMBER 02 IMM SWISS FRANC OPTIONS

05/22/02 days to exp: 107 int. rate: 1.72% calc. imp vol of *: 10.36%

strike	last	imp vol	delta	gamma theta-7 vega prem	iv-skew
SFU02	0.6388				
0.6700C	0.00480s	11.13	.22	0.07720.0003750.0010550.004800	+.78
0.6600C	0.00680s	10.74	.30	0.09270.0004210.0012080.006800	+.38
0.6500C	0.00980s	10.55	.39	0.10480.0004600.0013270.009800	+.19
0.6400C	0.01360s	10.35*	.50	0.11090.0004680.0013730.013600	-.01
0.6300C	0.01900s	10.35*	.61	0.10670.0004480.0013250.010200	-.01
0.6200C	0.02540s	10.45	.71	0.09410.0003980.0011900.006600	+.09
0.6100C	0.03280s	10.55	.79	0.07670.0003250.0009950.004000	+.19
0.6000C	0.04110s	10.55	.87	0.05770.0002370.0007680.002300	+.19
0.5900C	0.05010s	10.94	.91	0.04100.0001730.0005780.001300	+.58
0.6600P	0.02780s	10.74	.70	0.09270.0004140.0012080.006600	+.38
0.6500P	0.02090s	10.55	.61	0.10480.0004560.0013270.009700	+.19
0.6400P	0.01480s	10.35*	.50	0.11090.0004680.0013730.013600	-.01
0.6300P	0.01030s	10.45*	.39	0.10580.0004560.0013260.010300	+.09
0.6200P	0.00680s	10.55	.29	0.09350.0004100.0011930.006800	+.19
0.6100P	0.00420s	10.55	.20	0.07670.0003340.0009950.004200	+.19
0.6000P	0.00260s	10.74	.13	0.05790.0002600.0007820.002600	+.38
0.5900P	0.00160s	10.94	.08	0.04100.0001890.0005780.001600	+.58
0.5800P	0.00090s	11.33	.05	0.02790.0001370.0004190.000900	+.97
0.5700P	0.00050s	11.72	.03	0.01840.0000950.0002940.000500	+1.36
0.5600P	0.00030s	12.50	.02	0.01300.0000750.0002230.000300	+2.14
0.5500P	0.00020s	12.50	.01	0.00740.0000420.0001330.000200	+2.14
0.5400P	0.00010s	12.50	.01	0.00390.0000220.0000730.000100	+2.14

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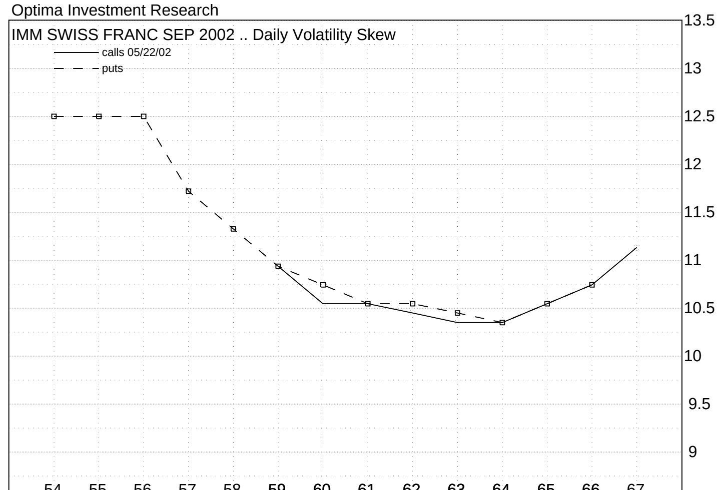
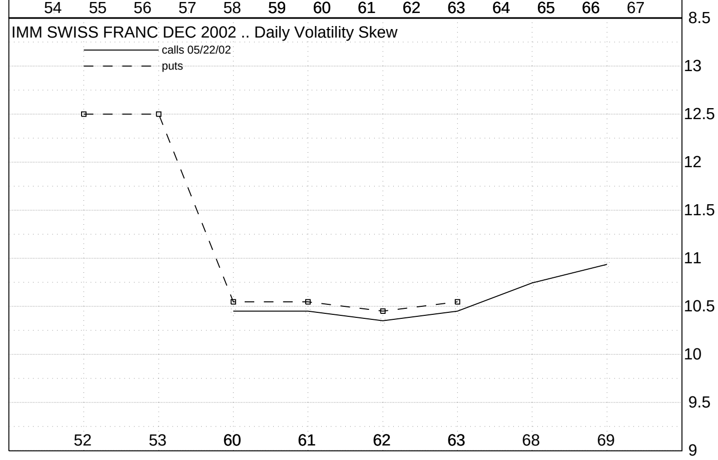


DECEMBER 02 IMM SWISS FRANC OPTIONS

05/22/02 days to exp: 198 int. rate: 1.72% calc. imp vol of *: 10.55%

strike	last	imp vol	delta	gamma theta-7 vega prem	iv-skew
SFZ02	0.6401s				
0.6900C	0.00500s	10.94	.18	0.05150.0002410.0012990.005000	+.39
0.6800C	0.00660s	10.74*	.23	0.06000.0002710.0014690.006600	+.19
0.6300C	0.02480s	10.45*	.59	0.07790.0003290.0018110.014700	-.10
0.6200C	0.03060s	10.35	.67	0.07300.0003000.0016920.010500	-.20
0.6100C	0.03750s	10.45	.74	0.06430.0002650.0015200.007400	-.10
0.6000C	0.04500s	10.45	.80	0.05450.0002200.0013060.004900	-.10
0.6300P	0.01480s	10.55*	.40	0.07720.0003350.0018120.014800	+.00
0.6200P	0.01080s	10.45	.32	0.07240.0003090.0016940.010800	-.10
0.6100P	0.00780s	10.55	.25	0.06400.0002790.0015250.007800	+.00
0.6000P	0.00540s	10.55	.19	0.05440.0002370.0013130.005400	+.00
0.5300P	0.00040s	12.50	.02	0.00750.0000440.0002430.000400	+1.95
0.5200P	0.00030s	12.50	.01	0.00470.0000280.0001600.000300	+1.95



