

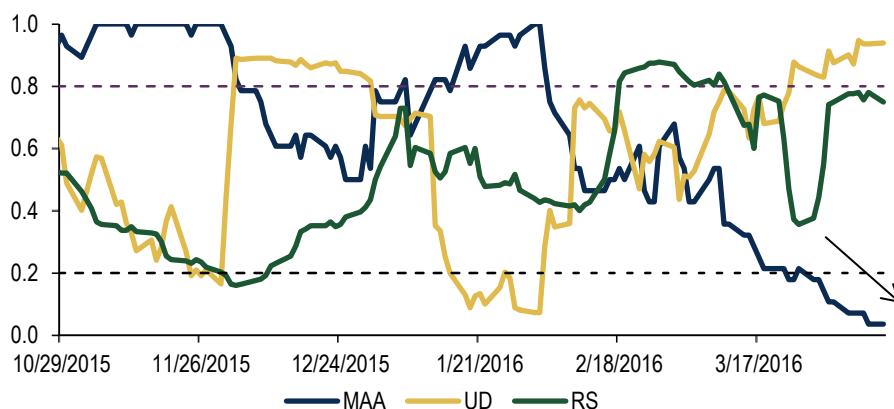
### Key takeaways

- USD is unable to rally and remains weak in New York hours.
- Sell USD/CHF: A solid downtrend is supported by negative Up-Down vol and Residual skew for puts.
- FORTE and positioning models show bearish signals for AUD/NZD.

### Trade of the week: Sell USD/CHF, reference 0.9550

The USD trends lower after another sell off in New York hours (Chart 8), and our models like to sell USD/CHF (Chart 1). Our positioning indicators suggest USD/CHF has more room to fall. The price action is impulsive to the downside, according to negative Up-Down vol and options show excess demand for USD/CHF puts. This is in-line with our view that [perceived "safe" assets may outperform](#) in the first half of 2016.

Chart 1: USD/CHF downtrend continues



Source: BofA Merrill Lynch Global Research

Table 1: USD positioning: Bearish USD/CHF

	Trend	Risk of Reversal	MAA	UD	RS
EURUSD	↑	LOW	96	0	36
USDJPY	↓	MEDIUM	0	78	13
GBPUSD	↓	LOW	14	43	34
AUDUSD	↑	LOW	93	75	8
USDCHF	↓	LOW	4	93	75
USDCAD	↓	MEDIUM	11	44	4
NZDUSD	↑	LOW	96	14	16
USDSEK	↓	LOW	4	97	69
USDNOK	↓	LOW	7	57	59

An uptrend has MAA > 60, a downtrend MAA < 40. Uptrend reversal likely if MAA/UD/RS > 80, unlikely if UD, RS < 50. Downtrend reversal likely if MAA/UD/RS < 20, and unlikely if UD, RS > 50. UD and RS are 1y percentile and MAA is %. Source: BofA Merrill Lynch Global Research

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Refer to important disclosures on page 16 to 17. Analyst Certification on page 15.

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Trade of the Week is our highest conviction view over the coming week. Performance history of prior trades of the week is in the Appendix A. Trades are exited at the subsequent Monday close.

## FORTE: Sell AUD/NZD

Our equity-linked FORTE model is bearish AUD/NZD (Table 2). New Zealand equities maintain their top rank and NZ rates momentum was also positive last week, supporting a relatively favorable environment for NZD. In addition, our positioning model suggests AUD/NZD uptrend is running out of steam with Residual Skew for puts.

**Table 2: FORTE is bullish NZD**

	FORTE RANKING		Equity Ranking		Rate z-score	Cheapness z-score	Short-term Momentum z-score
USD	1		2		-0.5	1.0	-0.3
NZD	2		1		-1.9	-0.1	0.7
GBP	3		3		-1.7	0.8	-0.4
CAD	4		4		0.2	-0.7	-0.3
NOK	5		5		-1.0	-1.1	0.9
AUD	6		6		-0.3	0.8	0.0
CHF	7		7		-0.1	-0.1	0.0
SEK	8		8		-1.5	0.3	-0.2
EUR	9		10		-1.4	0.3	-0.6
JPY	10		9		-1.9	-1.5	-0.3

The equity signal ranking is magnified or diminished by currency rates trend and currency cheapness 1 (bullish) to 10 (bearish).

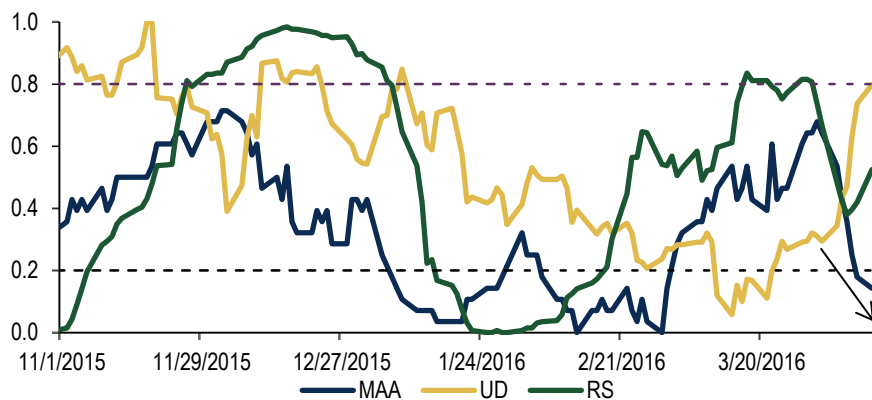
FORTE is positioned long two currencies (green) and short two (red), chosen from the four candidates based on equities.

Source: BofA Merrill Lynch Global Research

## Sell AUD/JPY

Our positioning model is bearish AUD/JPY (Chart 2). AUD/JPY exhibits greater volatility when the spot falls, displaying bearish Up-Down vol. Similarly, event analysis shows the JPY is set to outperform, in our view, as the option market increased its demand for JPY calls (Table 5).

