

FX Technical Advantage

Euro's golden cross favors mid-January bounce back

Short term: Euro's golden cross favors Jan bounce back

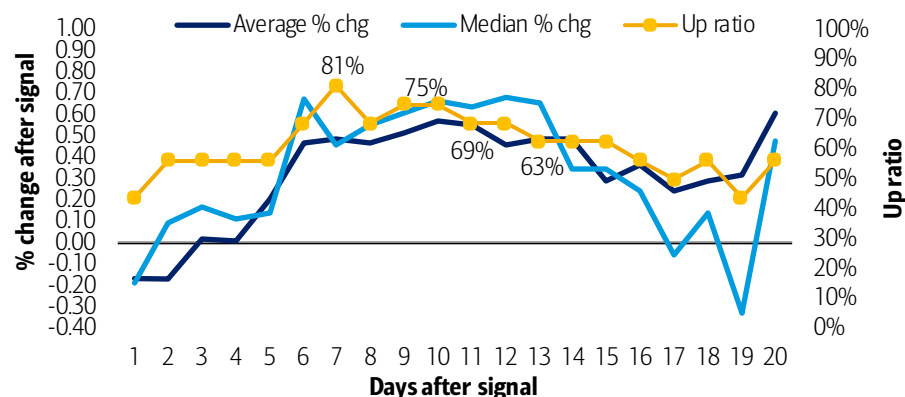
The last year has been a choppy range for the euro and the chart remains so. However the popular golden cross signal, or when the 50-day simple moving average (SMA) crosses above the 200-day SMA, occurred on January 3 at 1.0920. Since the euro began trading in 1999 there have been 16 such signals. History shows that 13 of the 16 times the euro was higher seven trading days later 81% of the time (Jan 12, 2024). Average and median returns were 0.49% and 0.46%. From 6 to 12 trading days later, euro was up 69-81% of the time (See Chart 1 and Exhibit 1). This signal implies euro finds support at/above the 200d SMA of 1.0846, longs enter between this and 1.09 for bounce back to the top of range in the 1.10-1.11 area and stopping below 200d SMA (Chart 2).

Medium term risks: Head and shoulders top?

In our [2024 year ahead view](#) we outlined three concerns regarding consensus lower USD views for 2024 that limited our conviction. To summarize, they were: (1) Gold breaking higher (it hasn't); (2) Medium-term USD/EM uptrends were supported (most still are); and (3) No additional bullish snapback patterns/signals like last [February](#) and [April 2023](#) (see reports on each). (On Dec 28 2023, the BBDXY formed a hammer candle and is snapping back.) Taken together this means the medium-term risk of a head and shoulders top in euro's weekly chart is still relevant (See Chart 3 or [FX Viewpoint Dec 2023](#)). The euro rally into YE23 stopped and turned down right where it technically should (a trend line and 200wk SMA). That turn may evolve into the peak of a right shoulder. The path may be a short-term euro rally after the golden cross that is sold into for a lower euro in Q1/H1 (bottom of range at 1.05?). This provided spot remains below the 200wk SMA at 1.1152.

Chart 1: Euro after a golden cross favor's tactical upside

After a golden cross the average and median % change in euro is higher 6-12 trading days later and starts to diverge after that. The up ratio is 81% seven trading days later (Jan 12) out of 16 signals since 1999.



Source: BofA Global Research, Bloomberg

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Refer to important disclosures on page 8 to 10. Analyst Certification on page 7. 12640791

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Appendix

Exhibit 1: Euro golden cross signals since 1999

The euro has tended to be higher 6-15 trading days after a golden cross signal with 6-12 trading days later showing the strongest up ratio.