Optima Investment Research
STERLING/DOLLAR JUN 2002 .. Daily Implied volatility

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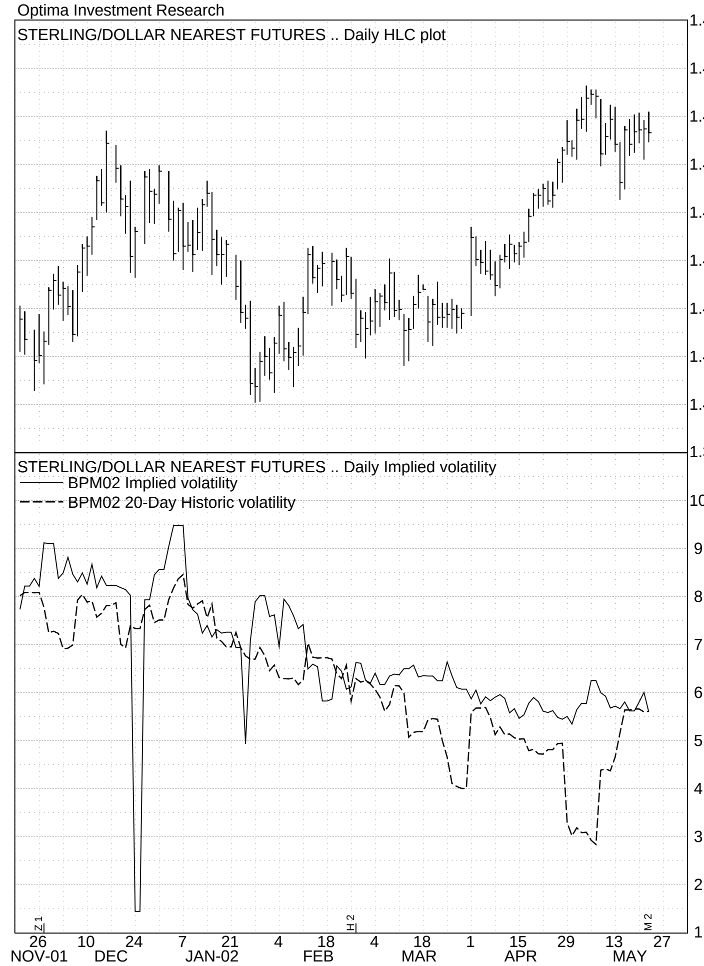
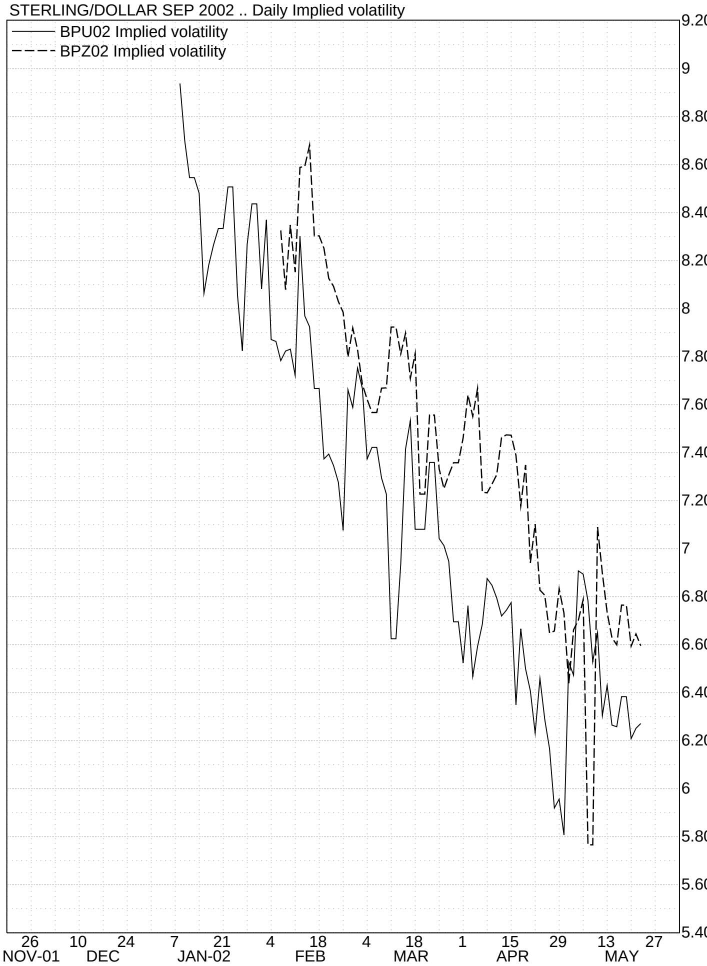


