December 6, 2018 09:45 PM GMT

### FX Pulse | Global

# Interest in Carry

**CNY** is the 'anti-dollar'... Positive sentiment from the US-China trade discussions at the G2O pushed USDCNH past the previous November low. CNY acts as the 'anti-dollar': a weaker RMB leads to broader USD strength, and vice versa.

...and rising CNY leads broader USD weakness. A positive trade outcome may provide an initial boost to US risk assets, but we suggest there is more at play here. We argue China has a strong incentive to make structural reforms not only to reduce trade frictions but, more importantly, to improve China's position as an investment destination. Bolstering growth without further increasing financial sector leverage requires foreign capital to make up the shortfall, and China maintains its longer-term aim of currency internationalization. Structural reforms rendering China more appealing to foreign investors support these varied aims.

**Shifting capital flows....** The second-order implications of China attracting more capital are negative for US assets and USD. Pessimism about the US growth and inflation outlook have led to a lower and flatter yield curve but lower rates have failed to keep credit spreads contained. Tightening global liquidity conditions are clearly taking hold in the US, and the combination of a weaker US asset outlook, low FX hedge ratios by foreign investors, and high risk exposure suggests foreign capital may begin flowing East.

...are EURUSD positive. European investors are exposed to US assets - US credit in particular - and we believe that investors' focus on European politics and EUR's low carry has rendered the market unprepared for the forthcoming EUR bull run that we expect.

**Short USD, long carry.** The carry theme may not work for EUR bears, but it may work for EM bulls. We trade our portfolio accordingly, adding USD shorts against EUR, JPY, and BRL.

Exhibit 1: Current trade portfolio

Closed Trades			
Long USD/MYR 3m NDF		Closed at 4.130	0 on 4-Dec-18
Active Orders	Entry	Stop	Target
Short AUD, CAD, NZD vs USD, JPY	100.00	102.50	88.00
Short EUR/SEK	10.4326	10.3600	10.0000
Short USD/SEK	9.0900	9.1700	8.7000
Short USD/CLP 3m NDF	676	695	624
Short USD/IDR 3m NDF	14755	14900	14300
Short USD/ZAR	13.91	14.50	13.00
Long EUR/USD	1.1382	1.1265	1.1800
Short USD/JPY	113.12	113.80	108.00
New Orders			
Sell USD/BRL 3m NDF	NY Close 6-Dec-18	4.0400	3.6200

 $Source: Strategic\ FX\ Portfolio\ Trade\ Recommendations\ for\ more\ details.\ Changes\ in\ stops/targets\ in\ bold\ italics.$ 

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#### **FX** Overview

STRATEGIST

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Strategic FX Portfolio; G10 & EM Currency Summary

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Central Bank Watch; Global Event Risk Calendar

#### **FX Forecasts**

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## FX Overview

#### Hans Redeker

Bottom Line: Until recently the US has been isolated from higher capital costs despite capital becoming more scarce globally. Rising corporate bond spreads indicate that the US is no longer immune from liquidity pressures. EUR may be bolstered by an improving EM outlook and resulting demand for European goods and pent-up supply capacity in the German auto sector. Outsized EUR-positive moves are made more likely by sustained EUR pessimism and resulting bearish positioning.

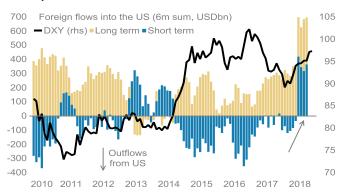
**Stronger CNY post-G20:** We expect a rising CNY to have a substantial impact on USD markets. CNY now functions as an 'anti-dollar' currency, joining EUR. Exhibit 2 shows the inverted correlation between EURUSD and USDCNY. CNY has stabilized after the US and China agreed to spend 90 days negotiating a solution to their trade conflict at the G-20 meeting in Buenos Aires. That outcome jolted a market that was USD long-positioned.

**Exhibit 2:** Negative USDCNY and EURUSD correlation suggests CNY strength may see EURUSD higher



Source: Macrobond, Morgan Stanley Research

**Exhibit 3:** Inflows into US money market instruments have increased markedly



Source: Macrobond, Morgan Stanley Research

The US has enjoyed a reprieve from tightening global liquidity... US fund inflows have increased, but this is largely explained by an increase in flows into money markets (Exhibit 3). Funds have accumulated in USD-denominated money market funds, which we think represents a final symptom of global liquidity concentration.

Investors began to realize in February 2018 that global liquidity conditions would no longer be adequate to provide sufficient capital for risk-taking at the global periphery. Investors sold assets from EM and transferred the proceeds to the US. As a result, the US initially saw looser financial conditions and more liquid local markets despite globally tightening liquidity conditions.

...but corporate bond spreads are now rising: Recent increases in US credit spreads and yield suggest that tighter global liquidity conditions have finally reached US shores. Until now, US capital market outperformance and liquidity creation have been driven by investors swapping debt holdings for equity.



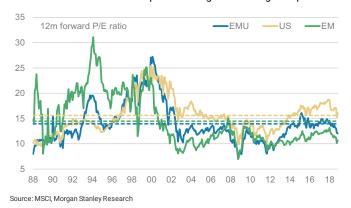
However, rising corporate bond spreads have reduced the incentive for investors to convert equity into debt. This is important because shareholder distributions, such as buybacks, have been a key driver of US risk asset performance. The transmission mechanism is important: widening spreads, worsening the outlook for buybacks, weigh on equities. Poor risk asset performance can tighten financial conditions, translating a poor market outcome into a poor economic one. Indeed, it seems that growth and inflation expectations have been coming down as well in response to these conditions (Exhibit 4).

Exhibit 5 illustrates that US valuations are high, especially compared with EM valuations. Stretched US valuations may be a drag on US markets as liquidity turns against the US. The performance of the US corporate bond market is a key indication of the degree of this turn. US capital markets may now shift from reliably outperforming to underperforming.

**Exhibit 4:** Credit spreads widening amid continued US yield curve flattening



Exhibit 5: Valuations in US equities are higher than in global peers



Source: Macrobond, Morgan Stanley Research

**The US corporate bond sell-off...** Structural factors may contribute to USD weakness (and EUR strength). US external funding needs have risen, and will be more difficult to meet as foreign central banks tighten and the supply of global savings declines. US asset classes that have benefited the most from foreign inflows (like corporate bonds) have recently shown alarming signs of underperformance. US corporate bond market underperformance indicates the way that tightening global liquidity will impact US asset markets.

...shows that the US is affected by tightening global liquidity: Higher US funding costs are driven by a number of factors. China has become a capital importer and Japan and Europe have slashed their capital exports – in addition to increased borrowing by the federal government and Federal Reserve tightening (net shrinking of fixed asset holdings). These factors have all made capital more difficult to attain for US corporates.

Passive fund management tools like ETFs (in addition to Japanese and European portfolio flows) have supported US corporate bond valuations. Passive tools tend to prolong and magnify market trends. Passive flows extended and accentuated Japanese and European-supported corporate bond valuations — and may also extend and accentuate liquidation pressures.



**An EM rebound would support EUR...** EUR and CNY are connected due to fundamental (in addition to technical) factors. Euro area exports are biased towards EM markets, and a stabilizing China bolsters EM confidence.

This relationship is evident in Exhibit 6, which shows the high correlation between euro area and aggregate EM PMIs. EM recovery should drive stronger demand for European exports. The recent EM FX rally and improving EM financial conditions indicate that an EM recovery has begun. FX movements affect financial conditions differently in G10 economies versus EM economies.

