27 September 2018

It's not that EASI

What has and hasn't changed in FX risk premia since US exceptionalism emerged

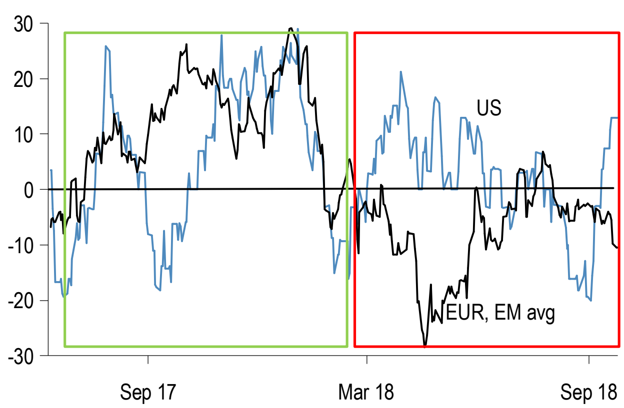
- **The message from growth signals is unchanged—they are still suggesting a defensive view in FX markets, i.e. supportive of the broad dollar vs. high beta FX.**
- **Factors that have changed and thus could indicate some resilience relative to April are (a) investor positioning has neutralized, and (b) returns from FX carry have undershot their typical drivers.**
- **The take-away from our single-factor frameworks is that global growth momentum continues to be the most important dynamic and is relevant not just for the broad USD, but also for returns from FX carry.**

Background

It has now been six months since the US growth exceptionalism dynamic surfaced in FX markets. This **growth dynamic unfolded at an inconvenient time for FX markets**—after a year of synchronized global growth in which the US lagged the rest of the world resulting in crowded investor positioning in pro-growth trades (long EUR, EM; short USD) and value being squeezed out of FX markets[1]—resulting in outsized market reaction (*A regime shift in FX? Softer growth momentum has increased risks of USD strength and high beta weakness*, 27th April, 2018). This note assesses the performance of FX single factors since then and highlights what has and has not changed in this context.

In summary, the take-away, which is unchanged from April, is that **growth signals (economist forecast revisions, EASIs) are still suggesting a defensive view is appropriate for FX markets**, i.e. supportive of the broad dollar vs. high beta FX. **What is different is that returns from FX carry have undershot on multiple metrics and investor positioning is cleaner.** Against this backdrop, **our single-factor frameworks indicate global growth momentum continues to be an important dynamic in FX markets,** as it will inform the broad USD performance as well as returns from FX carry.

Chart 1: FX markets saw a regime-shift at the end of 1Q18—from strong, synchronized global momentum to US exceptionalism
J.P. Morgan economic activity surprise indices



Source: J.P. Morgan

[1] As measured by dispersion in REERs.

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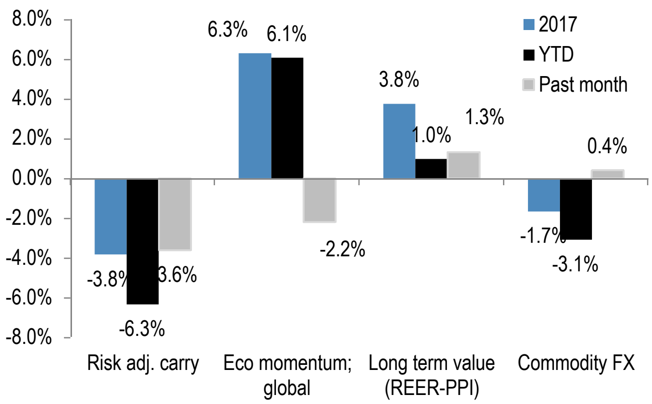
1. FX carry delivered its near-worst performance in 15 years; growth momentum outperformed.

The broad USD TWI has strengthened by 6.5% over the past six months. Moves have been larger in EM compared to the rest of G10, with EUR/USD cumulatively 5% weaker over this period and our EM currency index (EMCI) falling by nearly 13%. These broad moves have impacted FX factor performance substantially as well, as **FX carry experienced substantial drawdowns, among the largest since 2003** (6% year-to-date; 7% over the past two months alone, putting it among the fifth largest 2-month drawdowns in the past 15 years) while **growth momentum experienced substantial gains of similar magnitude** (chart 2). Meanwhile, returns from FX value were relatively modest. **Bulk of the returns for carry and growth momentum accrued after March, when US exceptionalism first emerged** (chart 3).