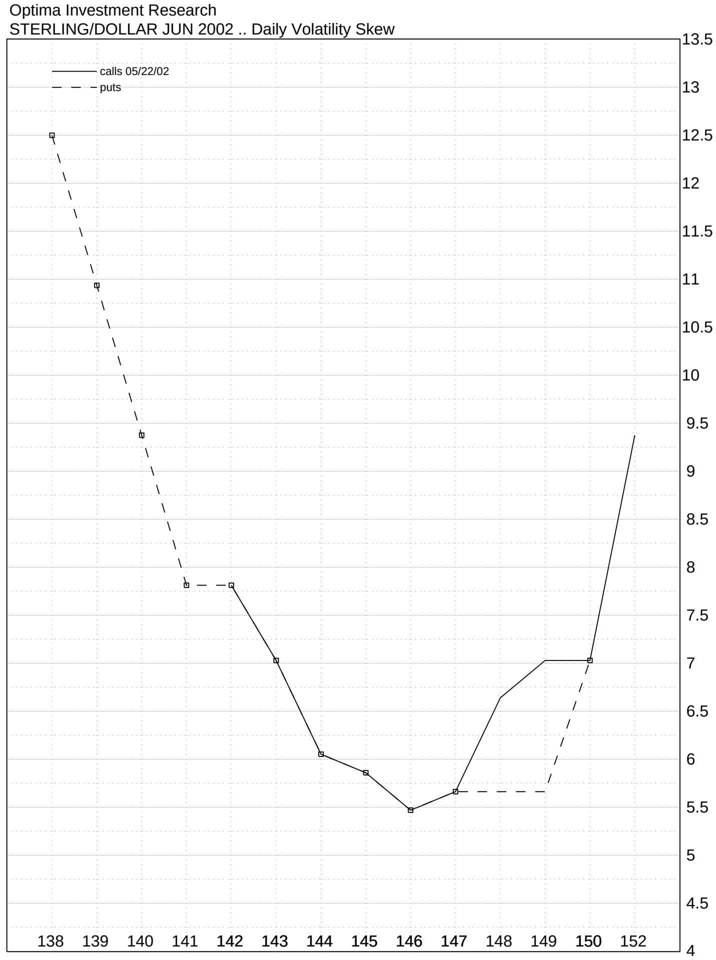
Optima Investment Research
STERLING/DOLLAR SEP 2002 .. Daily Implied volatility



Optima Investment Research

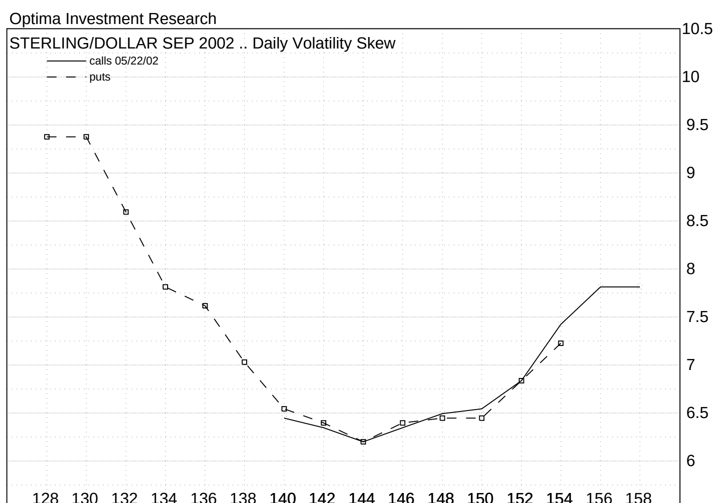
JUNE 02 STERLING/DOLLAR OPTIONS
05/22/02 days to exp: 16 int. rate: 1.72% calc. imp vol of *: 5.60%

strike	last	imp vol	delta	gamma	theta-7	vega	prem	iv-skew
BPM02	1.4566							
1.5200C	0.0002c	9.38	.02	0.0135	0.00014	0.00015	0.00020	+3.77
1.5000C	0.0002s	7.03	.02	0.0258	0.00017	0.00022	0.00020	+1.43
1.4900C	0.0006s	7.03	.06	0.0574	0.00046	0.00044	0.00060	+1.43
1.4800C	0.0012s	6.64	.13	0.1029	0.00086	0.00069	0.00120	+1.04
1.4700C	0.0022s	5.66	.22	0.1721	0.00116	0.00095	0.00220	+.06
1.4600C	0.0050s	5.47*	.42	0.2344	0.00162	0.00120	0.00500	-.13
1.4500C	0.0108s	5.86*	.65	0.2078	0.00162	0.00114	0.00420	+.26
1.4400C	0.0184s	6.05	.82	0.1426	0.00106	0.00085	0.00180	+.45
1.4300C	0.0276s	7.03	.90	0.0841	0.00075	0.00061	0.00100	+1.43
1.4200C	0.0372s	7.81	.94	0.0492	0.00047	0.00041	0.00060	+2.21
1.4000C	0.0566s	.00	1.00	0.0000	0.00000	0.00000	-0.00000	
1.3800C	0.0766s	.00	1.00	0.0000	0.00000	0.00000	-0.00000	
1.3600C	0.0966s	.00	1.00	0.0000	0.00000	0.00000	-0.00000	
1.5400P	0.0834s	6.25	1.00	0.0000	0.00000	0.00000	0.00000	+.65
1.5200P	0.0634s	6.25	1.00	0.0011	0.00000	0.00000	0.00000	+.65
1.5000P	0.0436s	7.03	.98	0.0258	0.00015	0.00022	0.00020	+1.43
1.4700P	0.0156s	5.66	.78	0.1721	0.00116	0.00095	0.00220	+.06
1.4600P	0.0084s	5.47*	.58	0.2344	0.00162	0.00120	0.00500	-.13
1.4500P	0.0042s	5.86*	.35	0.2078	0.00162	0.00114	0.00420	+.26
1.4400P	0.0018s	6.05	.18	0.1426	0.00106	0.00085	0.00180	+.45
1.4300P	0.0010s	7.03	.10	0.0841	0.00076	0.00061	0.00100	+1.43
1.4200P	0.0006s	7.81	.06	0.0492	0.00048	0.00041	0.00060	+2.21
1.4100P	0.0002s	7.81	.02	0.0228	0.00018	0.00021	0.00020	+2.21
1.4000P	0.0002c	9.38	.02	0.0178	0.00020	0.00019	0.00020	+3.77
1.3900P	0.0002c	10.94	.02	0.0145	0.00022	0.00018	0.00020	+5.34
1.3800P	0.0002c	12.50	.02	0.0121	0.00024	0.00017	0.00020	+6.90