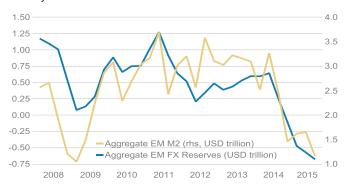
In G10, FX strength generally tightens financial conditions as the domestic export outlook weighs on growth expectations. In contrast, EM FX strength can loosen financial conditions. Incoming funds are often used as collateral for local credit. For this reason, we often see M2 monetary aggregates and currency reserves rising at the same time. Capital inflows strengthen the currency, leading to increased reserves and improved availability of credit collateral.

Exhibit 6: Historically, Euro area and EM PMIs have moved together



Source: Haver Analytics, Morgan Stanley Research

**Exhibit 7:** Portfolio flows influence both monetary aggregates and currency reserves



Source: Macrobond, Morgan Stanley Research. EMs included are Argentina, Brazil, Chile, China, Czech Republic, Hungary, Indonesia, Malaysia, Mexico, Poland, Russia, South Africa, Turkey, Ukraine, Venezuela, MENA nations. South Korea and Hong Kong

...and EM FX could drive an EM rebound: EM financial conditions have eased along with recent FX strength. Easier financial conditions should improve EM economic conditions and investor confidence. EM assets have outperformed over the past three months, and we expect continued strong performance. As discussed above, EM asset valuations remain cheap. In addition, EM nations have reduced their sensitivity to global funding costs. EM external funding needs are lower than in 2013, and capital costs remain depressed relative to attractive EM investment returns. However, EUR-funded carry traders should worry as the EM outlook improves. The accumulation of capital in USD-denominated money market funds indicates the potential for EUR to strengthen precipitously.

We argue that markets are too bearish on EUR... Investors are concerned about Europe for many reasons. EUR is a negative-yielding currency. The potential for political risk in France is rising, Italy and the EU continue to struggle to agree on the Italian budget, and EMU economic data have repeatedly surprised negatively. These are negative developments, but they have contributed to the market being over-positioned short EUR.

# Morgan Stanley | RESEARCH



...discounting several bullish possibilities: The market has underpriced the possibility of an economic rebound in Europe, driven by several factors.

First, EM recovery may bolster euro area exports as discussed above.

Second, German economic performance has suffered due to (temporary effects of) the automobile emission scandal, and may be set to rebound when new production lines open.

Third, rising populist political pressures could drive fiscal expansions and a diminution of free-market, supply-oriented policies. Euro area growth and inflation could rise simultaneously as its current account surplus moderates. Higher domestic spending would lead to lower capital exports and higher euro area nominal yields. We think that the market is underpricing the chance of that outcome.

Investors are overly carry-positioned, creating room for low-carry FX to rally: Our EUR optimism is founded on these fundamental factors in addition to market positioning against low-yielding currencies like EUR. Investors recently appear to be primarily carry-motivated, taking positions according to short-term yields. This positioning creates the potential for low-yielding currencies like EUR to rally.

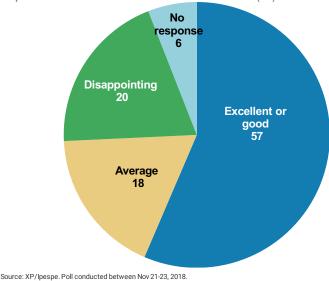


# Strategic FX Portfolio Trade Recommendations

### Sell USD/BRL 3m NDF

**Exhibit 8:** The president-elect to start his mandate with significant popular support

Expectations for Bolsonaro's administration (%)



Limit Order (Entry: 6-Dec-18)
Entry: NY-Close 6-Dec-18; Stop: 4.0400; Target: 3.6200

In our view, the recent weakness in BRL was primarily driven by a seasonal USD liquidity shortage onshore, which should be alleviated by the BCB's ongoing FX credit line auctions, but provides an attractive entry point for our long BRL trade. As a reminder, the FX credit lines help to provide USD liquidity to the onshore market, helping to bring down the implied USD yield versus BRL, diminishing the incentive to sell BRL. Moreover, we are now less than one month away from the inauguration of the president-elect, who will start his mandate with significant popular support, according to recent polls. Although we ultimately expect some noise around the pension reform in 2Q, we see a window of opportunity for BRL to outperform in the coming weeks as the new administration takes over, given its recent market-friendly cabinet appointments and more orthodox economic agenda. Risks to this trade include a stronger USD and a less orthodox shift in rhetoric by the incoming administration.

## Long EUR/USD

**Exhibit 9:** Euro area current account surplus has narrowed to lowest level since Jan 2017



Source: Macrobond. Morgan Stanley Research

Hold (Entry: 4-Dec-18) Entry: 1.1382; Stop: 1.1265; Target: 1.1800

This trade first appeared in the FX Morning

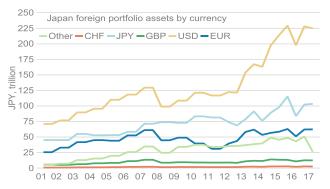
We think EURUSD is likely to rally from here. A strengthening of the CNY on the back of benign trade outcomes may support broader USD weakness, including against EUR. The Eurozone's current account surplus has fallen to the lowest level since early 2017 while the ECB continues to reduce its liquidity provision domestically as its asset purchases end later this year. Political momentum toward greater Eurozone fiscal integration continues to suggest greater capital demand in the future and a more sustainable euro-area outlook. The US outlook for assets

continuing to worsen, coupled with improving domestic fundamentals and tightening liquidity conditions, may continue the process of shrinking capital exports, bolstering EURUSD. A risk to the trade is that European growth slows notably, keeping the ECB dovish and supporting continued capital exports to the US, weighing on EURUSD.

## IDEA

### Short USD/JPY

**Exhibit 10:** Japanese foreign investments are predominantly held in the US



Source: Macrobond, Morgan Stanley Research

Hold (Entry: 4-Dec-18)

Entry: 113.12; Stop: 113.80; Target: 108.00

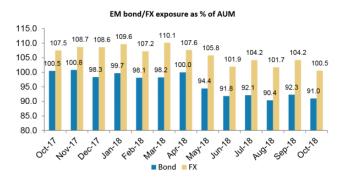
This trade first appeared in the FX Morning

USDJPY should fall further as a worsening US asset outlook raises the prospect of asset repatriation out of the US. The US yield curve continues to flatten while corporate bond spreads widen further. Japanese banks' participation in the USD market, helping to keep financial conditions loose and assets attractive, may slow as a flattening yield curve reduces the incentive for maturity transformation. Reduced participation by Japanese banks may tighten financial conditions and worsen the asset outlook, providing greater incentive for other real money investors like

lifers and pension funds to reduce their US exposure, driving USDJPY lower. A risk to the trade is that risk sentiment stays supported and the US outlook improves, incentivizing further foreign investment into the US by Japanese investors and pushing USDJPY higher.

### Short USD/ZAR

Exhibit 11: Positioning in EM is light



Source: Company website. Morgan Stanley Research

Hold (Entry: 21-Nov-18) Entry: 13.91; Stop: 14.50; Target: 13.00

In regard to the recent news around Eskom, our economists expect that the government is going to resist stepping in with debt relief for as long as possible. The ZAR has depreciated as any intervention might result in a downgrade in the sovereign credit by Moody's, but we maintain our constructive view. In line with our forecasts the SARB hiked rates by 25bp, which supported the ZAR. The question now is whether this is a one-off hike or the start of a cycle. Our economists believe that the MPC prefers not to fall behind its model-implied path, which suggests another 25bp rate hike in 2019. While we expect the hike to come in Q1

2019, the market has not fully priced it yet. We continue to hold our short USD/ZAR together with our existing long positions in EM. The break below 14.0 was technically important and opens up a move to 13.0.