Chart 2: FX carry has been the worst performing factor year-to-date, while growth momentum has been one the best performers

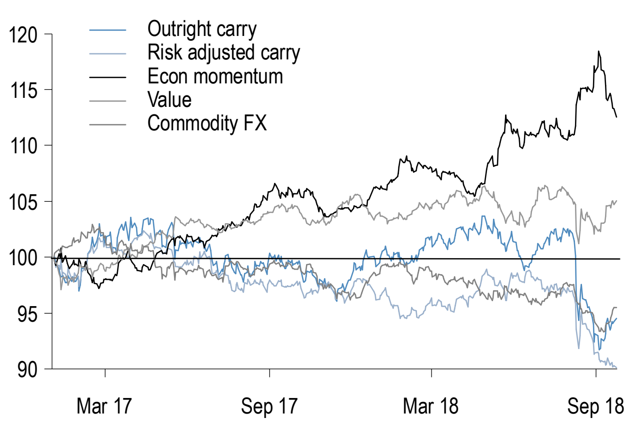
Factor performance; %



Source: J.P. Morgan

Chart 3: Bulk of FX gains from growth and drawdowns in FX carry accrued after March when US exceptionalism first emerged

Returns indices by factor



Source: J.P. Morgan

2. Outsized USD and currency-specific moves since April are largely explained by shifts in growth momentum.

Broad USD and currency specific performance are largely explained by changes growth momentum. For instance, the shift in US-global growth dynamics would have warranted a 5.5% strengthening in USD TWI since mid-April given historical relationships. The USD move thus far has been of similar magnitude (chart 4). On a more granular basis, changes in individual currencies have also been broadly correlated with the changes in the growth outlook (chart 5), although **some currencies appear to have weakened by more than that implied by this factor alone** (TRY for instance, where idiosyncratic factors have been at play (excluded from the chart for better visibility); ZAR and BRL as well). Several high yielding currencies have experienced large depreciation, and this has contributed to large drawdowns from FX carry and is discussed in more detail below.

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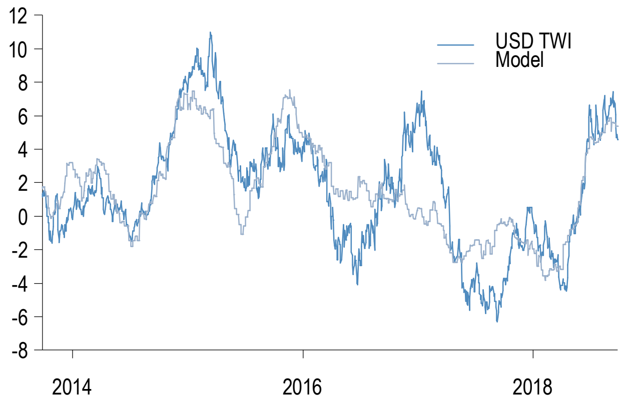
Chart 4: USD strength is in line with global growth slowdown experienced *so* far…

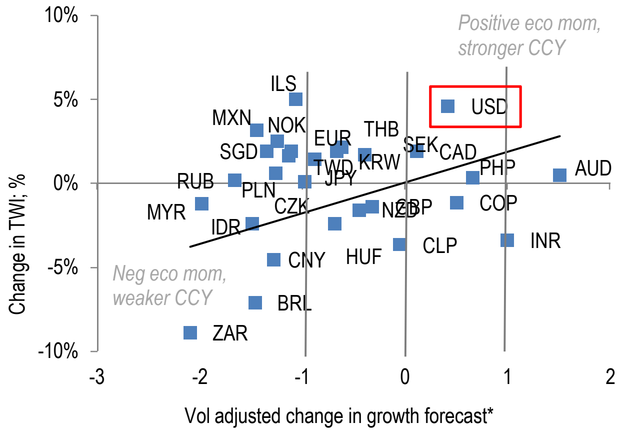
5m change in USD TWI: Actual vs. proxied by change in the global and USD-global growth forecast revision indices; %



Source: J.P. Morgan

Chart 5: …and currency-specific performance has loosely correlated to changes in the growth outlook