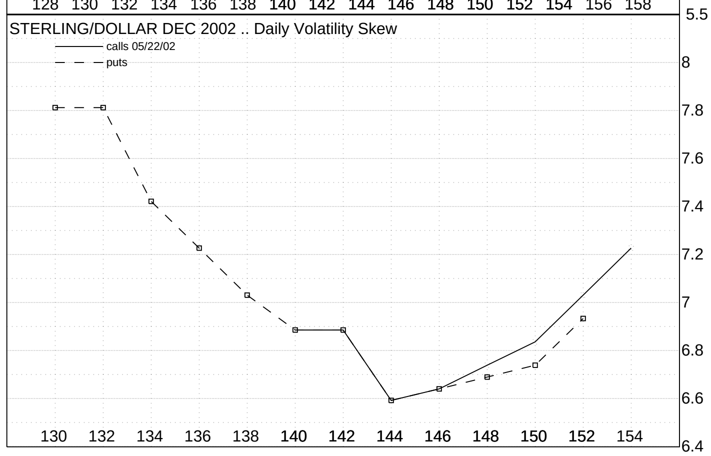
SEPTEMBER 02 STERLING/DOLLAR OPTIONS
05/22/02 days to exp: 107 int. rate: 1.72% calc. imp vol of *: 6.27%

strike	last	imp vol	delta	gamma	theta-7	vega	prem	iv-skew
BPU02	1.4482							
1.5800C	0.0004s	7.81	.02	0.0081	0.00009	0.00050	0.00040	+1.54
1.5600C	0.0010s	7.81	.04	0.0143	0.00017	0.00082	0.00100	+1.54
1.5400C	0.0016s	7.42	.07	0.0218	0.00024	0.00115	0.00160	+1.15
1.5200C	0.0024s	6.84	.10	0.0323	0.00030	0.00152	0.00240	+.56
1.5000C	0.0044s	6.54	.16	0.0481	0.00041	0.00207	0.00440	+.27
1.4800C	0.0084s	6.49	.27	0.0651	0.00056	0.00267	0.00840	+.22
1.4600C	0.0146s	6.35*	.41	0.0779	0.00064	0.00305	0.01460	+.08
1.4400C	0.0236s	6.20*	.57	0.0802	0.00062	0.00306	0.01540	-.07
1.4200C	0.0368s	6.35	.72	0.0670	0.00054	0.00268	0.00860	+.08
1.4000C	0.0524s	6.45	.83	0.0482	0.00039	0.00204	0.00420	+.17
1.5400P	0.0928s	7.23	.93	0.0210	0.00018	0.00109	0.00100	+.96
1.5200P	0.0738s	6.84	.90	0.0323	0.00028	0.00152	0.00200	+.56
1.5000P	0.0558s	6.45	.83	0.0481	0.00038	0.00204	0.00400	+.17
1.4800P	0.0400s	6.45	.72	0.0654	0.00054	0.00266	0.00820	+.17
1.4600P	0.0264s	6.40*	.58	0.0773	0.00064	0.00305	0.01460	+.13
1.4400P	0.0154s	6.20*	.42	0.0802	0.00063	0.00306	0.01540	-.07
1.4200P	0.0088s	6.40	.28	0.0667	0.00055	0.00268	0.00880	+.13
1.4000P	0.0046s	6.54	.16	0.0482	0.00041	0.00206	0.00460	+.27
1.3800P	0.0026s	7.03	.10	0.0315	0.00031	0.00151	0.00260	+.76
1.3600P	0.0016s	7.62	.06	0.0202	0.00023	0.00108	0.00160	+1.35
1.3400P	0.0008s	7.81	.03	0.0116	0.00014	0.00068	0.00080	+1.54
1.3200P	0.0006s	8.59	.02	0.0077	0.00011	0.00051	0.00060	+2.32
1.3000P	0.0004s	9.38	.02	0.0053	0.00009	0.00038	0.00040	+3.10
1.2800P	0.0002s	9.38	.01	0.0026	0.00004	0.00020	0.00020	+3.10

