A weaker Chinese Yuan: Contagion or confusion for global currencies?

While weakness in the Chinese yuan (CNY) is being touted as a source of global market risk, we find limited evidence of broad-based contagion from independent CNY weakness – with the spillover effects varying across regions and specific currencies. Our view for a more stable CNY could see Asia FX tactically outperform the more vulnerable CEEMEA FX space

Key messages: Limited signs of broad-based contagion from a weaker CNY

- While in the currency space, the Chinese yuan (CNY) has been one of the biggest direct casualties of President Trump's rampant trade war, we attempt to unravel the extent to which CNY weakness has been a source of risk for global FX markets.
- We find limited evidence of broad-based contagion from independent (non-USD-related) CNY moves in the current trade war episode – with the spillover effects varying across regions and specific currencies. We also note that the spillover effects vary over time depending on the prevailing PBoC FX policy regime.

- Regional disparities show that Asian FX suffered the most collateral damage from a weaker CNY as the US-China trade war has escalated, with the cross-correlations between other EM FX blocs (Latam and CEEMEA) and the yuan significantly lower.
- We expect the removal of CNY weakness as a source of market risk to remove the depreciation bias in highly correlated currencies – and allow for both a relative relief rally and local factors to dictate currency movements. While under benign conditions, Asian currencies would have probably seen a sharper relief rally under a more relatively stable CNY, the current market turmoil in EM FX – namely Turkey and Russia – is likely to counteract any broad move lower in USD/Asia FX.
- We think a more stable CNY could allow for a relative outperformance of Asia FX versus CEEMEA FX – with the latter group of currencies playing catch-up to the more oversold Asian currency bloc. More specifically, we also see some spillovers from the fragile risk environment (TRY collapsing, USD/CNY higher, EUR/USD below 1.1500) into the CEE FX – with HUF underperforming the CEE region.
- With EMEA a source of geopolitical risk, we think it will be difficult for the ZAR to also stabilise – in effect the Rand's source of market risk has shifted from a weaker CNY to a weaker TRY and RUB.

PBoC FX policy regime influences CNY co-movement with global currencies

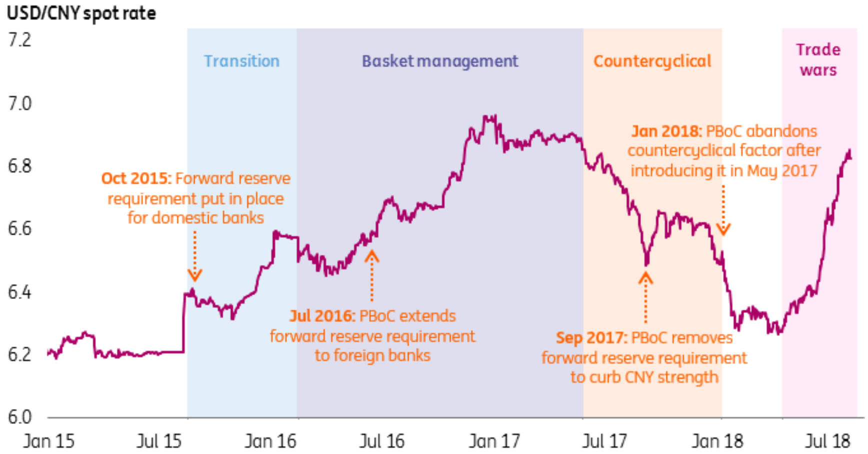
Ever since the PBoC devalued the yuan on 11 August 2015 – a move that was seen to make the currency more flexible and free-floating – sharp movements in USD/CNY have anecdotally been an important source of market risk for global currencies (notably those that are particularly sensitive to the Chinese trade or commodity story). But as the PBoC's FX policy has evolved since August 2015, so too has the relative importance of USD/CNY movements in influencing global FX markets.