Price on signal close	Date	1 day later	2 days later	3 days later	4 days later	5 days later	6 days later	7 days later	8 days later	9 days later	10 days later	11 days later	12 days later	13 days later	14 days later	15 days later
1.0661	12/29/2022	0.41	0.06	-1.06	-0.53	-1.30	-0.16	0.65	0.68	0.90	1.80	1.59	1.51	1.19	1.25	1.61
1.2152	5/17/2021	0.58	0.19	0.63	0.25	0.53	0.81	0.33	0.35	0.33	0.62	0.50	0.49	-0.21	0.12	0.31
1.1219	6/26/2020	0.21	0.13	0.29	0.18	0.26	0.80	0.49	0.99	0.59	0.72	1.11	1.61	1.72	1.47	1.86
1.1183	5/23/2017	0.32	0.24	0.00	-0.17	0.03	0.55	0.27	0.86	0.63	0.84	0.66	0.28	0.11	0.18	0.25
1.1217	3/22/2016	-0.32	-0.38	-0.45	-0.19	0.66	1.08	1.45	1.55	1.55	1.49	1.62	1.44	1.62	1.70	1.51
1.1216	10/2/2015	-0.25	0.50	0.19	0.54	1.27	1.27	1.45	2.30	1.52	1.18	0.99	1.16	1.10	-0.95	-1.77
1.3279	7/26/2013	-0.13	-0.12	0.17	-0.54	-0.02	-0.16	0.20	0.43	0.77	0.47	0.16	-0.12	-0.18	0.51	0.38
1.3392	6/18/2013	-0.72	-1.28	-2.02	-2.03	-2.35	-2.84	-2.64	-2.85	-2.45	-3.08	-2.86	-3.57	-4.20	-3.90	-4.56
1.2938	10/26/2012	-0.26	0.16	0.17	0.04	-0.80	-1.10	-0.96	-1.29	-1.48	-1.73	-1.76	-1.81	-1.56	-1.21	-1.51
1.3977	10/15/2010	-0.31	-1.79	-0.09	-0.41	-0.16	-0.09	-0.84	-1.49	-0.34	-0.21	-0.60	0.41	1.16	1.65	0.39
1.3985	5/26/2009	-1.14	-0.31	1.24	1.24	2.27	1.27	1.42	-0.12	-0.61	0.57	-0.01	0.88	0.22	-1.30	-1.06
1.2388	4/24/2006	0.35	0.53	1.18	1.99	1.61	1.82	1.98	2.45	2.73	2.62	2.99	3.18	3.62	4.36	3.30
1.2469	10/15/2004	0.20	0.35	0.97	1.18	1.72	2.71	2.41	1.96	2.22	2.64	2.27	2.21	2.82	3.23	3.97
0.9260	5/22/2002	-0.53	-0.56	-0.58	0.28	0.97	1.19	0.89	1.72	1.45	1.40	2.31	1.89	2.00	2.39	1.89
0.9149	9/21/2001	0.24	0.86	0.90	0.37	-0.38	0.28	0.44	-0.04	0.32	0.37	0.61	-0.19	-0.43	-1.38	-0.37
0.9358	1/23/2001	-1.30	-1.22	-1.22	-1.99	-0.96	0.09	0.32	0.06	0.18	-0.51	-0.78	-1.96	-1.24	-0.38	-1.60
Average % chg		-0.17	-0.16	0.02	0.01	0.21	0.47	0.49	0.47	0.52	0.57	0.55	0.46	0.48	0.48	0.29
Median % chg		-0.19	0.10	0.17	0.11	0.14	0.67	0.46	0.55	0.61	0.67	0.64	0.68	0.66	0.35	0.34
Up		7	9	9	9	9	11	13	11	12	12	11	11	10	10	10
Up ratio		44%	56%	56%	56%	56%	69%	81%	69%	75%	75%	69%	69%	63%	63%	63%

Source: BofA Global Research, Bloomberg

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Exhibit 2: Euro golden cross signals since 1999 from 16-80 days later

The up-ratio strength loses its bias from 16-60 days and then is modestly stronger with an up ratio of 63% of the time 65-80 trading days later.