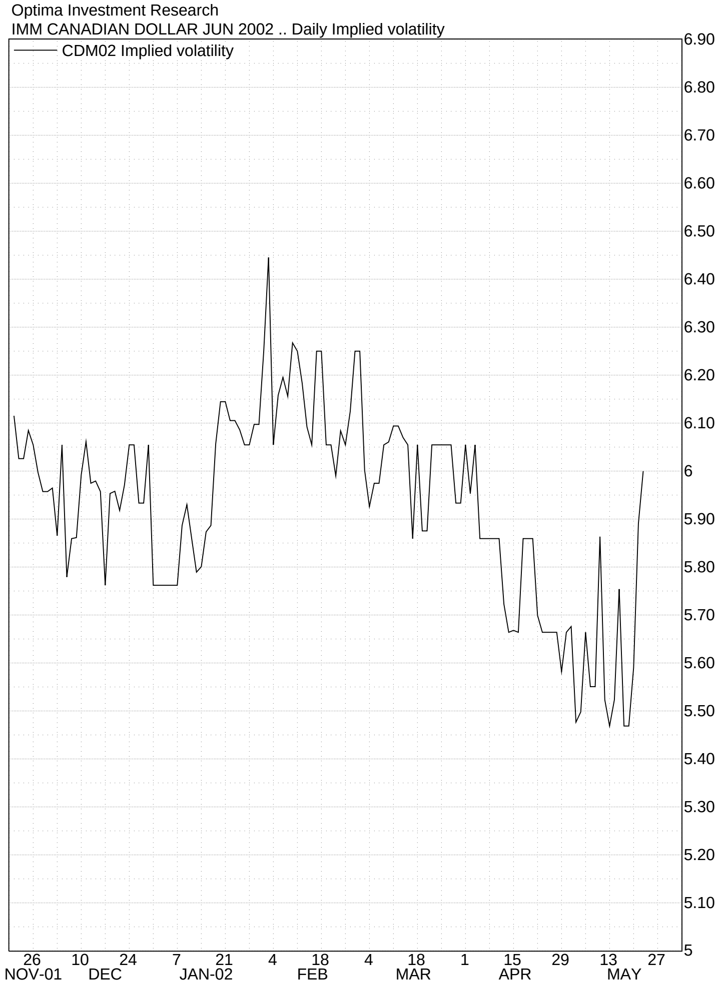


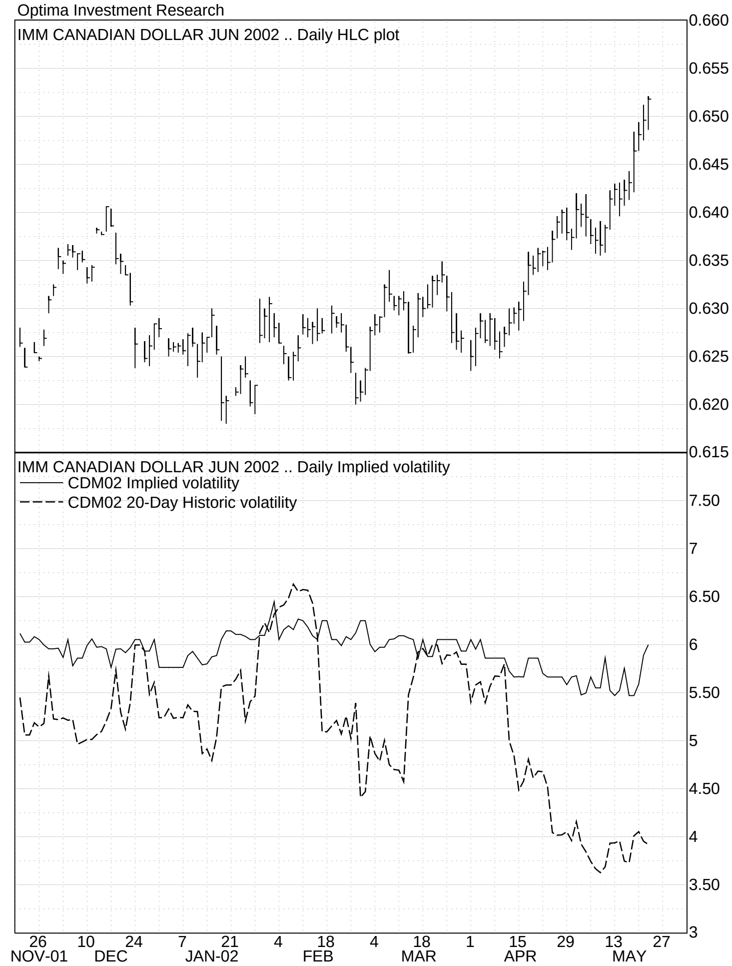
DECEMBER 02 STERLING/DOLLAR OPTIONS
05/22/02 days to exp: 198 int. rate: 1.72% calc. imp vol of *: 6.59%