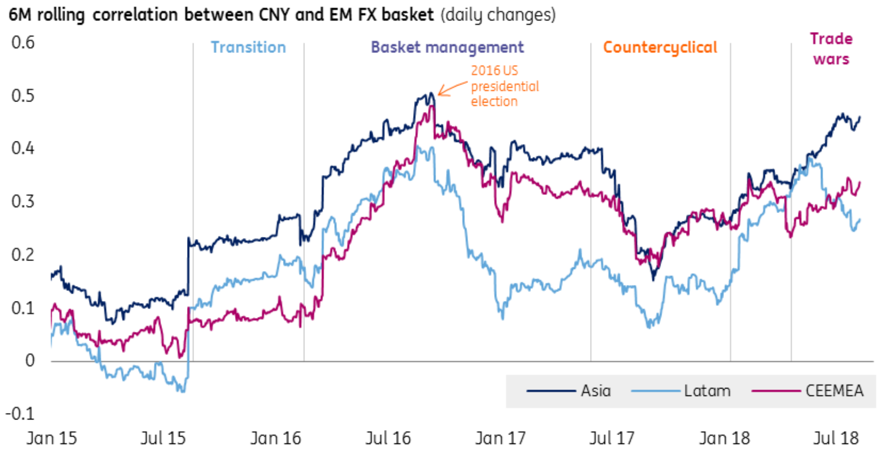
We attempt to unravel to the extent to which CNY weakness of late has been a dragging force on currencies elsewhere. In line with a recent study by the BIS, we identify three PBoC FX policy phases since the CNY devaluation on 11 August 2015: (1) **Transition** after the fixing reform; (2) **Basket management** that was aimed to keep CNY stable against major trading partner currencies; (3) **Countercyclical management** that gave the PBoC some flexibility to prevent herd-like behaviour in markets. We also add a fourth phase to depict the start of the **US-China trade war** era (see Box 2 at the end of the note for more detail on the four CNY policy phases).

The second chart below shows that the rolling correlation between daily moves in CNY and three regional FX baskets (Asia, Latam and CEEMEA) has ebbed and flowed materially since August 2015 – with changes in the PBoC FX policy approach broadly marking distinct regime shifts. Here we make our first two concluding observations:

1. **Asian currencies have retained the tightest correlation with USD/CNY moves since the US-China trade war began**, while other regional currency blocs have been less tightly correlated. Latam FX overall has been driven more by local factors than CNY weakness.
2. **The PBoC FX policy regime matters for the overall correlation between USD/CNY and global currencies** – with global currencies generally more sensitive to CNY depreciation episodes (as opposed to CNY appreciation episodes). Should CNY weakness persist, our economists believe the PBoC's likely next step would be a return to the 'countercyclical factor' – and this in itself could be seen as the central bank steadying the USD/CNY ship. In this instance, we would expect USD/CNY stability to also remove the depreciation bias in

highly correlated currencies – and allow for both a more sizable relief rally and local factors to dictate currency movements.





Source: ING estimates, Bloomberg. Note: Basket currencies are USD crosses; Asia Basket = AUD NZD KRW IDR INR MYR PHP SGD THB TWD; Latam Basket = BRL MXN CLP COP PEN; CEEMEA Basket = RUB TRY ZAR HUF CZK PLN.

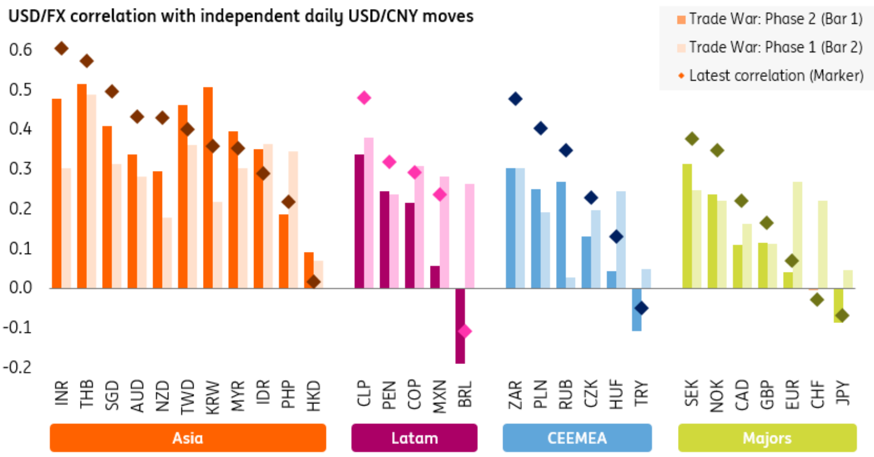
Individual currencies show differentiation in their sensitivity to CNY

Focusing on the current trade war episode, we break down the USD/CNY move higher into two distinct phases. The initial move from 6.25 to 6.40 was largely a broad USD-related move – with the greenback gaining ground on the back of a short USD positioning adjustment and higher US rates story. The second leg higher in USD/CNY, from 6.40 to 6.85-6.90 (current), is what we deem to be more idiosyncratic CNY weakness – and coincides with the Trump administration escalating the US-China trade war by looking into US$200bn worth of tariffs on Chinese imports.

The chart below shows the correlation of individual currencies to independent CNY moves during these two phases. To draw a more accurate inference of the co-movement between CNY and global currencies, we control for daily USD/CNY moves that are broadly USD related (see Box 1 at the end of the note for our methodology).