Date	16 days later	17 days later	18 days later	19 days later	20 days later	25 days later	30 days later	35 days later	40 days later	45 days later	50 days later	55 days later	60 days later	65 days later	70 days later	75 days later	80 days later
12/29/2022	1.83	1.98	2.12	2.39	2.17	2.34	0.74	0.12	-0.61	-0.60	-0.75	-0.48	1.59	2.29	2.45	3.61	2.90
5/17/2021	0.17	0.23	0.15	-0.35	-0.26	-1.92	-1.87	-2.37	-2.39	-2.90	-2.87	-2.32	-3.42	-3.08	-3.35	-2.92	-2.32
6/26/2020	2.04	2.75	3.13	3.36	3.90	4.98	5.06	5.55	5.15	6.10	5.52	5.59	5.54	3.67	4.43	5.41	4.45
5/23/2017	0.31	-0.34	0.13	-0.30	-0.44	1.40	1.46	2.54	3.32	4.15	5.54	5.09	4.94	5.18	7.06	6.54	7.01
3/22/2016	0.51	0.45	0.60	0.86	1.26	0.71	2.49	1.38	0.86	-0.68	-0.76	1.26	-0.09	0.22	-1.36	-1.26	-1.39
10/2/2015	-1.41	-1.47	-2.61	-2.13	-1.87	-4.24	-3.95	-5.08	-5.55	-2.99	-2.05	-3.10	-2.28	-3.21	-2.62	-2.67	-3.74
7/26/2013	0.42	1.04	0.57	0.58	0.78	-0.43	-0.76	0.11	1.85	1.83	2.10	2.00	3.07	3.94	1.57	0.66	1.63
6/18/2013	-3.09	-2.20	-2.43	-2.46	-1.72	-1.26	-0.96	-0.65	-0.96	0.19	0.01	-1.66	-0.93	-0.25	0.61	1.00	1.35
10/26/2012	-0.96	-0.94	-0.84	-0.42	0.29	0.37	-0.09	1.74	1.93	2.15	1.01	3.13	2.96	4.07	5.43	3.30	3.26
10/15/2010	-0.41	-1.46	-1.39	-2.22	-2.05	-2.18	-5.26	-4.03	-5.37	-5.65	-6.12	-4.24	-7.66	-4.21	-2.55	-2.62	-2.83
5/26/2009	-0.31	-0.61	-0.34	-0.86	0.66	0.34	-0.44	-0.13	1.72	1.30	3.02	1.17	1.08	2.23	1.71	3.53	4.81
4/24/2006	3.80	2.87	3.68	3.15	3.86	2.92	4.18	1.61	1.53	1.55	3.35	2.75	1.05	1.99	3.06	3.67	2.63
10/15/2004	3.62	3.46	3.37	3.51	4.05	4.44	6.64	7.90	6.07	6.72	8.52	8.70	4.69	5.16	4.57	4.56	3.21
5/22/2002	1.88	2.17	2.03	2.78	3.43	6.11	5.89	6.84	8.79	7.53	5.57	5.26	5.64	5.94	5.68	7.12	5.41
9/21/2001	-0.62	-0.71	-1.24	-1.29	-1.72	-2.39	-1.33	-2.30	-3.34	-4.03	-2.02	-2.70	-1.20	-2.81	-3.21	-2.19	-2.46
1/23/2001	-1.90	-3.26	-2.22	-1.54	-2.61	-1.94	-0.22	-2.20	-2.82	-4.49	-4.08	-5.02	-5.59	-4.45	-4.61	-5.43	-6.12
Average % chg	0.37	0.25	0.29	0.32	0.61	0.58	0.72	0.69	0.63	0.64	1.00	0.96	0.59	1.04	1.18	1.39	1.11
Median % chg	0.24	-0.05	0.14	-0.33	0.48	0.36	-0.15	0.12	1.19	0.74	0.51	1.21	1.06	2.11	1.64	2.15	2.13
Up	9	8	9	7	9	9	7	9	9	9	9	9	9	10	10	10	10
Up ratio	56%	50%	56%	44%	56%	56%	44%	56%	56%	56%	56%	56%	56%	63%	63%	63%	63%

Source: BofA Global Research, Bloomberg

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EURUSD short-term

Chart 2: EURUSD – Daily chart

Euro has been trading in a range for the last year. The golden cross signal ending Jan 3, 2024 suggests buying a dip near the 200d SMA of 1.0846-1.09 for a bounce back to the upper end of range in January. If euro breaks below the 200d SMA, we think the risk is more equally skewed for euro to go to the upper or lower end of the range and amplifies the medium term risk discussed next for lower.



Source: BofA Global Research, Bloomberg

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EURUSD medium term**Chart 3: EURUSD Weekly chart**

The euro rally failed where it was supposed to...at the trend line and 200wk SMA at 1.11-1.1152. This turn down creates risk of the right shoulder of a head and shoulders top. If that's the case, the aforementioned golden cross and a January bounce back may be short lived. Meaning euro might see some tactical strength in January which then gets sold for this bigger top to form. While below resistance, euro down to 1.05 is a possible outcome



Source: BofA Global Research, Bloomberg

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Chart Alpha

Considering euro's golden cross, we close our long USDKRW +1m NDF trade at 1308, having recommended a tactical long at 1293 in our year ahead report. On December 22, 2023, our short MXNCLP trade was stopped out. (Report reference: [2024 FICC Technical Advantage: Flying near the hard deck 03 December 2023](#)).