5m change in CCY TWI (%) vs. change in the growth forecast* (z-score)



* 1y zscore of 5-month change in J.P. Morgan growth forecast revision indices. Excludes TRY for better visibility (31% weakening in TWI for a 2.1 sigma decline in the growth forecast. Source: J.P. Morgan

3. FX carry is undershooting; a moderation in the pace of EM growth forecast downgrades should help mean reversion.

FX carry baskets were cheap at the start of 2018 to begin with (*Year of the Underdog: FX carry is cheap going into 2018*). In previous research notes, we have noted that returns from carry have been correlated with EM growth momentum (as well as the ex-ante level of yield and REER valuations of the carry basket), so 2018 drawdowns are consistent with macro environment. What is not consistent is the *magnitude* of drawdowns—returns from carry thus far appear to have undershot its typical drivers by sizable magnitudes (chart 6) and are **now projected to be positive. However, it is also worth noting that changes in the EM growth outlook has historically impacted performance** and thus will be relevant. **FX carry has typically delivered positive returns with high hit rates (>80% of the quarters since 2003) when the EM growth outlook is ether getting upgraded or somewhat stable, but the hit rates fall to below 50% when the EM growth outlook is getting downgraded materially** (by 0.3%pts in a quarter, or half sigma; table 1).

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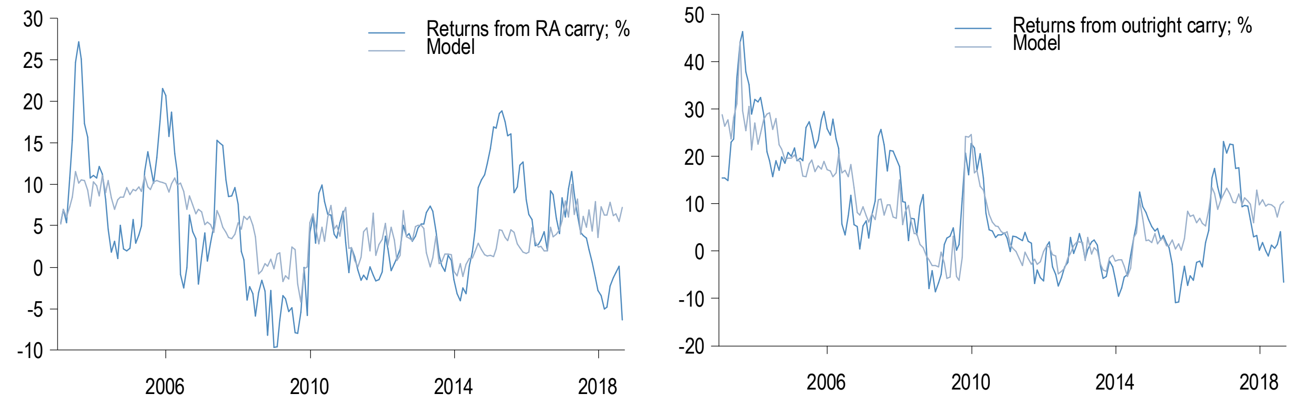
Chart 6: Drawdowns in FX carry appear to be in excess of the growth slowdown

Annual returns from FX carry baskets (outright yield and yield/1m implied vol; %): actual vs. model*



* Returns from carry modeled as a function of annual change EM growth forecast revision index, ex-ante yield and valuation of the carry basket (1y lagged). Source: J.P. Morgan

Table 1: A moderation in the pace of EM growth downgrades will likely help valuations mean revert

Average quarterly returns from FX carry baskets vs. % of quarters they delivered positive returns, vs. change in the EM growth forecast revision index

Change in EM growth forecast (3m; %pt)	Avg returns		% qtrs of + returns	
	Outright carry	RA carry	Outright carry	RA carry
<-0.3	-1.4%	0.4%	41%	47%
-0.3-0	4.1%	2.4%	93%	87%
0-0.3	2.1%	0.7%	**81%**	**63%**
>0.3	3.6%	1.5%	86%	71%
Total	2.0%	1.2%	74%	66%

Latest 3m change in EM FRI=-0.36

Quarterly data since 2003. 1 sigma of quarterly changes in the EM FRI is 0.6%pts since 2003 and 0.4%pts since 2010. Source: J.P. Morgan

4. The growth framework is still suggesting USD longs vs. high beta FX, but the worst-ranked currencies are already cheap and expensive to short given high carry.