**Chart 2: Up-down vol shows negative momentum in AUD/JPY**



Source: BofA Merrill Lynch Global Research

# BofAML FORTE Model

## Model description

FORTE is designed to capture currency performance generated by equity flows. The model first ranks each currency from 1 to 10 based on 1 year equity performance. A secondary ranking also incorporates the 1 year z-scores of a) 2 year rates, b) 3 week currency cheapness, and c) 1 week rate momentum. For our optimal currency portfolio, we go long the two currencies in the top-four equity ranking that are the highest ranked by the secondary ranking. We go short the two currencies in the bottom-four equity ranking that are the lowest ranked by the secondary ranking.

### FORTE is bullish NZD

FORTE ranks USD and NZD as asset currencies while funding these positions with EUR and JPY. NZD is supported by FORTE with New Zealand equities on top and supplemented by positive NZ rates momentum last week.

**Table 3: Forex trends from equities (Forte) signals**

	Equity Change (52wk)		Rates + cheapness filter		Equity Scorecard	Rates z-score	Cheapness (3wk) z-score	Rates Momentum (1wk) z-score	Overall Final rank
	Level	Rank	Filter score	Rank					
USD	-2.41	2	2.22	1	2	-0.55	1.02	-0.26	1
NZD	14.87	1	1.72	2	3	-1.85	-0.10	0.67	2
GBP	-12.23	3	-0.30	4	1	-1.67	0.79	-0.41	3
CAD	-12.75	4	-0.33	5	0.5	0.18	-0.72	-0.29	4
NOK	-14.43	5	-1.26	7	0	-1.02	-1.10	0.86	5
AUD	-15.43	6	0.51	3	0	-0.28	0.78	0.01	6
CHF	-17.80	7	-0.62	6	-0.5	-0.06	-0.06	-0.01	7
SEK	-19.51	8	-2.36	8	-1	-1.49	0.29	-0.16	8
EUR	-23.63	10	-4.76	9	-3	-1.44	0.32	-0.64	9
JPY	-20.87	9	-5.74	10	-2	-1.93	-1.54	-0.26	10

Source: BofA Merrill Lynch Global Research

Data collected Monday 03/28/2016

The equity signal ranking is magnified or diminished by currency rates trend and currency cheapness 1 (bullish) to 10 (bearish)

**Table 4: Forte signal history**

Long	1	NZD	CHF	NZD	NZD	USD	USD	USD	USD	USD	USD	USD
Currencies	2	CHF	NZD	USD	USD	NZD	NOK	NZD	AUD	NZD	NZD	NZD
Short	9	CAD	GBP	CAD	CAD	AUD	EUR	EUR	EUR	EUR	EUR	SEK
Currencies	10	EUR	CAD	SEK	SEK	SEK	SEK	SEK	SEK	SEK	SEK	EUR
Portfolio		↓	↑	↑	↑	↑	↓	↓	↓	↑	↓	↑
Date		2/1/2016	2/8/2016	2/15/2016	2/22/2016	2/29/2016	3/7/2016	3/14/2016	3/21/2016	3/28/2016	4/4/2016	4/11/2016

Source: BofA Merrill Lynch Global Research - the "Date" represents the day (close of business) when the signal expires. The arrow indicates whether the model had a positive or negative return for the week based on close-to-close returns. Past performance is not an indicator of future results

# Event analysis

## Model description

Often following a big currency move (rally or a sell-off), investors face the dilemma of either chasing the move or fading it. We believe the FX options market can provide valuable information about positioning and sentiment, so we have developed a framework that uses the level of volatility, skew and term structure to help with such decisions (see [Positioning through the lens of FX Vol](#)). Our framework consists of four general rules<sup>1</sup>.

- Buy: a currency whose depreciation is accompanied by an increase in 1m vol and put skew, but whose 1y vol does not increase.
- Sell: a currency whose depreciation is accompanied by a parallel shift higher across the vol curve.
- Buy: a currency whose appreciation is accompanied by a relative inversion of the vol curve and a decline in put skew.
- Sell: a currency whose appreciation is accompanied by an increase in put skew.

### Event analysis: Bullish JPY

FX vol has risen last week in both the front end and the back end.. After the JPY appreciation last week, the skew moved sharply for USD puts / JPY calls (Table 5). The USD/JPY curve has inverted further, implying short-term downside demand ahead of April 28 BOJ decision. This suggests the options market may be looking for a continuation, a positive signal for the JPY.

**Table 5: Volatility analysis**

Pair	old spot	new spot	1m vol	1m vol Chg	1y vol	1y vol Chg	1y - 1m Chg	1m skew % chg	Summary of views
EURUSD	1.1397	1.1416	9.10	0.30	10.26	0.40	0.10	-0.32	No Signal EUR
USDJPY	111.245	108.085	12.17	0.57	10.82	0.32	-0.24	-6.69	Bullish JPY
GBPUSD	1.4281	1.4246	10.60	0.75	13.10	0.28	-0.47	2.66	No Signal GBP
USDCHF	0.9587	0.9538	8.75	0.39	10.45	0.32	-0.07	0.18	No Signal CHF
AUDUSD	0.7610	0.7596	12.64	0.02	12.65	0.30	0.28	-2.36	No Signal AUD
USDCAD	1.3062	1.2948	10.81	0.47	10.54	0.44	-0.03	1.24	No Signal CAD
USDSEK	8.1236	8.1335	9.52	0.40	10.68	0.40	0.00	0.47	No Signal SEK
USDNOK	8.3247	8.2126	10.70	0.11	12.46	0.55	0.43	0.18	No Signal NOK
NZDUSD	0.6835	0.6857	14.41	0.09	13.82	0.36	0.27	-2.05	No Signal NZD
USDSGD	1.3517	1.3448	7.15	-0.62	7.06	-0.05	0.57	-0.09	No Signal SGD
USDKRW	1146.10	1146.50	11.19	-0.06	12.16	0.35	0.41	0.06	No Signal KRW
USDMXN	17.4800	17.6860	13.20	-0.67	13.88	-0.33	0.34	-1.47	No Signal MXN
USDBRL	3.6010	3.5588	27.35	2.78	20.12	0.00	-2.78	1.74	No Signal BRL
USDTRY	2.8135	2.8222	11.11	1.12	13.96	0.07	-1.05	5.30	No Signal TRY
USDZAR	14.7818	14.6857	19.67	0.99	20.36	0.41	-0.58	0.37	No Signal ZAR