FX and Technical Strategy closed two trades on January 3, 2024, including short GBPAUD and EURNOK. (Report reference: [FX Alpha: Targets reached in short GBPAUD and short EURNOK year-ahead trades 03 January 2024](#)).

Exhibit 3: Open trades

Open technical trades and cross strategy alpha trades including technicals. We still hold a steeper US 5s30s view and raise our stop from -5 to 0.

Report	Trade	Entry / revise date	Entry Level	Option expiry	Spot target 1	Spot target 2	Spot target 3	Spot stop	Rationale / time horizon	Risks
Global Macro Year Ahead	US 5s30s steepener	19-Nov-23	15	-	35	55	80	0	5s30s and 2s10s curve already bottomed and is in wave 3 steeper. Triple bottom in 5s30s in 2023 suggests steeper in 2024.	A macro risk off causing bull flattening.

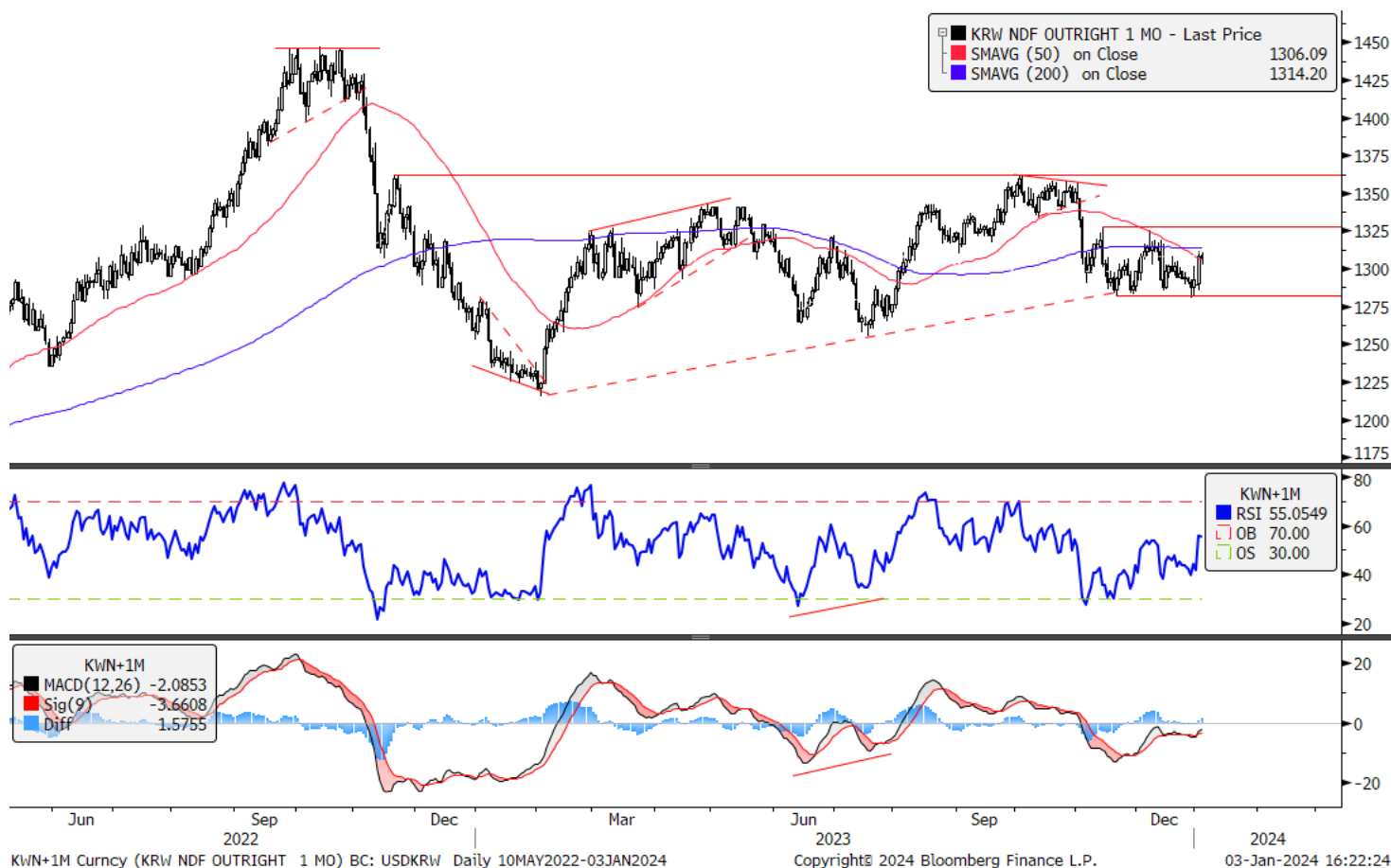
Note: Bid/offer spreads accounted for in initiation and closing levels. Does not reflect tax withholdings or any investment advisory fees. Past performance is no guarantee of future results. A complete performance record is available on request. Inception date - 10/16/2015. Initiation and closing prices are priced/used for trade rules and publication. For additional discussion on baseline views, valuation and risks to open trades, please see reports. DC = Daily close.