Our economic momentum framework was an early and reliable signal of USD strength mid-April when it turned long the USD (*A regime shift in FX?*) and before that of USD weakness in 2017 amid global synchronized growth (*When models fail: on why USD could keep undershooting rates)*. As a result, we have tracked and reported extensively on take-aways from the global growth momentum to inform on broad dollar direction in recent months. The broad take-away from the **growth framework[2] is unchanged from April, that the balance of risks are still biased for further USD strength, especially versus high beta FX** (chart 7) with the growth outlook for most countries outside the US has been downgraded over the past month (this is predominantly dominated by EM as indicated in chart 8; also see page 4 of the *Daily FX Alpha chartpack*).

[2] We released our single-factor economic momentum framework in January 2016. Recall that this framework uses J.P. Morgan economists growth forecast revision indices (FRIs) as a signal, buying (selling) the currencies experiencing the largest and substantial growth upgrades (downgrades). We have been highlighting **over the past year that a firming growth outlook has been one of the key drivers of currency returns and broad dollar weakness**, resulting in positive returns from this strategy (*Growth is still king in FX...and G10 is once again lagging EM*, Chandan). For details see *Know thyself: Evaluating and using J.P. Morgan economic forecasts*, Lupton et al and *How EASI is it to trade economic momentum in FX? An evaluation of three growth metrics*, Chandan.

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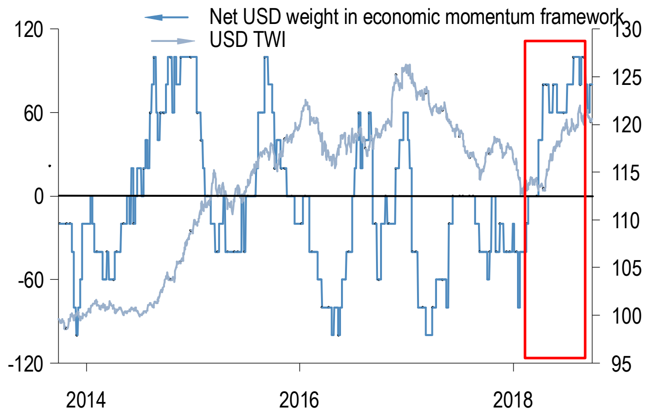
Chart 7: Growth momentum is still suggesting further USD upside …

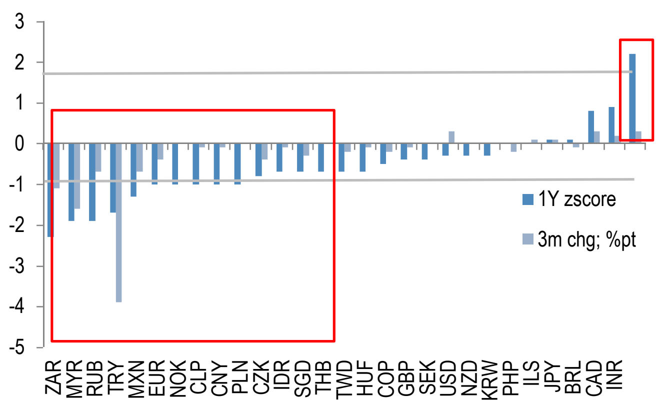
Net weight on the dollar from our economic momentum framework*; %



* see *How EASI is it to trade economic momentum in FX? An evaluation of three growth metrics* for details. Source: J.P. Morgan

Chart 8: …predominantly vs. EM as growth forecasts are still getting net downgraded

1y zscore of the 3-month change in J.P. Morgan growth forecast revision index



Source: J.P. Morgan

What has changed since April is that (a) **fewer countries are seeing growth downgraded materially** (chart 9). While this is an initial encouraging sign, it is still very early stage as aggregate growth momentum outside the US is still negative and importantly, our leading indicator of growth momentum, EASIs, are still on the margin negative outside the US (albeit by smaller magnitudes; chart 10). **Signs of growth momentum normalization outside the US are thus still very early stage and will be an important dynamic to watch in the coming weeks**; and

(b) more importantly, **the worst ranked currencies on growth momentum are already cheap on a REER basis and are onerous to be short** (this includes the likes of ZAR, RUB, TRY), making the suggested portfolio by this framework screen rich and highly negative carry (charts 11 and 12). In the past we have highlighted ex-ante valuations to be a relevant driver of returns from the strategy (ex-ante carry was less relevant; *Three isn't always a crowd: Economic momentum joins the FX value and carry party*). The deteriorating characteristics of the suggested portfolio is perhaps one reason why the growth framework has underperformed over the past month.