Source: BofA Merrill Lynch Global Research. Data collected Monday 03/28/2016

The table shows the 1-year percentile and 1-week change in 1m and 1y implied vol, the 1y-1m spread, and the 1m 25 delta risk reversal as a percentage of the ATM. Changes in ATM volatilities are calculated using fixed strikes to account for the skew. For a currency with a put skew, the rules for generating the signal column are the following:

Bullish signal: [#1]. Spot change < -1%, 1m vol change > 0.5%, 1y vol change < 0.2%, 1m skew chg < -2; [#2]. Spot change > 1%, 1y-1m change < -0.2%, 1m skew change > 2

Bearish Signal: [#1]. Spot change < -1%, 1m vol change > 1%, 1y vol change > 0.5%; [#2]. Spot change > 1%, 1m skew change < -2

<sup>1</sup> The rules described here assume the currency has a positive put skew.

# Positioning analysis

## Model description

Our preferred three measures of positioning are moving average aggregation (MAA), Up/Down volatility (UD) and Residual Skew (RS) (see charts in Appendix A).

MAA is the percentage of moving average trading rules giving a buy signal for a given cross and a variety of moving averages. A high (low) percentage of buy signals suggests long (short) positioning in the pair is quite heavy.

Up/Down volatility and Residual Skew are measures of skewness in currency returns, which we view as an indirect reflection of positioning. A high (low) value of one or both of UD and RS in conjunction with a high (low) value of MAA suggests positioning is impacting price action, so a reversal is likely.

### Positioning: Bullish EUR/USD

Our positioning model shows downside risks for US dollar remain (Table 1). While EUR is favored against USD, the positioning model is bearish on EUR/SEK downtrend (Table 6). The GBP downtrend shows less conviction with generally neutral price action and lack of excess demand from options (Table 7).

**Table 6: EUR trend and positioning: Bullish EUR/USD**

	Trend	Risk of Reversal	MAA	UD	RS
EURGBP	↑	LOW	96	65	74
EURJPY	↓	LOW	7	65	22
EURUSD	↑	LOW	96	0	36
EURAUD	↓	LOW	32	13	68
EURCHF	↓	LOW	36	42	69
EURCAD	↓	LOW	36	13	58
EURNZD	↑	LOW	61	59	67
EURSEK	↓	LOW	14	61	87
EURNOK	↓	LOW	36	58	6

An uptrend has MAA > 60, a downtrend MAA < 40. Uptrend reversal likely if MAA/UD/RS > 80, unlikely if UD,RS < 50. Downtrend reversal likely if MAA/UD/RS < 20, and unlikely if UD,RS > 50. UD and RS are 1y percentile and MAA is %. Source: BofA Merrill Lynch Global Research

**Table 7: GBP trend and positioning: GBP shorts less attractive**

	Trend	Risk of Reversal	MAA	UD	RS
EURGBP	↑	LOW	96	69	73
GBPJPY	↓	LOW	0	75	22
GBPUSD	↓	LOW	14	43	34
GBPAUD	↓	LOW	7	45	42
GBPCHF	↓	LOW	4	54	50
GBPCAD	↓	LOW	0	44	37
GBPNZD	↓	LOW	0	59	51
GBPSEK	↓	MEDIUM	4	10	35
GBPNOK	↓	LOW	0	60	54

An uptrend has MAA > 60, a downtrend MAA < 40. Uptrend reversal likely if MAA/UD/RS > 80, unlikely if UD,RS < 50. Downtrend reversal likely if MAA/UD/RS < 20, and unlikely if UD,RS > 50. UD and RS are 1y percentile and MAA is %. Source: BofA Merrill Lynch Global Research

# Time zone trading patterns

## Model description

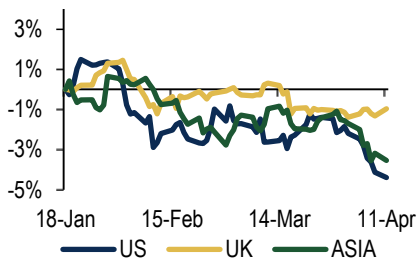
Understanding flows is both the most important and the most difficult aspect of currency trading. In our view, breaking down currency performance by time zones can help investors better understand the sources of key flows (e.g., the importance of private cross-border portfolio investment flows or reserve rebalancing related flows at any given time). We define the UK time zone as between 8am GMT and 1pm GMT. The US time zone is from 1pm to 12am GMT, and Asia's is from 12am to 8am GMT.

### USD under pressure in NY hours

The USD sell-off resumed in New York trading hours last week, benefitting CAD, CHF and JPY. Note that EUR, GBP and CHF gain in NY hours but underperform in other time zones. The flow divergence in different hours has contributed to USD staying in a range, while leaning to the downside.

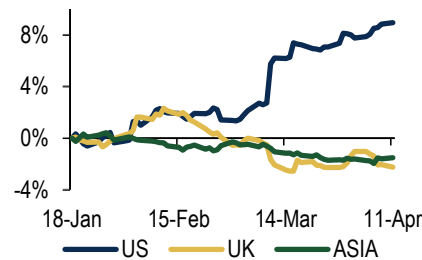
USD/JPY down move was supported by selling in all three time zones, especially New York and Asia.