### Short USD/IDR 3m NDF

Exhibit 12: Rates differential between Indonesia and the US continues to widen



Source: Bloomberg. Morgan Stanley Research

Hold (Entry: 15-Nov-18)

Entry: 14755; Stop: 14900; Target: 14300

BI has hiked 175bp cumulatively since May this year and IDR has stabilized. It suggests that BI focuses on IDR stability and wants to defend the currency proactively by increasing real rates and reducing Indonesia's vulnerability. Investors have been concerned about IDR's volatility and liquidity. With the introduction of DNDF and proactive rate hikes, we believe that investors could return to the bond market. Also, with our equity strategists' positive outlook on Indonesia equity, the inflows could help to strengthen IDR, in our view. Risks to this trade include a stronger USD and/or a deterioration in global risk appetite.

### Short USD/CLP 3m NDF

Exhibit 13: Copper positioning is now cleaner



Source: IMM, Morgan Stanley Research

Hold (Entry: 8-Nov-18)

Entry: 676; Stop: 695; Target: 624

With copper futures positioning now cleaner on a year-to-date basis and given the country's strong fundamentals, we think that short USDCLP positions look attractive. In our view, near-term trade risks, which have pressured the Chilean peso this year, are receding, which should give CLP some room to retrace its earlier losses. Risks to this trade include an escalation in the current USChina trade dynamic, or further declines in risk appetite.



### Short USD/SEK

**Exhibit 14:** SEK is the cheapest G10 currency, while USD is the most expensive



Source: Macrobond, Morgan Stanley Research

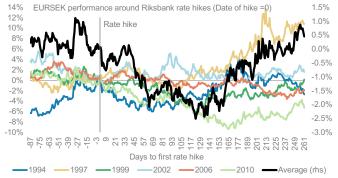
Hold (Entry: 1-Nov-18) Entry: 9.0900; Stop: 9.1700; Target: 8.7000

SEK looks poised to gain further. European FX looks oversold as investors have become increasingly bearish on the European economic and political outlook, pushing European currencies into oversold territory. SEK should gain as European economic data rebound from the current temporary slowdown, German and Italian political risks subside, and the ECB and Riksbank continue their hawkish tones. The recent weakness in consumer confidence and retail sales data are unlikely to deter the Riksbank, particularly as inflation pressures are likely to continue building amid a tightening labor market. SEK also remains cheap relative to its long-run REER while USD looks overvalued. A key risk to the

trade is that European economic data continue to worsen, weighing on European FX, including SEK.

### Short EUR/SEK

Exhibit 15: EURSEK tends to weaken going into a Riksbank rate hike



Source: Macrobond, Morgan Stanley Research

Hold (Entry: 4-Oct-18)

Entry: 10.4326; Stop: 10.3600; Target: 10.0000

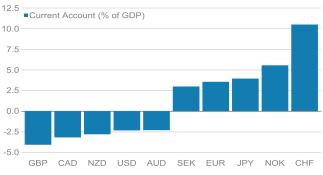
We tighten our stop to 10.3600. We think that SEK valuations are attractive. Indeed, SEK is the cheapest G10 currency when looking at its REER relative to historical averages. Meanwhile, EUR may stay offered in the coming weeks as concerns about political risk increase the incentive to hedge foreign investments, particularly for US-based investors where hedging costs are positive-yielding. SEK should benefit from improving fundamentals in Europe and the Riksbank has adopted a more hawkish tone, with our economists now expecting a hike in December, ahead of market expectations. The recent weakness in retail sales and consumer

confidence data is unlikely to deter the Riksbank, particularly as inflation pressures continue to build amid a tightening labor market. Sweden has also built up a record-high net foreign asset position of SEK 861 billion, suggesting more cushion from repatriation flows in the event of rising global volatility. Risks to the trade include the Riksbank turning more dovish and a significant sell-off in global risk appetite, weighing on SEK.



### Short AUD, CAD & NZD/USD & JPY

**Exhibit 16:** Currencies of highly indebted, current account deficit countries should underperform



Source: Macrobond, Morgan Stanley Research

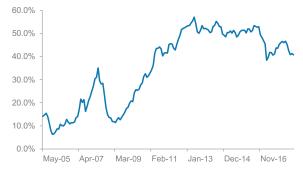
Limit Order (Entry: 28-Jun-18)
Entry: 100.00; Stop: 102.50; Target: 88.00

In an environment of rising protectionist risks, waning risk sentiment and declining global liquidity, we expect that currencies of countries with large current account deficits (which require funding from abroad) and weak balance sheets should underperform as investors seek safer assets like USD or JPY. These challenges are likely to support asset volatility, bolstering risk-aversion and rendering investors less willing to fund the deficits of currencies with asset quality risks without sufficient compensation, likely in the form of a weaker currency. We think that US economic data, while likely to decelerate from here,

remain solid enough to keep the Fed on track to continue hiking rates, further pressuring higher-risk currencies. The key risk to this trade is that risk sentiment remains supported, keeping USD and JPY weak.

## Long USD/MYR 3m NDF

Exhibit 17: MGS foreign ownership remains high



Source: Haver Analytics, Morgan Stanley Research

### Closed (Entry: 18-Oct-18) Entry: 4.1725; Closed at 4.1300 on 4-Dec-18

The rally in EM post-G2O pushed our long USD/MYR 3m NDF to hit the stop loss of 4.13. We still believe the trade makes sense given the concerns about market liquidity in local government market. Foreign investors are likely to use rally to sell, which we have observed in the past few months. We would use further rally in MYR to fade the move.



# Strategic FX Portfolio

Trade Recommendation	Notional	Entry Date	Entry Level	Current	Stop	Target	Spot P&L	Carry P&L	Portfolio Contribution
Closed Trades Long USD/MYR 3m NDF	\$10.0mn	18-Oct-18	4.1725		Closed at 4.130	0 on 4-Dec-18	-\$102.9k	-\$36.8k	-\$139.7k
Active Trades									
Short AUD, CAD, NZD vs USD, JPY	\$10.0mn	28-Jun-18	100.00	100.5334	102.50	88.00	-\$56.4k	-\$32.4k	-\$88.8k
Short EUR/SEK	\$10.0mn	4-Oct-18	10.4326	10.2376	10.3600	10.0000	\$187.3k	-\$0.4k	\$186.9k
Short USD/SEK	\$10.0mn	1-Nov-18	9.0900	8.9910	9.1700	8.7000	\$110.1k	-\$26.0k	\$84.1k
Short USD/CLP 3m NDF	\$10.0mn	8-Nov-18	676	676	695	624	\$81.1k	\$14.5k	\$95.6k
Short USD/IDR 3m NDF	\$10.0mn	15-Nov-18	14755	14798	14900	14300	-\$29.1k	\$38.3k	\$9.2k
Short USD/ZAR	\$10.0mn	21-Nov-18	13.91	14.09	14.50	13.00	-\$133.7k	\$17.4k	-\$116.3k
Long EUR/USD	\$10.0mn	4-Dec-18	1.1382	1.1387	1.1265	1.1800	\$4.4k	-\$1.5k	\$2.9k
Short USD/JPY	\$10.0mn	4-Dec-18	113.12	112.53	113.80	108.00	\$52.4k	-\$1.3k	\$51.2k
New Trades									
Sell USD/BRL 3m NDF	\$10.0mn	NY C	lose 6-Dec-18		4.0400	3.6200			