Thus, **while the broad take-away from the framework is still defensive (short high beta vs. USD), the framework could be vulnerable drawdowns from the specific high-beta FX selection.**

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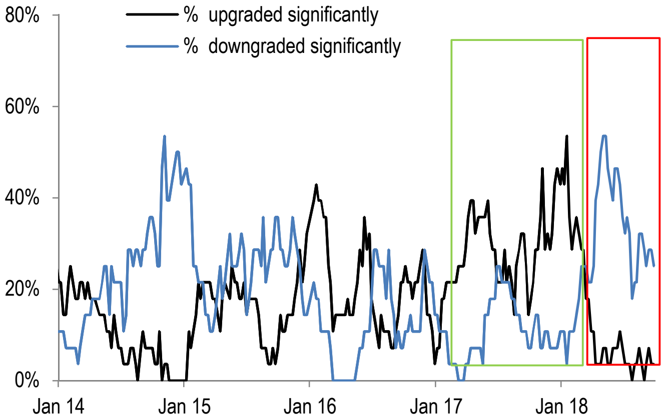
Chart 9: The pendulum may be turning but it's still early stage: Fewer countries are seeing substantial growth downgrades, but growth forecasts are being upgraded in hardly any countries…

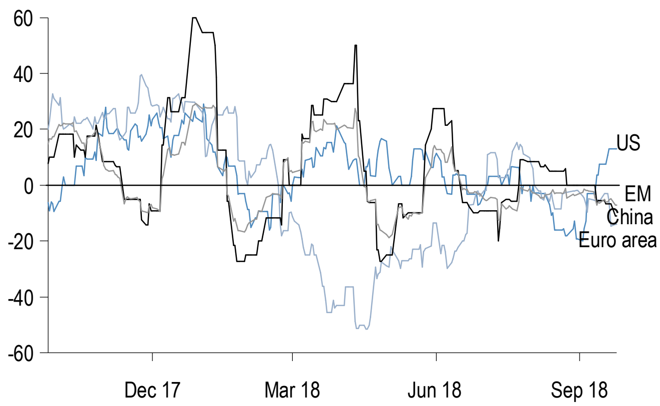
% of countries where growth forecasts have changed by more than 1 sigma in the past quarter



Source: J.P. Morgan

Chart 10: …and the EASIs are still negative outside the US

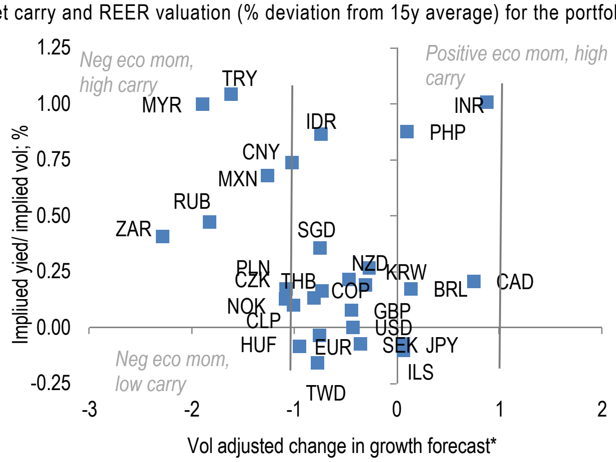
EASI by country



Source: J.P. Morgan

Chart 11: The worst ranked currencies on growth carry well

Net carry and REER valuation (% deviation from 15y average) for the portfolio suggested by the growth momentum framework