Chart 3: USDJPY returns by time zone



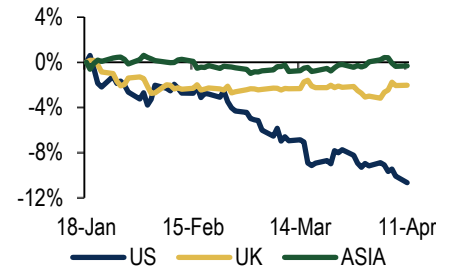
Source: BofA Merrill Lynch Global Research

Chart 4: EURUSD returns by time zone



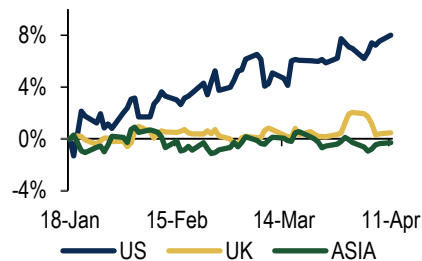
Source: BofA Merrill Lynch Global Research

Chart 5: USDCAD returns by time zone



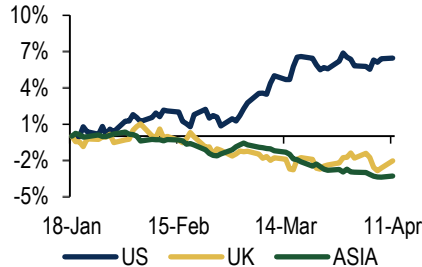
Source: BofA Merrill Lynch Global Research

Chart 6: NZDUSD returns by time zone



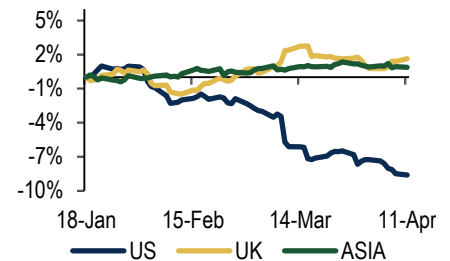
Source: BofA Merrill Lynch Global Research

Chart 7: GBPUSD returns by time zone



Source: BofA Merrill Lynch Global Research

Chart 8: USDCHF returns by time zone



Source: BofA Merrill Lynch Global Research



# Tail risk analysis

## Model description

We analyze tail risks from China (CDS increasing by 75bp), equities (25% drop in S&P500) and Europe (Sp-Ge 10yr bond spread widening by 200bp), and calculate what we anticipate will provide the most efficient FX hedge. We estimate the reaction of currencies to these moves using a one-sided regression of weekly returns. We calculate the strike that maximizes the estimated payout given the estimated spot moves in the scenarios, and rank the currencies according to the estimated payout. We also perform a one-sided quadratic regression of the weekly returns to determine if correlation is likely to increase in the scenario. In our view, the convexity is favorable if the slope of the quadratic regression curve increases (in absolute value) for larger absolute returns.

## Use AUD to hedge tail risks

In our view, AUD/JPY provides the most attractive hedge for China. In addition, we believe AUD/JPY also provides attractive currency hedges for US tail risks. Plus, AUD/JPY is a notable hedge for the Eurozone tail risks, in our view.

**Table 8: Tail risk analysis – 75bp increase in China CDS**

Pair	Spot	Strike	Estimated Scenario Spot	Strike Vol	Correlation	Estimated Payout	Favourable Convexity
S&P500	2047.90	2025.00	1767.24	17.0	-0.37	2.78	No
AUDJPY	82.2550	77.3860	68.8570	16.4	-0.56	3.90	No
EURAUD	1.5017	1.5613	1.6928	13.4	0.58	3.10	No
AUDCHF	0.7247	0.6906	0.6325	14.1	-0.56	3.00	No
EURCAD	1.4772	1.5100	1.6152	11.9	0.44	2.60	No
CADCHF	0.7365	0.7148	0.6674	12.0	-0.45	2.60	No
GBPJPY	154.1940	152.9750	134.9010	16.5	-0.43	2.50	No
AUDUSD	0.7595	0.7419	0.6848	13.1	-0.55	2.50	No

Source: BofA Merrill Lynch Global Research, Bloomberg, Data collected Monday 03/28/2016

**Table 9: Tail risk analysis – 25% drop in S&P500**

Pair	Spot	Strike	Estimated Scenario Spot	Strike Vol	Correlation	Estimated Payout	Favourable Convexity
S&P500	2047.90	1800.00	1535.70	22.4	1.00	6.95	No
AUDJPY	81.5750	73.7610	65.0540	18.0	0.69	5.60	No
EURMXN	20.2029	22.4136	24.7110	17.7	-0.64	5.20	No
EURZAR	16.9012	19.2308	21.8601	22.7	-0.64	4.80	No
EURAUD	1.5076	1.6192	1.7563	14.1	-0.72	4.80	Yes
CADJPY	83.2240	77.4120	69.6660	16.0	0.65	4.70	No
EURKRW	1304.9800	1399.6100	1513.3100	14.4	-0.62	4.60	No

Source: BofA Merrill Lynch Global Research, Bloomberg, Data collected Monday 03/28/2016

**Table 10: Tail risk analysis – 200bp increase in Sp-Ge bond spread**

Pair	Spot	Strike	Estimated Scenario Spot	Strike Vol	Correlation	Estimated Payout	Favourable Convexity
S&P500	2047.90	1975.00	1727.76	18.2	-0.47	3.26	Yes
AUDJPY	82.2660	75.7910	67.1000	17.3	-0.30	4.80	No
AUDCHF	0.7245	0.6661	0.6075	15.1	-0.35	4.70	No
EURAUD	1.5019	1.5886	1.7225	13.8	0.31	3.90	No
NZDJPY	74.2130	70.2590	62.2780	17.6	-0.24	3.40	No
NZDCHF	0.6540	0.6184	0.5634	15.4	-0.28	3.10	No
CADJPY	83.6470	81.1980	73.7220	14.5	-0.27	2.90	No
USDJPY	108.2950	106.2210	98.5590	11.4	-0.28	2.70	No

Source: BofA Merrill Lynch Global Research, Bloomberg, Data collected Monday 03/28/2016