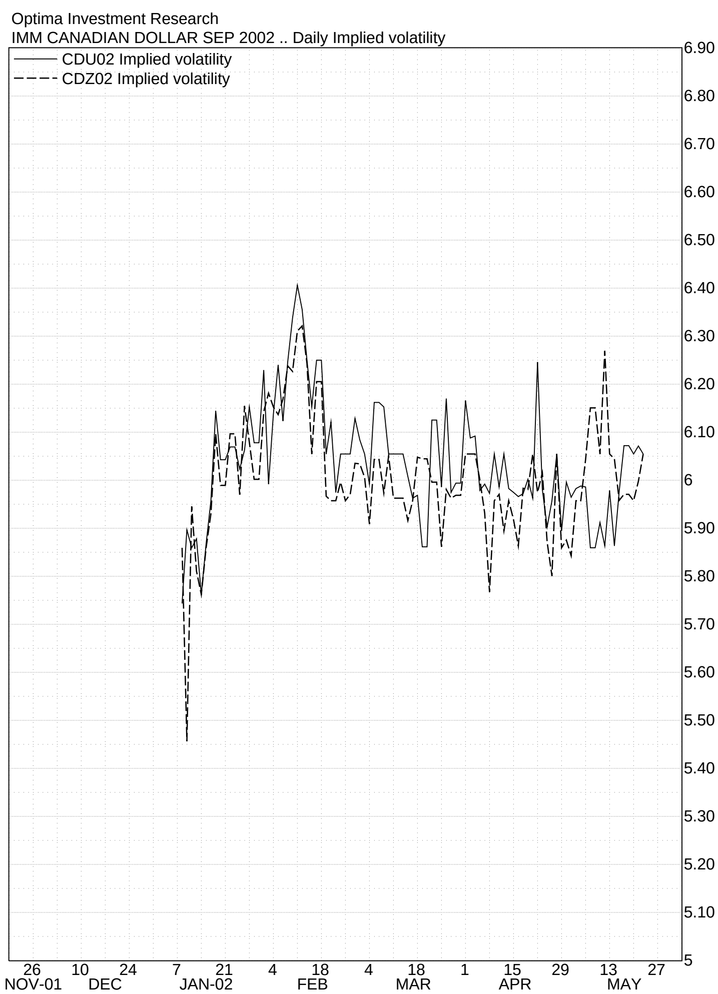
strike	last	imp vol	delta	gamma	theta-7	vega	prem	iv-skew
BPZ02	1.4398s							
1.5400C	0.0038s	7.23	.11	0.0240	0.00025	0.00215	0.00380	+.63
1.5200C	0.0058s	7.03	.15	0.0315	0.00031	0.00267	0.00580	+.44
1.5000C	0.0086s	6.84	.21	0.0400	0.00037	0.00320	0.00860	+.24
1.4800C	0.0130s	6.74	.30	0.0481	0.00043	0.00372	0.01300	+.14
1.4600C	0.0192s	6.64	.39	0.0543	0.00047	0.00407	0.01920	+.05
1.4400C	0.0276s	6.59*	.50	0.0565	0.00048	0.00419	0.02760	+.00
1.4200C	0.0396s	6.88*	.61	0.0518	0.00048	0.00403	0.01980	+.29
1.4000C	0.0524s	6.88	.71	0.0458	0.00042	0.00362	0.01260	+.29
1.5200P	0.0850s	6.93	.84	0.0314	0.00027	0.00263	0.00480	+.34
1.5000P	0.0680s	6.74	.78	0.0401	0.00034	0.00318	0.00780	+.14
1.4800P	0.0526s	6.69	.70	0.0483	0.00042	0.00371	0.01240	+.09
1.4600P	0.0392s	6.64	.60	0.0543	0.00047	0.00407	0.01900	+.05
1.4400P	0.0278s	6.59*	.49	0.0565	0.00048	0.00419	0.02760	+.00
1.4200P	0.0200s	6.88*	.38	0.0518	0.00049	0.00403	0.02000	+.29
1.4000P	0.0130s	6.88	.28	0.0458	0.00043	0.00362	0.01300	+.29
1.3800P	0.0084s	7.03	.20	0.0371	0.00036	0.00306	0.00840	+.44
1.3600P	0.0054s	7.23	.13	0.0282	0.00029	0.00246	0.00540	+.63
1.3400P	0.0034s	7.42	.09	0.0204	0.00022	0.00189	0.00340	+.83
1.3200P	0.0022s	7.81	.06	0.0146	0.00017	0.00146	0.00220	+1.22
1.3000P	0.0012s	7.81	.04	0.0094	0.00011	0.00099	0.00120	+1.22

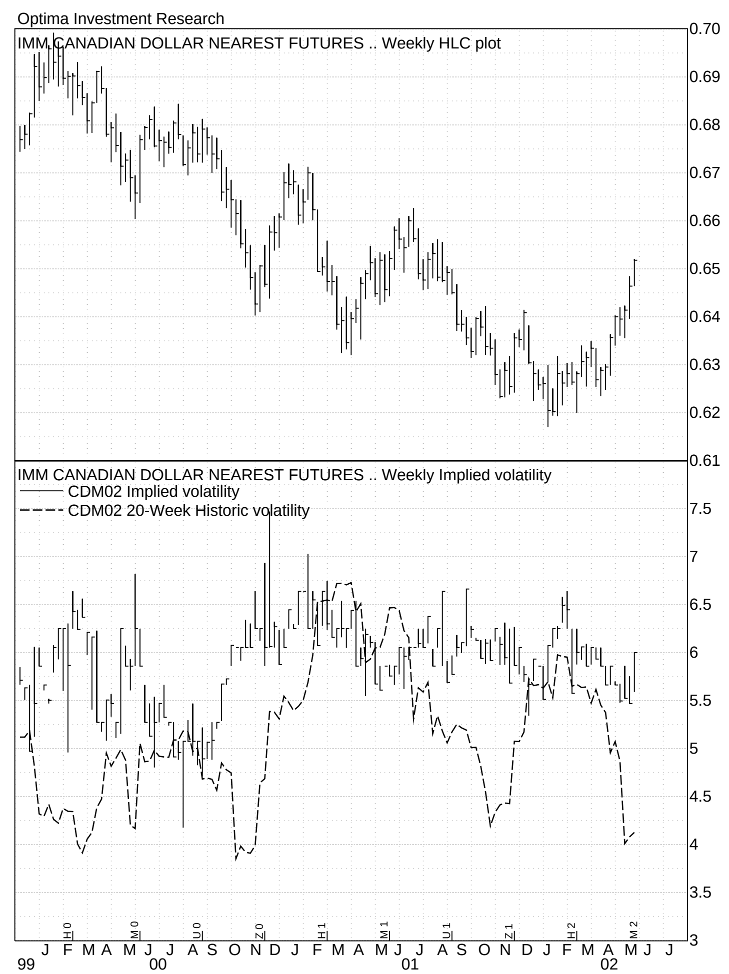


OPTIMA - CANADIAN DOLLAR OPTIONS PACKAGE









JUNE 02 IMM CANADIAN DOLLAR OPTIONS
05/22/02 days to exp: 16 int. rate: 1.72% calc. imp vol of *: 6.00%