While the regional disparities are clear – with Asia FX exhibiting a structurally higher co-movement with CNY during Phase 2 of the current Trade War – there are also some interesting intra-regional disparities. Within Latam, the **Chilean peso (CLP)** has been most sensitive to CNY weakness – given its particular sensitivity to the Chinese commodity (copper) trade story. Within CEEMEA, the **South African Rand (ZAR)** has exhibited the tightest co-movement with CNY – again for a similar reason given ZAR's sensitivity to the commodity markets.

Cross-correlations between CNY and global FX in the 2018 Trade War era



Source: ING estimates, Bloomberg, Macrobond. Note: Chart shows average of 40-day rolling correlations for sample period. Also see Box 1 below for the methodology we use to determine independent CNY moves

Two scenarios going forward: CNY slump or CNY stability?

The purpose so far has been to highlight the limited evidence of broad-based contagion from the recent sharp CNY depreciation. Pinpointing the differentiation in the sensitivity of individual currencies to USD/CNY moves can help to identify any relative value opportunities – based on the two broad scenarios for CNY going forward:

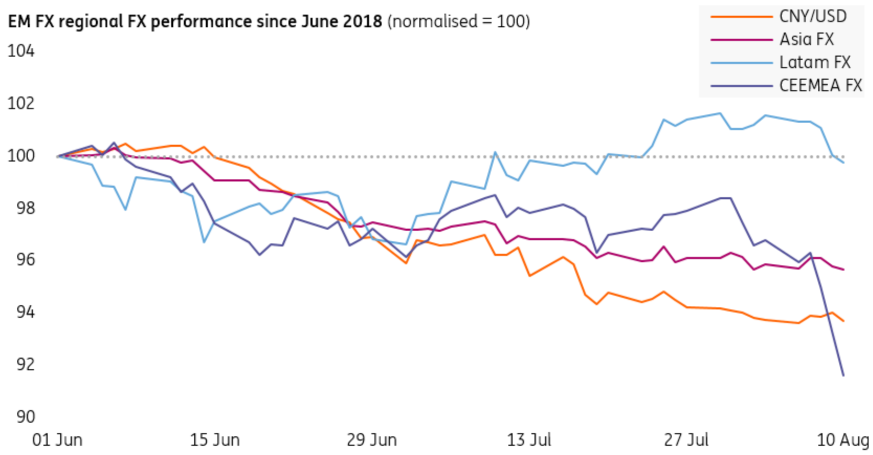
1. Relative CNY stability (base scenario)

We think the PBoC's re-introduction of the forward trading reserve requirement last week was a strong signal that officials may be looking to draw a line under the sand for CNY weakness. While we may see CNY move lower in days when the USD is broadly strengthening – ING's Greater China Economist, Iris Pang, does not expect to see any sharp idiosyncratic CNY depreciation (see alternative case below). In effect, the PBoC's signal of intent for a stable CNY – and the possibility of introducing further tools to stabilise the currency (ie, the reintroduction of the countercyclical factor) – may see a subtle shift in the trade war trading dynamics, with broader global markets becoming less sensitive to any pick-up in headline noise.

This relative stability in USD/CNY may also help to stabilise those currencies most sensitive to the yuan (ie, Asia FX). While under benign conditions, Asian currencies would have probably seen a sharper relief rally, the current market turmoil in EM FX – namely Turkey and Russia – may counteract any broad move lower in USD/Asia FX. Instead, we expect the removal of CNY weakness as a source of market risk to foster a convergence between Asia FX and CEEMEA FX – with the latter group of currencies playing catch-up to the more oversold Asian currency bloc. With EMEA a source of geopolitical risk, we think it will be difficult for the ZAR to also stabilise – in effect the Rand's source of market risk has shifted from a weaker CNY to a weaker TRY and RUB.

2. Sharp idiosyncratic CNY depreciation (alternative scenario)

If we were to see further idiosyncratic CNY weakness stemming from an escalation in the global trade war – then we would expect those currencies most sensitive to independent CNY moves to remain under pressure. In particular, ZAR could find pressure from both a weaker EMEA FX complex – as well as further weakness in CNY and commodities.