Source: Morgan Stanley Research; Changes in stops/targets in bold italics. (1) Stops are based on the WMR fixing. (2) The portfolio represents hypothetical, not actual, investments.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year return
2009	0.74	-0.97	-0.15	-1.09	0.50	-0.87	0.30	0.22	2.00	0.77	1.27	0.55	3.27%
2010	-0.01	-0.27	1.71	1.13	1.39	-0.86	-2.36	0.95	0.67	-0.30	0.13	0.66	2.80%
2011	-1.20	0.29	-1.71	0.51	-1.11	-0.33	0.84	-1.02	0.50	-1.03	-0.18	0.44	-3.97%
2012	0.34	0.46	-0.42	0.52	1.78	-0.43	0.39	0.56	0.43	0.53	0.96	0.47	5.72%
2013	-0.23	-0.66	0.08	0.10	0.26	0.05	-0.71	-0.13	-0.62	0.23	1.17	-0.27	-0.75%
2014	1.09	-0.67	-0.54	-0.02	-0.20	-0.26	1.20	0.30	1.23	0.35	-0.30	0.37	2.54%
2015	2.21	0.09	1.07	-1.96	1.40	-0.63	2.20	2.80	0.29	-0.35	0.49	0.17	7.77%
2016	-0.22	1.07	-1.46	-0.33	-1.11	0.03	-0.55	0.00	0.56	0.13	0.24	0.00	-1.63%
2017	-1.08	0.89	0.17	0.81	-1.03	-0.01	0.24	0.88	-1.06	0.25	-0.26	0.49	0.29%
2018	-0.42	0.35	-1.23	2.34	1.26	-2.68	-0.02	0.19	-1.04	0.99	-0.24	-1.40	-1.66%

Source: Morgan Stanley Research

For more details regarding calculations, please see "Reading FX Tactical Trade Performance" at the back of the FX Pulse. Trade FX Performance Data Package contains complete performance statistics. Reported returns are unleveraged. Reported returns do not take into account transaction fees and other costs; past performance is no guarantee of future results. (4) In the case that trade allocations are increased, entry levels are a weighted average.

\* Global Risk Demand Index – US Pat. No. 7,617,143. We updated our methodology for our portfolio in 2011 (see FX Pulse: Watching Europe, October 13, 2011).

Exhibit 18: History of recommendations

Sell												
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG	Gross P&L BP	Gross P&L US\$K
USD/CLP	3m	Sell USD/CLP 3m NDF	13-Sep-18	680.00	09-Oct-18	685.00	651.00	685.00	\$10m	CHN+3m Curncy		
Shor	t USD/IDR 3m	NDF										
Instrument	Maturity	Trade	Entry Date	Entry Level	Exit Date	Exit Level	Target/ Objective	Stop/Re- assess	Size of Trade or Unit/Notional	CUSIP/ISIN/ BLOOMBERG	Gross P&L BP	Gross P&L US\$K
USD/IDR	3m	Short USD/IDR 3m NDF	13-May-18	14360.00	07-Jun-18	14126.00	13500.00	14560.00	10m	IHN+3M Curncy		
USD/IDR	3m	Buy USD/IDR 3m NDF versus sell USDIDR 6m NDF	1-Oct-18	225.00	05-Oct-18	280.00	100.00	280.00	10k	IHN+3M Curncy		
USD/IDR	6m	Buy USD/IDR 3m NDF versus sell USDIDR 6m NDF	1-Oct-18	225.00	05-Oct-18	280.00	100.00	280.00	10k	IHN+6M Curncy		

Source: Morgan Stanley Research

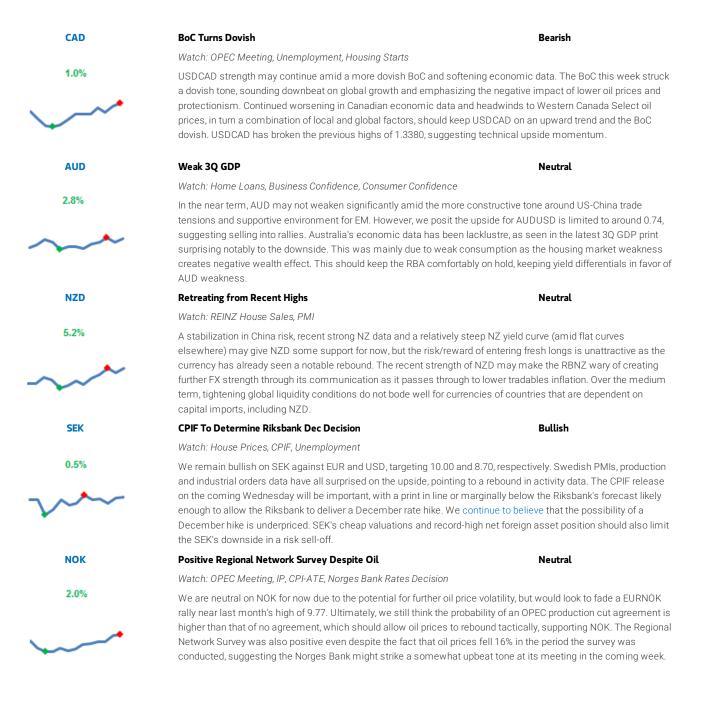


# G10 Currency Summary

#### Gek Teng Khoo, David Adams, Andrew Watrous, Chun Him Cheung







Charts show 3M performance against USD, as normally quoted and DXY for USD. Click on any currency for a reference webpage on Matrix.



# EM Currency Summary

### Ioana Zamfir (LatAm), Chun Him Cheung & Belle Chang (AxJ), Filip Denchev (CEEMEA)

ARS	Bullish
5.3%	Falling inflation expectations for two consecutive months in Argentina gave BCRA the option to remove the 60% rate floor. Subsequently, the authorities announced the removal of the floor and the implementation of a new crawling band of 2% starting in 1Q19 (versus 3%). While this announcement triggered some weakness in ARS, we remain bullish on the peso, but think that it will likely trade range-bound in the near term, as the markets navigate the broader risk environment and adapt to the recent BCRA changes in parallel.
BRL	Bullish
3.7%	In our view, the recent underperformance of BRL has been driven by a shortage of USD liquidity onshore, which led to an increase in implied USD yields versus implied BRL yields. The BCB's FX credit line auctions have relieved some of the pressure on the real, as the USD liquidity injected through these auctions helped to bring down the implied USD yield versus BRL, diminishing the incentives to sell the Brazilian currency. As onshore USD demand is alleviated, we expect BRL to continue retracing losses. The new president assumes office on January 1, with significant popular support, as suggested by recent polls. We see a window of opportunity for BRL to outperform in
	the coming weeks as the new administration takes over, given its recent market-friendly cabinet appointments and more orthodox economic agenda.
CLP	Bullish
-1.0%	The fundamental story in Chile remains attractive and supportive for CLP, with relatively strong economic growth and a more sustained increase in business sentiment helping to drive investment. With near-term trade risks in the price and a more positive outlook for copper, according to our commodities strategists, we expect CLP to gain some momentum in the weeks to come.
СОР	Bearish
-0.7%	With risks for oil tilted to the downside, and inexpensive carry, COP looks vulnerable relative to its LatAm peers. Moreover, Colombia requires comprehensive fiscal reform to maintain its investment grade credit rating (more long-term) and cover a COP 14 trillion gap in the 2019 budget (more immediate). However, the modified tax bill that is being introduced in Congress now excludes some of the initial proposals (e.g., expanding the VAT base to include basic foods). In our view, the proposed tax bill does not sufficiently address the broader fiscal concerns and we remain cautious on Colombian assets.
MXN	Bearish
3.1%	We think that investor confidence had already been affected going into the airport consultation, and risk premium in local assets should continue to increase. We see the 2019 budget (likely to be presented in the first days of December) as the potential catalyst for further weakness. In our view, even if a balanced budget is presented for 2019, potential concerns about assumptions on growth and/or savings from spending reengineering will likely tilt risks to the downside.
PEN	Neutral
0.3%	Loose monetary conditions with improving investment but little to no inflation should keep monetary policy anchored. We note that the new administration has started to put forth objectives on improving investment, increasing tax revenues and boosting growth.
^ ^	