strike	last	imp vol	delta	gamma theta-7 vega prem	iv-skew
CDM02	0.6518				
0.6700C	0.00020s	7.81	.05	0.09190.0001710.0001580.000200	+1.81
0.6650C	0.00040s	7.03	.09	0.16600.0002860.0002440.000400	+1.03
0.6600C	0.00090s	6.64	.19	0.29540.0005320.0003850.000900	+.64
0.6550C	0.00200s	6.25*	.36	0.43680.0007760.0005130.002000	+.25
0.6500C	0.00420s	5.86*	.59	0.48540.0007680.0005310.002400	-.14
0.6450C	0.00780s	6.25	.79	0.33720.0005500.0004100.001000	+.25
0.6400C	0.01230s	7.03	.89	0.19060.0003400.0002750.000500	+1.03
0.6350C	0.01710s	7.81	.94	0.10320.0001940.0001740.000300	+1.81
0.6300C	0.02190s	9.38	.96	0.06820.0001710.0001380.000100	+3.38
0.6250C	0.02680s	6.25	1.00	0.00270.0000000.0000000.000000	+.25
0.6200C	0.03180s	6.25	1.00	0.00030.0000000.0000000.000000	+.25
0.6750P	0.02320s	.00	1.00	0.00000.0000000.0000000.000000	
0.6700P	0.01840s	7.81	.95	0.09190.0001650.0001580.000200	+1.81
0.6650P	0.01360s	7.03	.91	0.16600.0002820.0002440.000400	+1.03
0.6600P	0.00910s	6.64	.81	0.29540.0005290.0003850.000900	+.64
0.6500P	0.00240s	5.86*	.41	0.48540.0007690.0005310.002400	-.14
0.6450P	0.00100s	6.25	.21	0.33720.0005520.0004100.001000	+.25
0.6400P	0.00050s	7.03	.11	0.19060.0003440.0002750.000500	+1.03
0.6350P	0.00030s	7.81	.05	0.10320.0001990.0001740.000300	+1.81
0.6300P	0.00010s	6.25	.00	0.01570.0000120.0000300.000100	+.25
0.6250P	0.00020c	10.94	.03	0.04870.0001660.0001150.000200	+4.94
0.6200P	0.00010	12.50	.03	0.03670.0001570.0000980.000100	+6.50
0.6150P	0.00010	12.50	.01	0.01930.0000710.0000540.000100	+6.50
0.6100P	0.00010c	12.50	.01	0.00920.0000290.0000270.000100	+6.50
0.6050P	0.00010c	12.50	.00	0.00390.0000100.0000120.000100	+6.50

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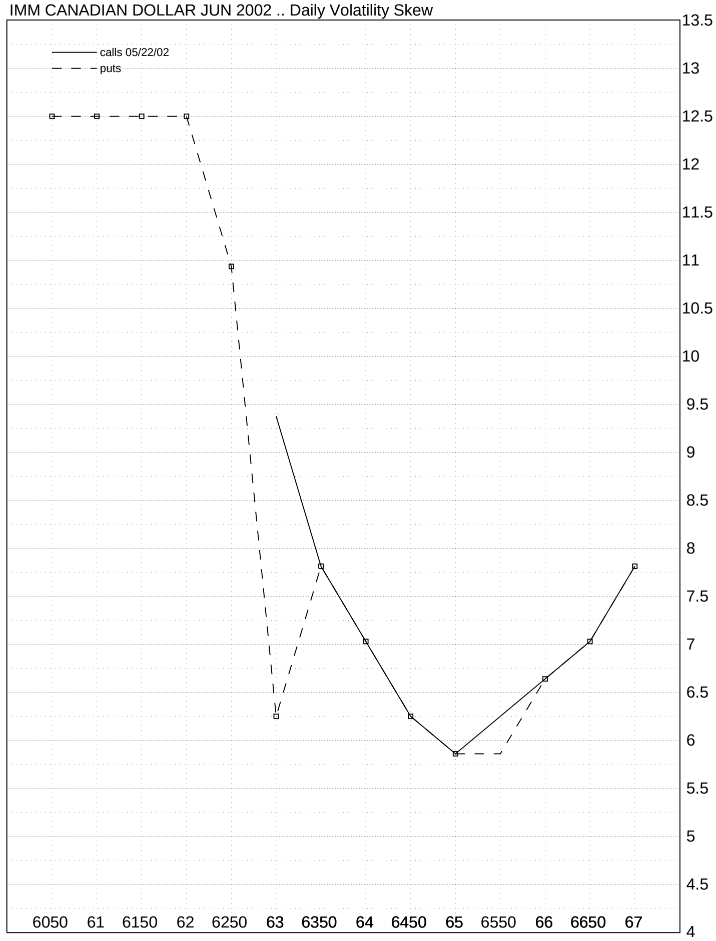
IMM CANADIAN DOLLAR JUN 2002 .. Daily Volatility Skew