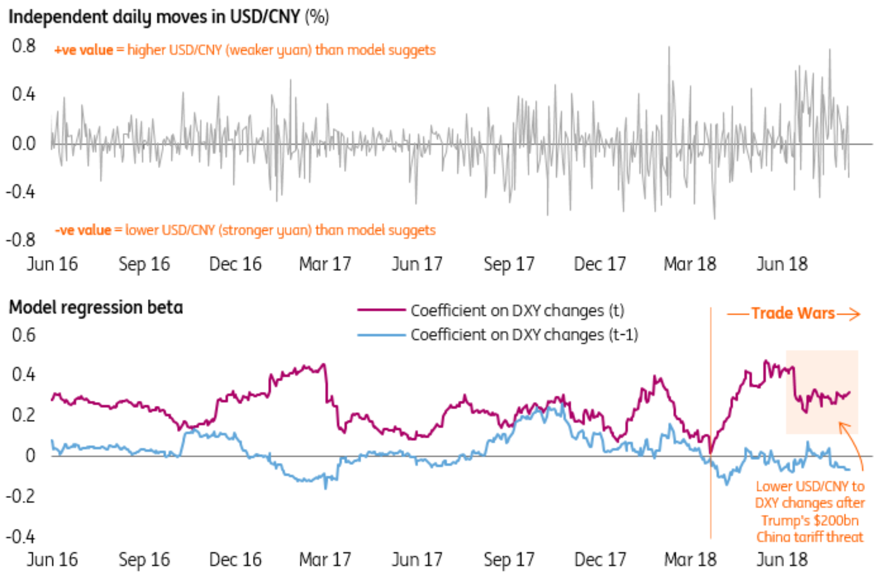
Source: ING, Bloomberg as of 10 June 2018

Box 1: Methodology to identify independent daily CNY moves

To differentiate between USD-related and independent CNY moves, we regress daily changes in USD/CNY on both daily and lagged daily changes in the DXY index over a 40-day rolling window. We then define the residuals of this regression as **independent CNY moves** (top panel of chart below) – that is clean of any broad USD movements. Running cross-correlations using these independent CNY moves allows us to make better-unbiased conclusions over the co-movement between CNY and global currencies.

The bottom panel of the chart below shows the coefficient of the DXY index in our USD/CNY regression. What's interesting to note is the step-change lower in sensitivity of USD/CNY moves to daily DXY changes since mid-June – which is around the same time that President Trump ordered the US trade representative to investigate additional tariffs on US$200bn-worth of Chinese imports. Therefore, one could argue that the second leg higher in USD/CNY since mid-June (from 6.45-6.50 to 6.85-6.90) was more idiosyncratic CNY weakness due to heightened trade war risks and PBoC policy easing. It is the cross-correlations during this phase that we are particularly interested in to determine those currencies most sensitive to CNY weakness.

Regression-based analysis to determine independent CNY moves



Source: ING FX Strategy, Macrobond, Bloomberg. Note: Model regresses daily changes in USD/CNY on daily and lagged daily changes in the DXY index over a rolling 40-day window

Box 2: A brief history of PBoC FX policy since August 2015

Adopting a similar framework to a recent BIS study, we identify four PBoC FX policy phases since the CNY devaluation on 11 August 2015:

1. **Transition** (18/08/2015 to 13/02/2016): In addition to introducing a reserve requirement on trading FX forwards for domestic banks, the PBoC aimed to provide stability in the CNY market following a period of turbulence after the fixing reform in August 2015. However, a couple of sharp moves lower in CNY – notably at the start of 2016 – continued to unsettle markets, with CNY fixing confusion reigning high.
2. **Basket management** (14/02/2016 to 25/05/2017): A distinct change in the CNY policy dynamics can be linked to an interview given by then PBoC Governor Zhou in mid-February 2016. The interview suggested that the PBoC would adopt a stable CNY against a basket of currencies – and while this didn't transpire in the subsequent months, the BIS notes that the predictability in the CNY fixing (based on the prior day's move) helped to ease market nerves.
3. **Countercyclical management** (26/05/2017 to 09/01/2018): With the USD turning lower in 2Q18 after some jawboning from President Trump, the PBoC introduced a 'countercyclical factor' into the CNY fixing mechanism. The aim was to avoid a herd-like behaviour in CNY markets – that could lead to currency overshooting (no longer was the prior day's move incorporated in the fixing). This didn't stop CNY moving lower amid broad-based USD weakness – with the PBoC relaxing its forward reserve requirement in September 2017. The 'countercyclical factor' was altogether removed on 9 January 2018.
4. **Trade Wars** (22/03/2018 to present): While President Trump announced tariffs on steel and aluminium at the beginning of March, we note that the bilateral trade war between the US and China did not heat up until 22 March – when President Trump

instructed the US Trade Representative (USTR) to investigate US$50bn worth of tariffs on China. This coincided with a turning point in USD/CNY – with the yuan embarking on a period of sharp depreciation.

Please see Recent RMB policy and currency co-movements (McCauley and Shu, 2018) for a more detailed history of CNY policy since August 2015.