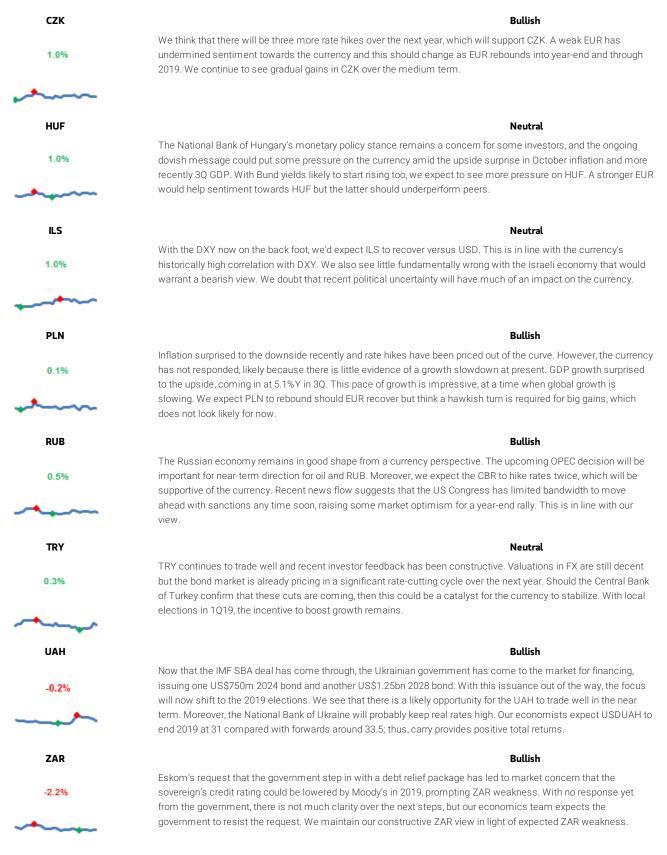
# Morgan Stanley | RESEARCH



CNY **Bearish** CNY experienced a sharp rally in the days following the favourable outcome from the Xi-Trump meeting. On -0.8% Wednesday, the Chinese government issued a press release noting that it would work with the US with a precise deadline to fulfill agreements reached. We think these are signals that may trigger some short-term momentum for CNYUSD as well as the RMB TWI. However, over the medium term, we remain bearish on CNY as we see CNY underperforming the majority of EM Asia due to divergent monetary policies. We recommended going long SGDCNH as one of our top trades for 2019. **INR Bullish** The RBI kept the policy rate unchanged at 6.5% and maintains its monetary policy stance of calibrated tightening. -3.6% Inflation projections were revised lower and our economists expect CPI to stay benign. Easing inflation pressure continues to suggest a continuing INR recovery. Our economists expect strong growth in India compared to its regional peers and pencil in 50bp of hikes by the RBI in 2019. With rate differentials against the US remaining high and given our DXY weakness view, we are bullish on INR. **IDR Bullish** With BI's proactive policy hikes since May 2018 increasing real rates and reducing IDR vulnerability, we're bullish on IDR, given the attractive carry. In addition, with our bearish view on DXY and a more dovish Fed, we could see a -3.8% further reduction in the funding pressure on Indonesia's current account deficit. Foreign capital continues to flow into bond and equity markets, and could support IDR. With our commodity strategists expecting oil prices to stay below US\$80 until 3Q19, we remain IDR bullish in the longer term. KRW **Bearish** The BoK raised its policy rate by 25bp at its November meeting to help ease financial imbalances derived from the household debt issue. However, the central bank reiterated that monetary policy is still accommodative as the -0.8% inflation trajectory is likely to stay benign. The slowing global economy, Korea's dependence on exports and the absence of a more aggressive fiscal policy stimulus do not bode well for the Korean economic outlook and thus our economists expect no further hike by the BoK in 2019. Thus we remain bearish on KRW compared to other Asia FMFX MYR **Bearish** We estimate that USDMYR is one of the most sensitive AXJ FX pairs to an S&P sell-off. Our equity strategists see further S&P weakness towards end-2018, and we'd expect a higher USDMYR should the historical relationship hold. -0.5%Moreover, Malaysia is one of the few oil exporters in Asia and, with crude prices below US\$60 per barrel, this should add further downward pressure on MYR. Lastly, the latest inflation figures show that GST zeroisation took more than 1pp off headline inflation and will likely keep BNM firmly on hold despite 3Q growth staying robust. SGD Neutral We think that the MAS is likely to continue its current appreciation slope for S\$NEER, suggesting a stronger SGD. -0.1% According to our MS SGD NEER model and the BIS trade weights, the US and China are the two most weighted countries. Thus, as we expect DXY weakness and a lower CNY NEER, USDSGD could outperform its regional peers. In addition, our economists expect Singapore GDP growth to continue to stay at a healthy level. TWD Neutral The G20 meeting outcomes and the November election results could suggest some temporary support for TWD 0.4% as the KMT party won a majority at the local government elections. With our equity strategists' neutral stance on the Taiwanese stock market and the low-volatility characteristic of TWD, the currency is likely to stay relatively stable. In addition, our economists expect the CBC to stay on hold in 2019, given our moderating GDP growth and CPI forecasts, posing some downward pressure on the currency. THB Neutral Thailand's 3Q GDP figures surprised significantly to the downside and may deter the BoT from hiking at the upcoming meeting in mid-December. At the November meeting, three out of seven governors voted for a hike as -0.8% growth conditions were considered to be sufficiently robust and financial stability concerns were rising. For the time being, we remain neutral on THB as EM sentiment towards Asia's high-yielders such as INR and IDR is reviving. Moreover, the upward momentum in Thailand's inflation seems to have turned and may be an impedient to the BoT turning more hawkish.

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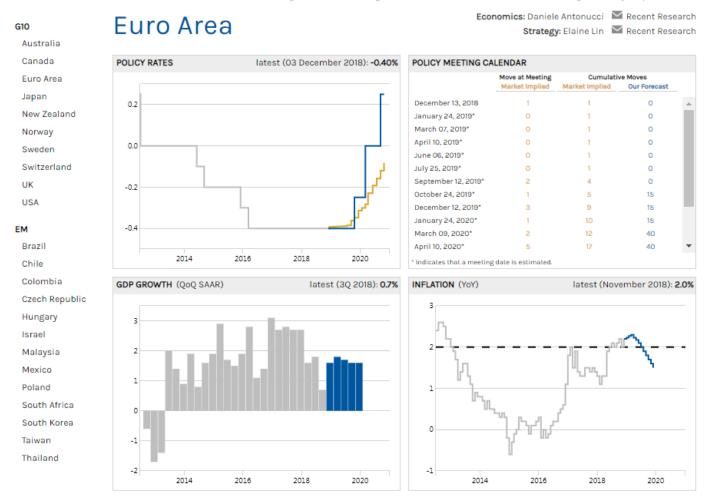


Charts show 1M performance against USD, as normally quoted.



## Central Bank Watch

Click on the countries to switch between them. Click on the G10 and EM headings for forecast rate changes. Click on the Rates, Growth and Inflation chart headings for country comparisons.



Morgan Stanley Research. Please see our Global Macro Forecast page for forecasts of countries not included in this interactive. With thanks to the AlphaWise Interactive Team for their contribution to this report.