Source: BofA Global Research, Bloomberg

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Chart 4: USDKRW +1m NDF – Daily chart

Stuck in a range supported at 1280 and resisted at 1320.



Source: BofA Global Research, Bloomberg

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Exhibit 4: Closed trades

Approximately two years of technical and cross strategy trade recommendations

Report	Trade description	Entry date	Entry level	Spot target 1	Spot target 2	Spot target 3	Stop	Close date	Level closed
2024 FICC Technical Advantage	Buy USDKRW +1m NDF	1-Dec-23	1293	1315	1327	1340	1270	1/3/2024	1308
2024 FICC Technical Advantage	Short MXN/CLP	1-Dec-23	49.85	48.25	47.5	46.1	52.2	12/22/2023	52.2
Global Macro Year Ahead	Short GBPAUD via 3m 1.90-1.86	19-Nov-23	s/r 1.9192	19-Feb-24	1.86	1.84	-	1/3/2024	1.2315% GBP (s/r 1.8762, vol ref 7.354 / 6.921)
Global Macro Year Ahead	GBP/AUD put spread	19-Nov-23	s/r 11.8623 vol refs: 8.929 and 9.108)	19-May-23	11.35	11.22	11.1	1/3/2024	Received 0.7307% EUR
EM Alpha	Sell EUR/NOK via 6m risk reversal	11/15/2023	18.15	17.6	17.25	-	18.55	11/21/2023	18.55
EM Alpha	Buy EURZAR	10/2/2023	20.15	20.75	-	-	19.60	11/1/2023	19.60
FX Alpha	Buy CADMXN	10/23/2023	13.3338	14.00	-	-	13.00	10/31/2023	13.00
FX Alpha	Buy EURSEK 3m zero-cost collar spot ref 11.5456	10/13/2023	3m 11.8380 call for 0.5676% EUR, vol 7.394%; sell 3m 11.3143, vol 6.701%, zero-cost	11.84	-	-	-	10/30/2023	1.12%
FX Alpha	Buy GBPAUD 6m put seagull	9/8/2023	0.3827% GBP (long 6m put spread, 1.94 / 1.90	1.94	1.90	-	2.05	9/22/2023	1.2341% GBP
FX Technical Advantage	Short USDCAD	8/29/2023	1.3570	1.3497	1.346	1.335	1.3725	9/13/2023	1.3550
Commodities Technical Advantage	Buy CTZ3	9/5/2023	89.0600	94.60	96.5	100	86.3	9/7/2023	86.30
FX Alpha	Sell 2m 25-delta OTM EUR/GBP put	6/24/2023	0.31% EUR (strike ref: 0.8472, spot ref: 0.8592, vol ref: 5.584)	24-Aug-23	-	-	-	8/3/2023	Spot ref 0.86470, vol ref 4.214)
FX Alpha	Buy USDSEK via 3m collar (spot ref is 10.2724)	7/19/2023	Buy 3m 10.73 call for 0.7795% USD (vol ref: 12.296%) and sell 3m 9.8960 put for the same price (vol ref: 10.202%).	10.5	10.7	-	9.896	8/1/2023	1.3316% USD with spot ref 10.6109
Technical Advantage	Buy USDMXN	6/27/2023	17.10	17.50	18.00	-	16.90	7/12/2023	16.90
FX Technical Advantage	Short GBPUSD	4/25/2023	1.2420	1.2367	1.223	1.216	1.255	4/28/2023	1.255
FX Alpha	Buy 3m USDSEK call spread	1/20/2023	1.4689% USD strikes 10.2466 & 10.70, spot ref 10.2971, vol refs 12.752/13.307)	10.25	10.5	10.7	-	3/7/2023	.82% USD (spot ref 10.7008, vol refs 12.18/11.943)
Rates Technical Advantage	5s30s steepener	2/12/2023	-12	0	10	20	-25	2/24/2023	-25
Rates Technical Advantage	Short US 10Y	1/22/2023	3.48%	3.70%	3.82%	3.90%	3.30%	2/17/2023	3.82%