# Optimal hedge ratios

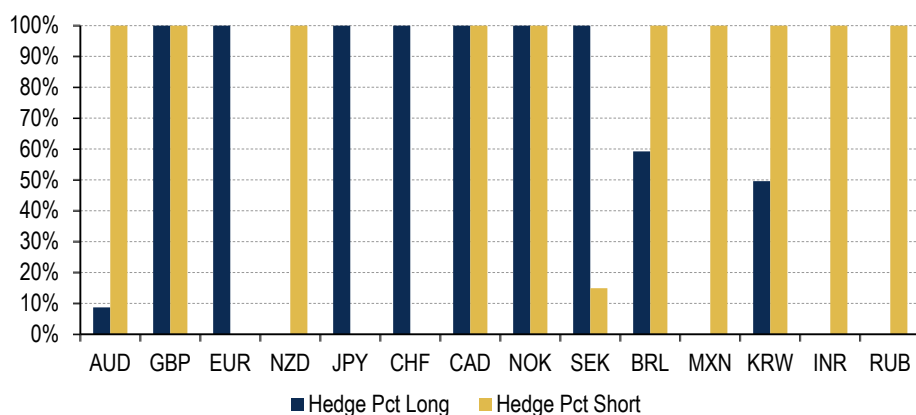
## Model description

Investors owning assets denominated in foreign currencies are subject to fluctuations in the dollar value of their investments due to currency movements. An important factor in the decision to hedge FX is the carry of the currency. Hedging a long position in a currency with high interest rates implies the acceptance of a cost reflected by the difference in foreign and domestic rates. We analyze the impact of correlation on hedged and un-hedged returns, and determine the appropriate hedge ratios to use for a given utility function. The USD based portfolio hedging is shown in this section. See Appendix C for other currency denominated portfolios. For more information regarding methodology, see [The impact of currency correlation on asset returns](#).

### Equity hedge percentage – raise JPY equity hedge

Equity volatility has risen in Japan and FX volatility has risen. In addition, the correlation between JPY equities and FX has become less negative, decreasing effectiveness of the natural hedge. We recommend raising the JPY equity hedge percentage. Table 11 shows the hedge percentages calculated to maximize the volatility-adjusted carry return on foreign equity indices.

Chart 12: Equity hedge percentage long and short – USD base



Source: BofA Merrill Lynch Global Research & Bloomberg

Table 11: Equity hedge recommendation – USD base

	Correlation	Equity Vol	Currency Vol	Carry	Hedge Pct Long	Hedge Pct Short
AUD	10%	13.5%	12.6%	1.6%	9%	100%
GBP	26%	11.8%	10.7%	-0.1%	100%	100%
EUR	6%	17.2%	9.1%	-1.0%	100%	0%
NZD	-27%	6.2%	14.4%	1.9%	0%	100%
JPY	-35%	20.3%	12.2%	-1.0%	100%	0%
CHF	-22%	11.7%	8.6%	-1.5%	100%	0%
CAD	73%	9.4%	10.9%	0.0%	100%	100%
NOK	32%	19.6%	10.8%	0.2%	100%	100%
SEK	27%	18.8%	9.3%	-1.2%	100%	15%
BRL	77%	38.0%	27.2%	11.0%	59%	100%
MXN	75%	10.8%	12.8%	3.4%	0%	100%
KRW	54%	7.1%	11.1%	1.0%	50%	100%
INR	13%	15.0%	6.0%	5.4%	0%	100%
RUB	45%	12.6%	21.5%	9.2%	0%	100%

Source: BofA Merrill Lynch Global Research, Bloomberg

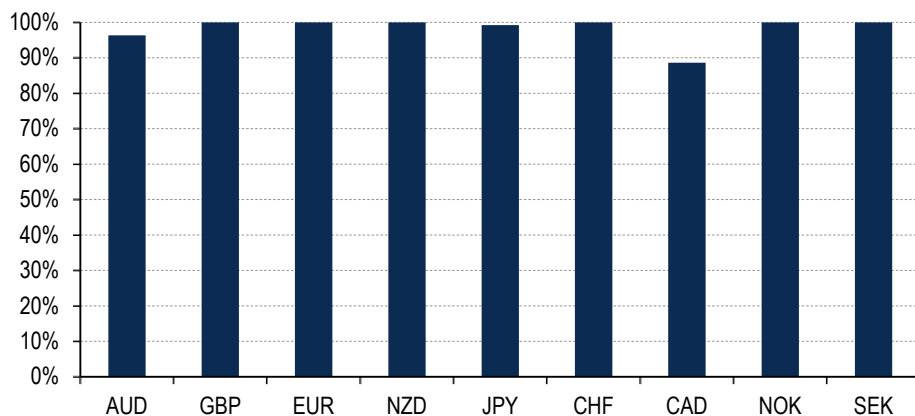
Hedge percentages are capped at 1 (fully hedged) and floored at zero (un-hedged). Equity index volatility and correlation are calculated using 1 month of daily returns. Currency volatility is 1 month at-the-money implied volatility. Carry is calculated using 1-month forward points.

Data collected Monday 03/28/2016

### Bond hedge percentage – raise AUD hedge ratio

Bond volatility has fallen in Australia and FX volatility has risen. In addition, the correlation between AUD bonds and FX has turned more positive, increasing the effects of (unwanted) positive drift. We recommend raising the AUD FX bond hedge ratio.

**Chart 13: Bond hedge percentage – USD base**



Source: BofA Merrill Lynch Global Research & Bloomberg

**Table 12: Bond hedge recommendation – USD base**

	Correlation	Bond Vol	Currency Vol	Carry	Hedge Ratio (max Sharpe Ratio)
<b>AUD</b>	32.3%	4.2%	12.6%	1.6%	96%
<b>GBP</b>	10.6%	3.3%	10.7%	-0.1%	100%
<b>EUR</b>	55.3%	3.0%	9.1%	-1.0%	100%
<b>NZD</b>	10.6%	3.3%	14.4%	1.9%	100%
<b>JPY</b>	-8.0%	3.1%	12.2%	-1.0%	99%
<b>CHF</b>	14.4%	1.5%	8.6%	-1.5%	100%
<b>CAD</b>	-26.6%	4.8%	10.9%	0.0%	89%
<b>NOK</b>	32.8%	3.1%	10.8%	0.2%	100%
<b>SEK</b>	3.4%	3.0%	9.3%	-1.2%	100%

Source: BofA Merrill Lynch Global Research, Bloomberg

Hedge percentages are capped at 1 (fully hedged) and floored at zero (un-hedged). Bond volatility and correlation are calculated using 1 month of daily returns in the 7-10 year sector. Currency volatility is 1 month at-the-money implied volatility.