# Global Event Risk Calendar

Gek Teng Khoo, Andrew Watrous

Date	Time (Ldn)	Ссу	Event	Ref. Period	MS forecast	Market	Previous
7-Dec	N/A	CNY	Foreign Reserves	Nov		3044B	3053.1B
	10:00	EUR	Eurozone GDP (QoQ)	3Q F	0.2%	0.2%	0.2%
	13:30	USD	Change in Nonfarm Payrolls	Nov	198k	198k	250k
	13:30	USD	Unemployment Rate	Nov	3.7%	3.7%	3.7%
	13:30	CAD	Employment Change	Nov	21.8k	10k	11.2k
	15:00	USD	Wholesale Inventories (MoM)	Oct F		0.7%	0.7%
	15:00	USD	Univ. of Michigan Confidence	Dec P		97	97.5
	N/A	ARS	BCRA Rates Decision				
7-8 D	N/A	EUR	CDU Party Congress				
8-Dec	N/A	CNY	Trade Balance	Nov	\$30.7B	\$34B	\$34.02B
	N/A	CNY	Exports (YoY)	Nov	8.0%	9.9%	15.6%
8-18 D	N/A	CNY	Foreign Direct Investment (YoY, CNY)	Nov			7.2%
9-Dec	1:30	CNY	CPI (YoY)	Nov	2.5%	2.4%	2.5%
	23:50	JPY	GDP (Q <sub>0</sub> Q)	3Q F		<b>-2</b> %	-1.2%
	23:50	JPY	Trade Balance BoP Basis	Oct			¥323.3B
10-Dec	6:45	CHF	Unemployment Rate	Nov		2.5%	2.4%
	7:00	NOK	CPI Underlying (YoY)	Nov			1.6%
	8:30	SEK	Household Consumption	Oct			0.1%
	9:00	CHF	SNB Sight Deposits				576.9B
	9:30	GBP	Visible Trade Balance (GBP mn)	Oct		£-10.7B	£-9.7B
	9:30	GBP	Industrial Production (MoM)	Oct		0.2%	0%
	9:30	GBP	GDP (Monthly Estimate, 3M/3M)	Oct		0.4%	0.6%
	N/A	GBP	UK House of Commons Debate on Brexit Deal (Day 4)	)			
	13:15	CAD	Housing Starts	Nov			206k
	15:00	USD	JOLTs Job Openings	Oct			7.01m
	22:30	AUD	Consumer Confidence				119.5
	23:50	JPY	M3 (YoY)	Nov			2.3%
	N/A	ARS	BCRA Rates Decision				
10-15 D	N/A	CNY	New Yuan Loans	Nov		1200B	697B
11-Dec	0:30	AUD	NAB Business Confidence	Nov			4.1
	7:00	NOK	GDP (MoM)	Oct			-0.5%
	9:30	GBP	Average Weekly Earnings (Ex. Bonuses, 3M/Y)	Oct		3.2%	3.2%
	9:30	GBP	ILO Unemployment Rate 3Mths	Oct		4.1%	4.1%
	10:00	EUR	German ZEW Survey Expectations	Dec		-24	-24.1
	10:00	EUR	Eurozone ZEW Survey Expectations	Dec			-22
	19:15	NZD	RBNZ's Orr spks (Parliament)				
	23:30	AUD	Westpac Consumer Confidence	Dec			104.34
	23:50	JPY	Domestic CGPI (YoY)	Nov		2.5%	2.9%
	23:50	JPY	Machine Orders (MoM)	Oct		10%	-18.3%
	N/A	ARS	BCRA Rates Decision				



	N/A	GBP	UK House of Commons Debate Vote On Brexit Deal (V	ote from 19:00)			
12-Dec	4:30	JPY	Tertiary Industry Index (MoM)	Oct		0.8%	-1.19
	8:30	SEK	CPI CPIF (YoY)	Nov			2.49
	10:00	EUR	Industrial Production (MoM)	Oct		0.5%	-0.39
	13:30	USD	CPI (YoY)	Nov	2.2%	2.2%	2.5%
	20:20	BRL	COPOM Rates Decision		6.50%	6.5%	6.59
	23:50	JPY	Japan MoF Weekly Security Flow				
	N/A	ARS	BCRA Rates Decision				
13-Dec	0:00	NZD	Half-Year Fiscal, Economic Update				
	7:00	EUR	German CPI (YoY)	Nov F		2.3%	2.3%
	7:00	SEK	Prospera Swedish Inflation Expectations Survey				
	8:00	PHP	BSP Rates Decision		4.75%	4.75%	4.759
	8:30	CHF	SNB Rates Decision		-0.75%	-0.75%	-0.759
	8:30	SEK	Unemployment Rate	Nov			5.5%
	9:00	NOK	Norges Bank Rates Decision		0.75%		0.75%
	9:00	NOK	Norges Bank Monetary Policy Report				
	9:00	CHF	SNB Press Conference				
	9:30	NOK	Norges Bank Press Conference				
	11:00	TRY	CBT Rates Decision		24.00%	24%	249
	12:45	EUR	ECB Rates Decision		0.00%	0%	09
	12:45	EUR	ECB Deposit Facility Rate		-0.40%	-0.4%	-0.49
	13:30	EUR	ECB Press Conference				
	13:30	USD	Initial Jobless Claims			225k	231
	14:30	EUR	ECB Staff Projections				
	19:00	ARS	CPI (MoM)	Nov			5.4%
	21:30	NZD	Manufacturing PMI	Nov			53.5
	22:00	AUD	PMI Manufacturing	Dec P			54.6
	22:00	AUD	PMI Services	Dec P			53.
	23:00	PEN	BCRP Rates Decision		2.75%		2.75%
	23:50	JPY	Tankan Large Manufacturing Index	4Q		18	19
	N/A	ARS	BCRA Rates Decision				•
14-Dec	2:00	CNY	Retail Sales (YoY)	Nov		8.8%	8.6%
	2:00	CNY	Industrial Production (YoY)	Nov		5.9%	5.9%
	2:00	CNY	Fixed Assets Ex Rural YTD (YoY)	Nov		5.9%	5.79
	4:30	JPY	Industrial Production (MoM)	Oct F		0.570	2.99
	8:30	EUR	PMI Manufacturing	Dec P		52	51.8
	8:30	EUR	PMI Services	Dec P		53.5	53.
	9:00	PLN	CPI (YoY)	Nov F		30.0	1.29
	10:30	RUB	CBR Rates Decision	NOVI	7.75%	7.5%	7.59
	13:30	USD	Retail Sales Advance (MoM)	Nov	0.2%	0.2%	0.89
	14:15				0.2%		
		USD	Industrial Production (MoM)	Nov		0.35%	0.19
	14:15	USD	Capacity Utilization	Nov		78.6%	78.4%
	14:45	USD	PMI Manufacturing	Dec P		54.4	54.
	14:45	USD	PMI Manufacturing	Dec P		0.50	55.
	15:00	USD	Business Inventories	Oct		0.5%	0.39
	N/A	ARS	BCRA Rates Decision				
15-Dec	10:30	EUR	ECB's Draghi spks				
16-Dec	21:30	NZD	Performance Services Index	Nov			55.4