SEPTEMBER 02 IMM CANADIAN DOLLAR OPTIONS
05/22/02 days to exp: 107 int. rate: 1.72% calc. imp vol of *: 6.05%

strike	last	imp vol	delta	gamma theta-7 vega prem	iv-skew
CDU02	0.6505				
0.6800C	0.00140s	6.84	.12	0.08220.0001540.0007650.001400	+.78
0.6700C	0.00260s	6.45	.20	0.12400.0002090.0010410.002600	+.39
0.6600C	0.00440s	5.86	.33	0.17450.0002450.0012880.004400	-.20
0.6550C	0.00640s	6.05*	.42	0.18270.0002740.0013760.006400	+.00
0.6500C	0.00870s	6.05*	.51	0.18600.0002790.0013970.008200	+.00
0.6450C	0.01160s	6.15	.60	0.17660.0002720.0013530.006100	+.10
0.6400C	0.01480s	6.25	.69	0.15930.0002510.0012550.004300	+.20
0.6350C	0.01850s	6.25	.76	0.13820.0002150.0011100.003000	+.20
0.6300C	0.02250s	6.45	.82	0.11290.0001830.0009560.002000	+.39
0.6250C	0.02690s	6.64	.87	0.08960.0001510.0008010.001400	+.59
0.6200C	0.03150s	7.03	.90	0.07060.0001300.0006810.001000	+.98
0.6550P	0.01090s	6.05*	.57	0.18270.0002730.0013760.006400	+.00
0.6500P	0.00820s	6.05*	.48	0.18600.0002790.0013970.008200	+.00
0.6450P	0.00610s	6.15	.39	0.17660.0002740.0013530.006100	+.10
0.6400P	0.00440s	6.25	.31	0.15930.0002540.0012550.004400	+.20
0.6350P	0.00310s	6.25	.23	0.13820.0002200.0011100.003100	+.20
0.6300P	0.00220s	6.45	.17	0.11290.0001900.0009560.002200	+.39
0.6250P	0.00160s	6.64	.13	0.08960.0001590.0008010.001600	+.59
0.6200P	0.00120s	7.03	.10	0.07060.0001400.0006810.001200	+.98
0.6150P	0.00090s	7.42	.08	0.05570.0001220.0005770.000900	+1.37
0.6100P	0.00070s	7.81	.06	0.04400.0001060.0004870.000700	+1.76
0.5950P	0.00020s	7.81	.02	0.01490.0000350.0001880.000200	+1.76
0.5900P	0.00010s	6.25	.00	0.00270.0000040.0000390.000100	+.20
0.5850P	0.00010c	6.25	.00	0.00130.0000020.0000200.000100	+.20
0.5800P	0.00010c	6.25	.00	0.00050.0000010.0000100.000100	+.20

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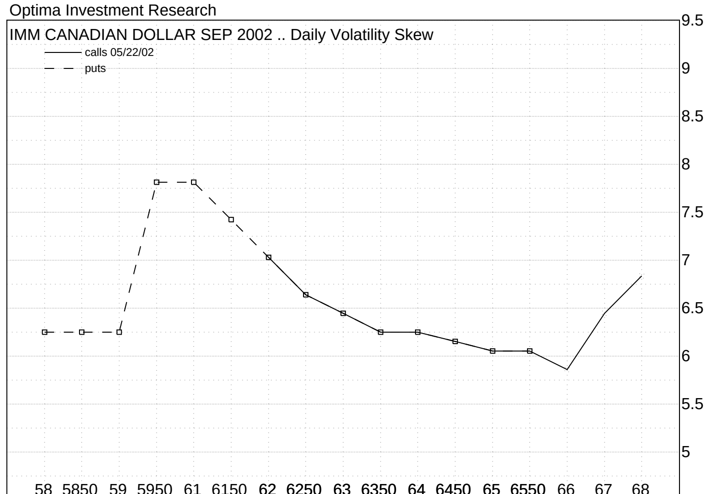

DECEMBER 02 IMM CANADIAN DOLLAR OPTIONS
05/22/02 days to exp: 198 int. rate: 1.72% calc. imp vol of *: 6.05%

strike	last	imp vol	delta	gamma theta-7 vega prem	iv-skew
CDZ02	0.6493s				
0.6900C	0.00170s	6.64	.11	0.05920.0001050.0009970.001700	+.59
0.6800C	0.00270s	6.45	.17	0.08170.0001360.0012840.002700	+.39
0.6700C	0.00450s	6.25	.25	0.10640.0001670.0015710.004500	+.20
0.6600C	0.00720s	6.15	.36	0.12690.0001930.0018010.007200	+.10
0.6500C	0.01110s	6.05*	.49	0.13650.0002010.0018900.011100	+.00
0.6450C	0.01370s	6.05*	.56	0.13450.0001970.0018650.009400	+.00
0.6400C	0.01660s	6.05	.63	0.12860.0001870.0017940.007300	+.00
0.6350C	0.01990s	6.15	.69	0.11770.0001750.0016840.005600	+.10
0.6300C	0.02350s	6.15	.75	0.10600.0001550.0015380.004200	+.10
0.6250C	0.02750s	6.35	.79	0.09160.0001410.0013910.003200	+.29
0.6200C	0.03160s	6.45	.83	0.07810.0001210.0012270.002300	+.39
0.6550P	0.01480s	6.15	.56	0.13240.0002000.0018680.009100	+.10
0.6450P	0.00950s	6.05*	.43	0.13450.0001980.0018650.009500	+.00
0.6350P	0.00580s	6.15	.30	0.11770.0001800.0016840.005800	+.10
0.6300P	0.00450s	6.25	.25	0.10500.0001650.0015470.004500	+.20
0.6250P	0.00350s	6.45	.20	0.09110.0001520.0014020.003500	+.39
0.6200P	0.00270s	6.45	.16	0.07810.0001300.0012270.002700	+.39
0.6000P	0.00080s	7.03	.06	0.03530.0000690.0006580.000800	+.98
0.5950P	0.00060s	7.03	.04	0.02710.0000530.0005230.000600	+.98
0.5900P	0.00040s	7.03	.03	0.02030.0000390.0004060.000400	+.98