Carry is calculated using 1-month forward points. Bond expected return is set equal to the bond volatility.

Data collected Monday 03/28/2016

# BofAML Octave Model

## Model description

Our weekly directional model is designed to produce an optimal currency portfolio based on carry, momentum and valuation considerations. The inputs in our model are the level of bond yields (carry), the change in bond yields, the change in national equity indices and deviation of spot from its moving averages, (valuation) with which we rank each currency from 1 to 10. We then combine these signals using a modified scorecard framework to arrive at an Overall Portfolio Indicator. For our optimal currency portfolio, we go long the three currencies that are the highest ranked, funded by the three currencies that are the lowest ranked.

## USD remains an asset in OCTAVE

OCTAVE ranks the CAD, USD and NZD as asset currencies, while funding these positions with JPY, CHF and SEK. USD remains an asset in OCTAVE with strong equities (top performance over 2mth) and reasonable carry level.

**Table 13: Ordered carry, trend and value (Octave) signals**

	Carry Levels		Yield Change		Equity Mkt Change		Contrarian Indicator		Overall Portfolio Indicator	
	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank
CAD	0.87	3	0.15	1	8.41	3	0.97	9	-8.48	1
USD	0.84	5	0.06	2	9.50	2	1.00	1	-7.56	2
NZD	2.19	1	-0.38	10	9.76	1	0.98	3	-4.40	3
GBP	0.78	6	0.02	4	6.45	4	1.00	2	-2.32	4
AUD	2.07	2	-0.01	7	2.45	7	0.98	5	-1.70	5
NOK	0.85	4	-0.04	8	5.72	5	0.97	8	1.08	6
EUR	-0.17	8	-0.01	6	3.19	6	0.98	4	3.22	7
SEK	-0.36	9	0.02	5	2.43	8	0.97	7	4.77	8
CHF	-0.74	10	0.06	3	-1.23	9	0.97	6	6.24	9
JPY	-0.13	7	-0.04	9	-1.69	10	0.96	10	11.83	10

Source: BofA Merrill Lynch Global Research, Bloomberg. Data collected Monday 08/17/2015. For each of the four OCTAVE components, every currency gets a rank from 1 (bullish) to 10 (bearish)

**Table 14: Octave signal history**

Long	1	NZD	NZD	NZD	NZD	NOK	CAD	CAD	USD	USD	USD	CAD
Currencies	2	AUD	AUD	AUD	NOK	AUD	NOK	NOK	CAD	CAD	CAD	USD
	3	GBP	NOK	NOK	AUD	NZD	GBP	USD	NOK	AUD	NZD	GBP
Short	8	CAD	SEK	USD	USD	CHF	EUR	SEK	EUR	SEK	JPY	NOK
Currencies	9	JPY	EUR	EUR	EUR	EUR	CHF	CHF	CHF	CHF	SEK	JPY
	10	EUR	JPY	JPY	JPY	JPY	JPY	JPY	JPY	JPY	CHF	CHF
Portfolio		↑	↓	↑	↑	↓	↑	↓	↓	↑	↓	↓
Date		2/1/2016	2/8/2016	2/15/2016	2/22/2016	2/29/2016	3/7/2016	3/14/2016	3/21/2016	3/28/2016	4/4/2016	4/11/2016

Source: BofA Merrill Lynch Global Research - the "Date" represents the day (close of business) when the signal expires. The arrow indicates whether the model had a positive or negative return for the week based on close-to-close returns. Past performance is not an indicator of future results.

## APPENDIX A: Trade Methodology & History

All trades are recommended and reported using the methodology explained below.

### Trade of the week recommendation

Trade of the week recommendations are published in the weekly FX Quant Trader on Monday after the NY close. The first paragraph in the report will contain the highest conviction directional trade for the week, together with supporting information from models discussed in the report. This trade will be chosen in a pair that has sufficient liquidity to permit a position to be implemented without a material impact on the price.

The highest conviction trade is determined by the analysts based solely on information from the individual models. High conviction is determined on the basis of consistency of multiple individual signals. When signals are inconsistent, the analysts will determine conviction on the basis of the weight that should be attached to individual signals in the opinion of the analysts. This weight is based on the degree to which the analyst believes that the underlying assumptions of the models are being met.

### Trade of the week history

Trades are assumed to be initiated at the indicated reference level, which is determined at the time of publication and closed at 5pm EST the subsequent Monday. The table below (Table 16) shows a history of prior trades of the week together with corresponding entries and exits.

Hit ratio figures are updated on a weekly basis (Table 15). Performance does not reflect transactions costs, tax withholdings or any investment advisory fees. The performance results are hypothetical in nature and do not reflect actual transactions. The performance of persons following our trade of the week recommendations will differ from the performance contained in this report for a variety of reasons, including differences related to incurring transactions costs and/or investment advisory fees, as well as differences in the time and price at which currencies were acquired and disposed of. Past performance is no guarantee of future results. A complete performance record is available upon request.

**Table 15: Historical hit ratio performance for trades of the week**

History	1m	3m	12m	Since inception
Trades initiated (#)	4	13	50	104
Trades up (#)	1	6	29	59
Trades down (#)	3	7	21	45
Hit ratio	25.0%	46.2%	58.0%	56.7%

Rolling trade history of 1 month corresponds to last 4 weeks, 3 months history covers last 13 weeks and 12 month history covers last 52 weeks. Since inception covers complete history since March 10, 2014 when trade of the week methodology was first established.