		,	•				
17-Dec	7:00	NOK	Trade Balance	Nov			34.9
	9:00	CHF	SNB Sight Deposits				
	10:00	EUR	CPI (YoY)	Nov F			2%
	13:30	USD	Empire Manufacturing	Dec			23.3
	14:00	CAD	Existing Home Sales (MoM)	Nov			-1.6%
	15:00	USD	NAHB Housing Market Index	Dec			60
	21:00	USD	Total Net TIC Flows	Oct			-29.1E
	22:30	AUD	Consumer Confidence				119.5
	N/A	ARS	BCRA Rates Decision				
7-20 D	N/A	JPY	Nationwide Dept Sales (YoY)	Nov			1.6%
8-Dec	0:30	AUD	RBA Minutes	Dec-4			
	9:00	EUR	IFO Expectations	Dec			98.7
	9:20	NOK	Norges Bank's Olsen spks				
	13:00	HUF	NBH Rates Decision		0.90%		0.9%
	13:30	CAD	Manufacturing Sales (MoM)	Oct			0.18%
	13:30	USD	Housing Starts	Nov		1240k	1228k
	19:00	ARS	GDP (YoY)	3Q			-4.2%
	23:30	AUD	Westpac Leading Index (MoM)	Nov			0.08%
	23:50	JPY	Trade Balance	Nov			-450.1B
	N/A	ARS	BCRA Rates Decision				
8-24 D	N/A	GBP	GfK Consumer Confidence	Dec			-13
9-Dec	7:05	ТНВ	BoT Rates Decision		1.75%	1.75%	1.5%
	8:00	SEK	Economic Tendency Survey	Dec			106.7
	9:30	GBP	CPI (YoY)	Nov			2.4%
	10:00	EUR	Construction Output (MoM)	Oct			2%
	13:30	USD	Current Account Balance	3Q			-101.5
	13:30	CAD	CPI (YoY)	Nov			2.4%
	15:00	USD	Existing Home Sales	Nov		5.23m	5.22m
	19:00	USD	FOMC Rate Decision (Upper Bound)		2.50%	2.5%	2.25%
	19:00	USD	Fed Summary of Economic Projections				
	19:30	USD	FOMC Press Conference				
	21:45	NZD	Trade Balance	Nov			-1295m
	21:45	NZD	GDP (Q <sub>0</sub> Q)	3Q			1%
	23:50	JPY	Japan MoF Weekly Security Flow				
	N/A	ARS	BCRA Rates Decision				
20-Dec	N/A	JPY	BoJ Rates Decision		-0.10%		-0.1%
	N/A	JPY	BoJ 10y Yield Target		0.00%		0%
	0:30	AUD	Employment Change	Nov			32.8k
	2:00	NZD	Credit Card Spending (MoM)	Nov			-0.1%
	4:30	JPY	All Industry Activity Index (MoM)	Oct			-0.9%
	6:30	JPY	BoJ Press Conference				
	N/A	IDR	BI Rates Decision		6.00%		6%
	8:30	SEK	Riksbank Rates Decision		-0.25%		-0.5%
	8:30	SEK	Riksbank Monetary Policy Report				
	9:00	EUR	Euro-Area Current Account	Oct			16.9B
	N/A	TWD	CBC Rates Decision		1.375%		1.375%
	<b>N/A</b> 9:30	<b>TWD</b> GBP	CBC Rates Decision Retail Sales (MoM)	Nov	1.375%		<b>1.375%</b> -0.4%

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	12:00	GBP	BoE Rates Decision		0.75%		0.75%
	12:00	CZK	CNB Rates Decision		1.75%		1.75%
	13:30	USD	Philadelphia Fed Business Outlook	Dec			12.9
	13:30	USD	Initial Jobless Claims				
	15:00	USD	Leading Index	Nov			0.1%
	19:00	MXN	Banxico Rates Decision		8.25%		8%
	21:00	NZD	ANZ Consumer Confidence Index	Dec			118.6
	23:30	JPY	CPI (YoY)	Nov			1.4%
	N/A	ARS	BCRA Rates Decision				
21-Dec	8:30	SEK	Retail Sales (MoM)	Nov			-1.1%
	9:30	GBP	PSNB ex Interventions	Nov			8.8B
	9:30	GBP	Current Account Balance	3Q			-20.3B
	9:30	GBP	GDP (QoQ)	3Q F			0.6%
	13:30	CAD	Retail Sales (MoM)	Oct			0.2%
	13:30	CAD	GDP (YoY)	Oct			2.1%
	13:30	USD	GDP (QoQ)	3Q T		3.5%	3.5%
	13:30	USD	PCE Core (QoQ)	3Q T			1.5%
	13:30	USD	Durable Goods Orders	Nov P		-2.4%	-4.3%
	15:00	EUR	Consumer Confidence	Dec A			-3.9
	15:00	CAD	Business Outlook Future Sales				15
	15:00	CAD	BoC Senior Loan Officer Survey				-10.94362
	15:00	USD	Personal Spending	Nov		0.3%	0.6%
	15:00	USD	PCE Core (YoY)	Nov			1.8%
	15:00	USD	Univ. of Michigan Confidence	Dec F		97	97.5
	16:00	USD	Kansas City Fed Manufacturing Activity	Dec			15
	N/A	COP	BDRC Rates Decision		4.25%		4.25%
	N/A	ARS	BCRA Rates Decision				
<b>Upcoming Risk</b>	c Events						
9-Jan	15:00	CAD	BoC Rates Decision	Jan	2.00%		1.75%
5-Feb	3:30	AUD	RBA Rates Decision	Feb	1.50%		1.50%
13-Feb	1:00	NZD	RBNZ Rates Decision	Feb	1.75%		1.75%

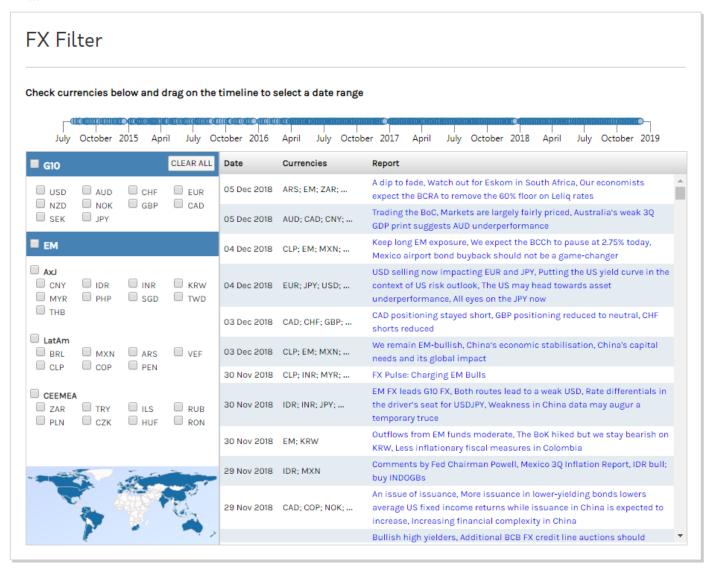
N/A denotes timing approximate or not confirmed / All times and dates are GMT and correct as of the date of publication / For a full list of economic events, see the calendar on the Morgan Stanley Matrix Platform.



# Currency Research Filter

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FX Filter



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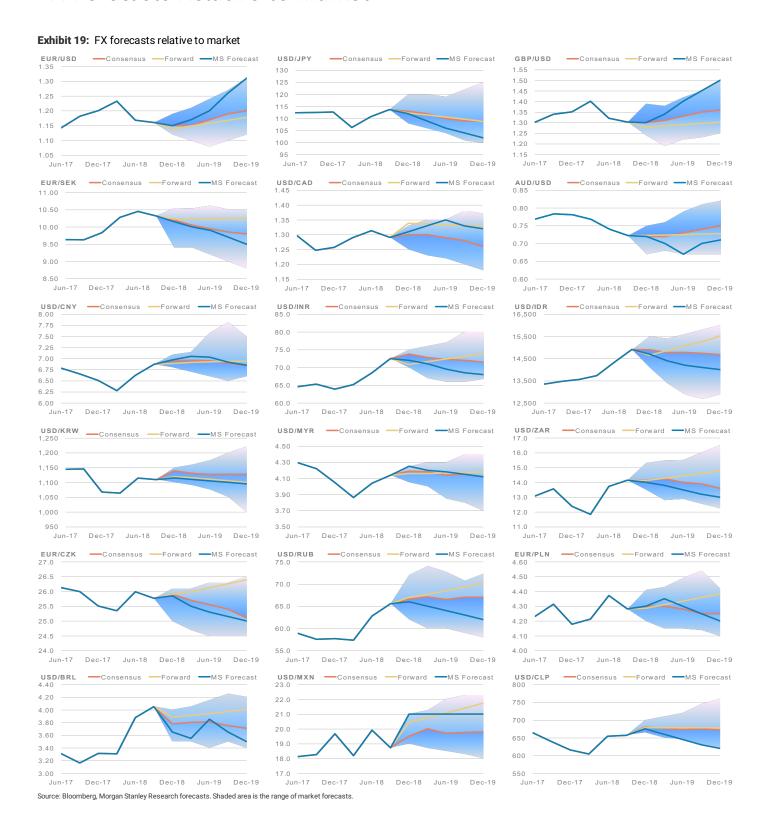
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## FX Forecasts Relative to Market