2023 FICC Technical Views	Short USDCAD via 6m 1.33/1.30 put spread	12/2/2022	65 USD pips (Spot ref: 1.3489, vol: 7.668%/8.035%)	1.33	1.319	1.30	-	2/1/2023	74.53 USD pips (spot ref: 1.33, vol: 6.893% / 7.237%)
EM Alpha	Long USDZAR	1/19/2023	17.23	-	17.46	17.75	17.86	2/1/2023	17.40
Global Rates, FX, EM 2023 Year Ahead	Short 10Y UST	11/20/2022	3.75%	3.60%	4.00%	4.25%	3.40%	1/18/2023	3.40%
FX Technical Advantage	Buy USD/CLP	11/20/2022	925	898	980	1000	865	12/12/2022	865
FX Technical Advantage	Buy DXY dip	9/12/2022	108.33	110.35	112.1	115	105	11/4/2022	110.87
Chart Alpha	Buy USD/ZAR	11/15/2022	17.30	18.00	18.50	-	<16.90	12/1/2022	17.90
Technical Advantage	Sell gold's bounce	10/3/2022	1702.00	1615.00	1560.00	1440.00	1740	11/10/2022	1760
Rates Technical Advantage	Short 10Y > 3.1%	8/31/2022	3.16%	3.38%	3.50%	3.96%	< 2.95%	10/11/2022	3.94%
Technical Advantage	Buy USDKRW	6/12/2022	1279.04	1321	1374	1400	1210	10/6/2022	1406
Commodities Technical Advantage	Buy USDCPL breakout	6/24/2022	917	920	945	985	872.75	07/15/2022	985.00
Commodities Technical Advantage	Sell HG1 breakdown	6/22/2022	394.4	350	335	314	421.9	7/15/2022	323.40
Commodities Technical Advantage	Buy crude oil	6/2/2022	116.87	130.3	140	-	111.2	6/17/2022	109.56
Chart Alpha	Buy Euro	5/4/2022	1.0610	1.0800	1.0850	-	-	5/12/2022	1.0470
Chart Alpha	Sell USDCHEF	5/4/2022	0.9740	0.9602	0.9525	-	-	5/5/2022	0.9825
Rates Alpha	Buy 10Y UST	4/14/2022	2.83%	3.05%	2.56%	2.40%	2.25%	1/0/1900	3.10%
FX Alpha	Buy AUD/NZD by owning a 6m call spread	1/27/2022	0.7764% (Spot: 1.069, 1.0753 (atmf) and 1.0944	1.0743	1.0817	1.0944	-	4/22/2022	1.2168% AUD
Global Rates, FX, EM Year Ahead	Buy USD/MXN	11/23/2021	20.70	20.50	21.93	22.67	-	3/9/2022	21.25
2022 FICC Technical Advantage	Sell AUD/USD by owning a 3m .69/.65 put spread	12/3/2021	74 USD pips, spot ref: .7020, vol: 10.74%/12.32%	0.718	0.69	0.65	-	3/3/2022	0.00
FX Alpha	Buy USD/JPY	11/23/2021	112.60 (Raised stop loss, spot ref 115)	114.5	117	-	112.6	2/24/2022	115.40

Exhibit 4: Closed trades

Approximately two years of technical and cross strategy trade recommendations

Report	Trade description	Entry date	Entry level	Spot target 1	Spot target 2	Spot target 3	Stop	Close date	Level closed
Global Rates, FX, EM Year Ahead	Buy USD/CHF 3m .94/.97 call spread, expiry Feb 21 2022	11/23/2021	Spot ref: .9258, vol ref: 6.839%/6.949% for 0.5359% USD	0.9259	0.94	0.97	-	2/23/2022	0.00
Chart Alpha	Buy EUR/ZAR (Raise stop)	2/4/2022	17.20 (Raise stop to 17.25, spot ref: 17.73)	17.82	18.25	18.5	17.25 (raised from 16.70)	2/10/2022	17.25
Chart Alpha	Buy EUR/ZAR	1/25/2022	17.20	17.82	18.25	18.5	16.7	2/4/2022	17.73

Approximately two years of closed technical and/or collaborative cross strategy trades in the alpha, technical advantage and year ahead reports

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