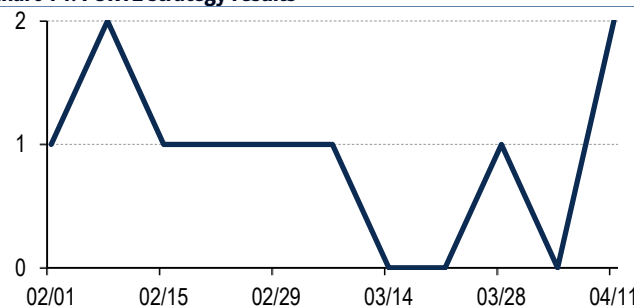
Source: BofA Merrill Lynch Global Research, Bloomberg

Table 16: Trade of the week history

Date (trade initiation)	Trade idea	Entry level	Date (trade closed)	Exit level
4-Apr-16	Long USDCAD	1.308	11-Apr-16	1.2898
28-Mar-16	Long USDJPY	113.45	4-Apr-16	111.34
21-Mar-16	Short USDKRW	1163.5	28-Mar-16	1165.94
14-Mar-16	Short USDCHE	0.9872	21-Mar-16	0.9699
7-Mar-16	Short EURNZD	1.622	14-Mar-16	1.6632
29-Feb-16	Short EURCAD	1.47226	7-Mar-16	1.46286
22-Feb-16	Short EURJPY	124.52	29-Feb-16	122.53
15-Feb-16	Long AUDJPY	81.802	22-Feb-16	81.593
8-Feb-16	Long EURSEK	9.4528	15-Feb-16	9.4661
1-Feb-16	Long EURCHF	1.11051	8-Feb-16	1.10489
25-Jan-16	Long USDCHE	1.0128	1-Feb-16	1.0198
18-Jan-16	Short AUDUSD	0.6866	25-Jan-16	0.6955
11-Jan-16	Short NZDUSD	0.656	18-Jan-16	0.6452
4-Jan-16	Long USDCAD	1.394	11-Jan-16	1.4216
14-Dec-15	Short CADJPY	88.128	21-Dec-15	86.816
7-Dec-15	Long USDCAD	1.3498	14-Dec-15	1.3734
30-Nov-15	Short EURAUD	1.458	7-Dec-15	1.49121
23-Nov-15	Short EURJPY	130.54	30-Nov-15	130.05
16-Nov-15	Long AUDNZD	1.094	23-Nov-15	1.1028
9-Nov-15	Long USDSEK	8.6858	16-Nov-15	8.7268
2-Nov-15	Long USDCHE	0.9869	9-Nov-15	1.0036
26-Oct-15	Long USDJPY	121.05	2-Nov-15	120.76
19-Oct-15	Long GBPCAD	2.0134	26-Oct-15	2.0193
12-Oct-15	Short USDKRW	1144.11	19-Oct-15	1121.14
5-Oct-15	Long USDJPY	120.46	12-Oct-15	120.04
28-Sep-15	Short EURUSD	1.1244	5-Oct-15	1.1188
21-Sep-15	Long USDCAD	1.3249	28-Sep-15	1.3397
14-Sep-15	Long GBPUSD	2.437	21-Sep-15	2.4548
7-Sep-15	Short EURJPY	133.22	14-Sep-15	136.07
31-Aug-15	Short NZDUSD	0.6356	7-Sep-15	0.6259
24-Aug-15	Short AUDUSD	0.718	31-Aug-15	0.7113
17-Aug-15	Long EURJPY	137.79	24-Aug-15	137.59
10-Aug-15	Long USDSEK	1.399	17-Aug-15	1.4077
3-Aug-15	Short AUDUSD	0.729	10-Aug-15	0.7413
27-Jul-15	Long USDCAD	1.3033	3-Aug-15	1.3156
20-Jul-15	Long USDJPY	124.27	27-Jul-15	123.25
13-Jul-15	Short AUDUSD	0.7407	20-Jul-15	0.7372
6-Jul-15	Long USDSEK	8.47	13-Jul-15	8.4896
29-Jun-15	Short GBPJPY	192.846	6-Jul-15	191.281
22-Jun-15	Short AUDJPY	95.36	29-Jun-15	94.098
15-Jun-15	Short CHFJPY	132.773	22-Jun-15	133.874
8-Jun-15	Long USDKRW	1118.4	15-Jun-15	1117.27
1-Jun-15	Short EURUSD	1.0928	8-Jun-15	1.1291
25-May-15	Short EURUSD	1.098	1-Jun-15	1.0927
18-May-15	Long AUDNZD	1.0825	25-May-15	1.0704
11-May-15	Short NZDUSD	0.7345	18-May-15	0.7389
4-May-15	Short GBPUSD	1.512	11-May-15	1.5586
27-Apr-15	Short GBPAUD	1.9405	4-May-15	1.9292
20-Apr-15	Long AUDCAD	0.9443	27-Apr-15	0.9498
13-Apr-15	Short EURUSD	1.0571	20-Apr-15	1.0738
6-Apr-15	Short GBPUSD	1.4895	13-Apr-15	1.4676
30-Mar-15	Short AUDUSD	0.7656	6-Apr-15	0.7592

Source: BofA Merrill Lynch Global Research, Bloomberg

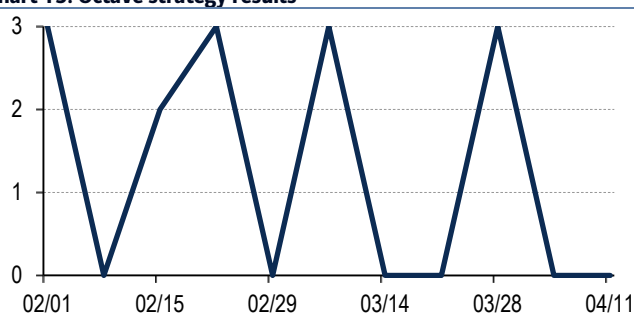
Chart 14: FORTE strategy results



Source: BofA Merrill Lynch Global Research, Bloomberg

The vertical axis denotes the number of long currencies that appreciated on a weekly close-to-close basis against an equally weighted basket of the two currencies recommended to short. For example, if the Monday close to Monday close change of our top two ranked currencies were 3% and 0.5% respectively, while each of our two short currencies rose 0.5%, then we would determine that 1 of our long currencies appreciated versus the equally weighted average of the shorts.