# Morgan Stanley Global Currency Forecasts

Exhibit 20: FX Forecasts - click here for custom forecasts

	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20
EUR/USD	1.15	1.17	1.20	1.26	1.31	1.34	1.36	1.37	1.38
USD/JPY	112	109	106	104	102	100	98	96	94
GBP/USD	1.30	1.34	1.40	1.45	1.50	1.54	1.58	1.59	1.60
USD/CHF	1.00	1.00	0.99	0.97	0.94	0.93	0.93	0.93	0.93
USD/SEK	8.83	8.55	8.25	7.70	7.25	7.09	7.06	7.08	7.10
USD/NOK	8.43	8.29	8.00	7.46	7.10	6.94	6.91	6.93	6.96
USD/CAD	1.31	1.33	1.35	1.33	1.32	1.31	1.30	1.29	1.28
AUD/USD	0.72	0.70	0.67	0.70	0.71	0.72	0.73	0.74	0.75
NZD/USD	0.67	0.65	0.62	0.66	0.67	0.68	0.69	0.70	0.71
EUR/JPY	129	128	127	131	134	134	133	132	130
EUR/GBP	0.88	0.87	0.86	0.87	0.87	0.87	0.86	0.86	0.86
EUR/CHF	1.15	1.17	1.19	1.22	1.23	1.25	1.26	1.27	1.28
EUR/SEK	10.15	10.00	9.90	9.70	9.50	9.50	9.60	9.70	9.80
EUR/NOK	9.70	9.70	9.60	9.40	9.30	9.30	9.40	9.50	9.60
USD/CNY	6.97	7.05	7.03	6.92	6.85	6.81	6.78	6.77	6.75
USD/HKD	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80
USD/IDR	14700	14400	14200	14100	14000	13900	13800	13700	13600
USD/INR	72.0	71.0	69.5	68.5	68.0	67.5	67.0	66.5	66.0
USD/KRW	1115	1110	1105	1100	1095	1090	1085	1080	1075
USD/MYR	4.25	4.20	4.18	4.15	4.12	4.10	4.08	4.05	4.02
USD/PHP	52.5	52.4	52.3	52.2	52.1	52.0	52.0	52.0	52.0
USD/SGD	1.37	1.34	1.32	1.29	1.28	1.28	1.27	1.26	1.26
USD/TWD	30.6	30.4	30.2	30.0	29.8	29.7	29.7	29.6	29.5
USD/THB	32.8	32.5	32.2	31.8	31.4	31.0	30.5	30.0	30.0
USD/BRL	3.65	3.55	3.85	3.65	3.50	3.50	3.55	3.60	3.60
USD/MXN	21.00	21.00	21.00	21.00	21.00	20.75	20.50	20.50	20.50
USD/ARS	37.00	39.50	41.25	42.50	43.50	44.15	44.75	46.00	42.00
USD/CLP	675	660	645	630	620	610	600	590	580
USD/COP	3135	3100	3060	3030	3010	3010	3000	2975	2975
USD/PEN	3.35	3.32	3.29	3.26	3.23	3.22	3.21	3.20	3.20
USD/ZAR	14.0	13.8	13.5	13.2	13.0	13.3	13.6	13.9	14.2
USD/TRY	5.50	5.50	5.60	5.70	5.80	5.90	6.00	6.10	6.20
USD/ILS	3.65	3.60	3.55	3.50	3.45	3.40	3.40	3.40	3.40
USD/RUB	66.0	65.0	64.0	63.0	62.0	61.0	60.0	60.0	60.0
EUR/PLN	4.30	4.35	4.30	4.25	4.20	4.15	4.10	4.10	4.10
EUR/CZK	25.9	25.5	25.3	25.2	25.0	25.0	24.8	24.5	24.3
EUR/HUF	325	330	325	320	315	315	315	315	315
EUR/RON	4.67	4.70	4.67	4.65	4.60	4.60	4.60	4.60	4.60
DXY Index	96	94	92	88	85	84	82	82	81
Fed's Broad USD Index	128	127	126	124	122	120	119	119	118

Source: Morgan Stanley Research Forecasts. Forecasts were updated on November 25, 2018.



# **Appendix**

The **Strategic FX Portfolio Trade Recommendations** page presents the portfolio of tactical trade ideas of the FX Strategy team and the performance of this portfolio over time.

**Strategic FX Portfolio Trade Recommendations** (Note: The portfolios represent hypothetical, not actual, investments.)

- On 10 June, 2010, we implemented changes to our portfolio to make it more robust and to better reflect our confidence levels and relative risk. A detailed explanation of this change can be found in "Portfolio Methodology Update" (10 June 2010).
- In summary, the trades and the weightings are primarily reviewed weekly on Thursdays and published in the Pulse. However, if we think there has been a material change to the risk-reward, we will make intraweek changes. We monitor trades daily. We will continue to publish the portfolio as a list of trades where our strongest conviction ideas will be given the largest weightings. We will, however, also adjust the weights of trades in order to manage our risk exposure.
- A table showing the trade, trade weight, trade entry date, risk allocation and levels for (average) entry, current, stop and target will be shown in the Strategic FX Portfolio Trade Recommendations section of the FX Pulse.
- If we increase the weighting allocated to a trade, the entry level published in the table will be changed to reflect a proportionally weighted rate of the initial entry level and the entry level on the date the weight was increased.

#### **Performance Statistics**

- We rebalance our portfolio daily at the NY close to keep the weight of each trade consistent with the published weight.
- We will primarily enter and exit trades using the bid or offer rate of the WMR fixing. If we make an intraday change to our portfolio, we will cite the closest Bloomberg half hourly fix in our published note and enter/exit at this rate.
- Stops or targets will be triggered if the stated level is met at the WMR fix.
- Returns shown include the cost of carry using the 1W interbank deposit rate if this is quoted liquidly but do not include any other expenses, slippage or fees and no interest on cash holdings are included. Reported returns are not levered.
- We have re-estimated our returns from 22 June 2006 to 10 June 2010, when we re-launched the portfolio, to take into account our more robust calculation technique.
- We provide a monthly breakdown of our historical portfolio performance back to Jan 2005 in the Strategic FX Portfolio section of the Pulse.



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Historical data for all these models can be found on the Morgan Stanley Matrix Platform. See *New FX Strategy Interactive Features* (January 17, 2014). Click here for a currency reference page:

Morgan Stanley Matrix



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(as of November 30, 2018)

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	COVERAGE UI	NIVERSE	INVESTMEN	IT BANKING CLI	ENTS (IBC)	OTHER MAINVESTMENT CLIENTS	SERVICES
STOCK RATING	COUNT	% OF	COUNT	% OF	% OF	COUNT	% OF
CATEGORY		TOTAL		TOTAL IBC	RATING		TOTAL
					CATEGORY		OTHER
							MISC
Overweight/Buy	1156	37%	295	40%	26%	541	38%
Equal-weight/Hold	1405	44%	342	47%	24%	641	45%
Not-Rated/Hold	46	1%	7	1%	15%	7	0%
Underweight/Sell	555	18%	85	12%	15%	226	16%
TOTAL	3,162		729			1415	

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