Chart 15: Octave strategy results



Source: BofA Merrill Lynch Global Research, Bloomberg

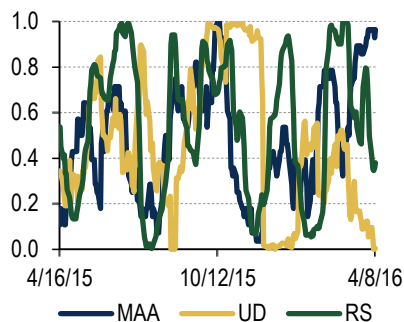
The vertical axis denotes the number of long currencies that appreciated on a weekly close-to-close basis against an equally weighted basket of the three currencies recommended to short. For example, if the Monday close to Monday close change of our top three ranked currencies were 3%, 0.5% and 1% respectively, while each of our 3 short currencies rose 0.5%, then we would determine that 2 of our long currencies appreciated versus the equally weighted average of the shorts.

# APPENDIX B

## Short-term positioning indicators

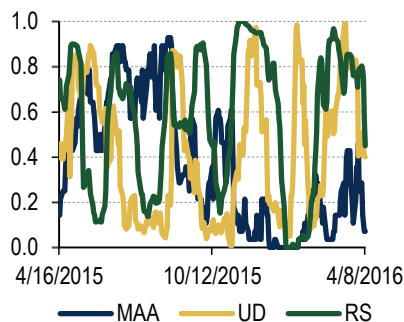
Moving Average Aggregator, Up-Down Volatility and Residual Skew indicators

**Chart 16: EUR/USD positioning**



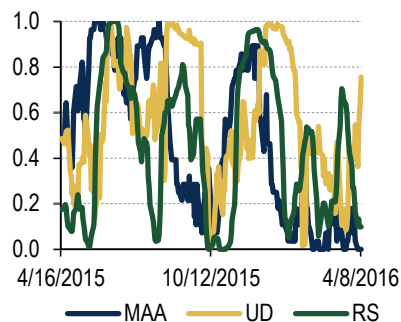
Source: BofA Merrill Lynch Global Research. Bloomberg

**Chart 17: GBP/USD positioning**



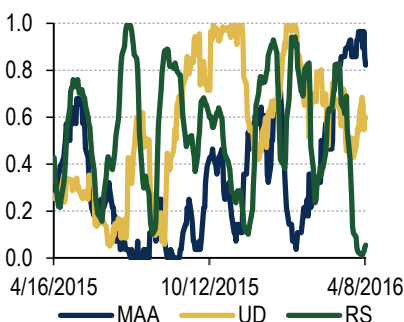
Source: BofA Merrill Lynch Global Research. Bloomberg

**Chart 18: USD/JPY positioning**



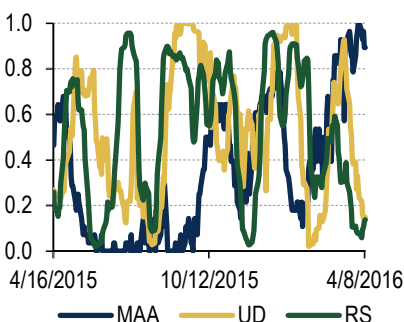
Source: BofA Merrill Lynch Global Research. Bloomberg

**Chart 19: AUD/USD positioning**



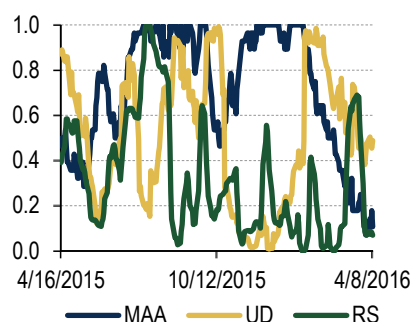
Source: BofA Merrill Lynch Global Research. Bloomberg

**Chart 20: NZD/USD positioning**



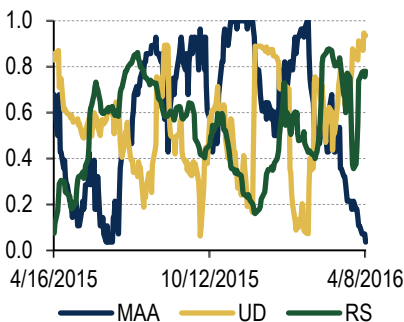
Source: BofA Merrill Lynch Global Research. Bloomberg

**Chart 21: USD/CAD positioning**



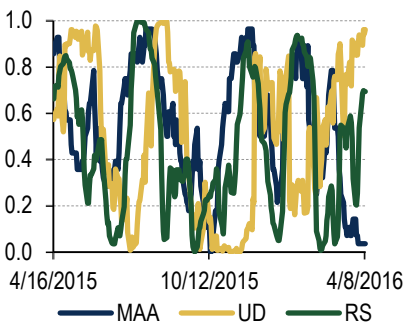
Source: BofA Merrill Lynch Global Research. Bloomberg

**Chart 22: USD/CHF positioning**



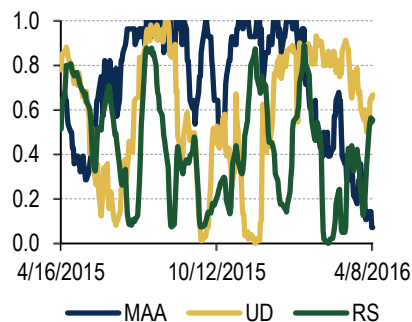
Source: BofA Merrill Lynch Global Research. Bloomberg

**Chart 23: USD/SEK positioning**



Source: BofA Merrill Lynch Global Research. Bloomberg

**Chart 24: USD/NOK positioning**



Source: BofA Merrill Lynch Global Research. Bloomberg

# Options Risk Statement

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## Potential risk at expiry and options limited duration risk

Unlike owning or shorting a stock, employing any listed options strategy is by definition governed by a finite duration. The most severe risks associated with general options trading are total loss of capital invested and delivery/assignment risk...all of which can occur in a short period.

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<http://www.theocc.com/about/publications/character-risks.jsp>

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