Source: J.P. Morgan

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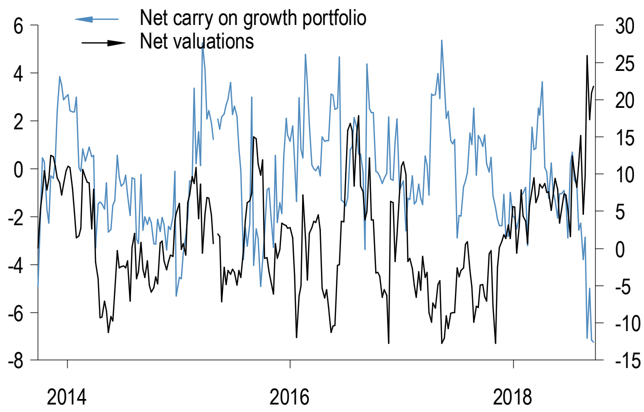
Chart 12: The worst ranked currencies on growth are cheap and have onerous carry to short

Net implied yield and deviation REERs vs. 15y average for portfolio suggested by J.P. Morgan FRIs; %



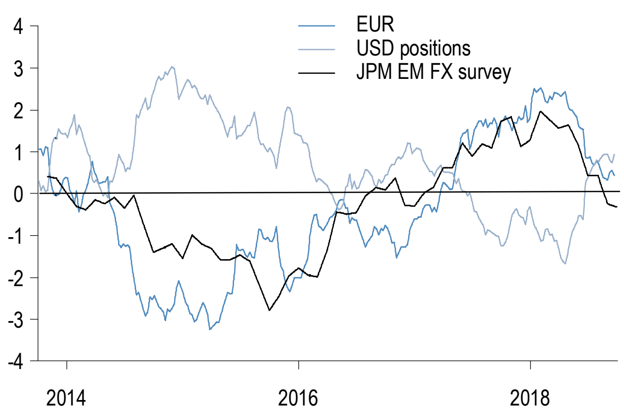
Source: J.P. Morgan

5. Positioning in the euro and EM FX is only neutral; net USD longs have accumulated but are still half their 2014 high.

A material change relative to the beginning of the year is that crowded investor longs in the EUR and EM FX have been unwound (basis: IMM, EM FX client survey). We note that net positioning is only neutral for both EUR and EM FX despite the large market moves. For USD, net non-commercial longs are still only 1 sigma longer average with total longs only 50% of the peak seen in November 2014. In any event, our prior work indicates that stretched positioning by itself is not a meaningful indicator of returns (*Trading short-term mean reversion in FX: Examples based on the IMM report and short-term fair value models*). Latest observations on IMM positioning are available here, Hui.

Chart 13: Investor positioning in EUR and EM FX is neutral; USD longs are not that large in aggregate

10y zscore of various measures (IMM, EM FX strategy survey)



Source: J.P. Morgan, EM FX strategy team

6. FX value is still not cheap.

We routinely track FX value[3] in our publications and in particular, have highlighted that low dispersion in valuations is typically associated with poor returns from the strategy (*How cheap is FX value? Wider dispersion in valuations and benign carry warrants closer inspection*). In this context, we note that **dispersions in FX are still not that high with room to widen further** (chart 14).

One may also look at the *cheap-only basket* to assess how much value FX markets offer. On a superficial level, valuations on the cheap-only basket are at their third cheapest in a decade (the other two episodes were the 2008 crisis and January

[3] Takes the average mispricing of the six cheapest currencies on a REER basis (ranked on percent deviation of current REER from 15y average). Daily rebalancing.

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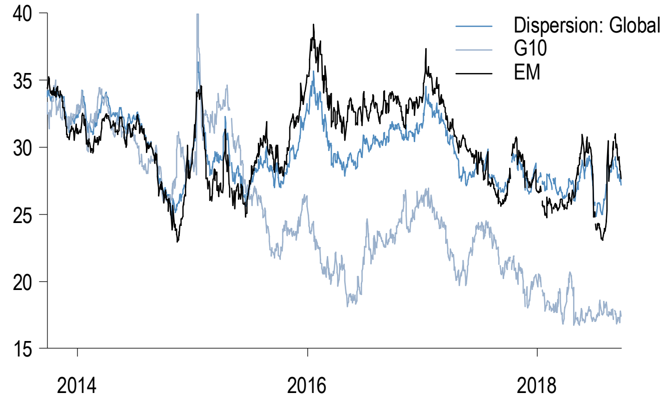
2016 CNY devaluation), but a closer inspection shows that this move has almost entirely been driven by TRY (grey line in chart 15).

Chart 14: Dispersion in FX value has gone up modestly but is still mid-range

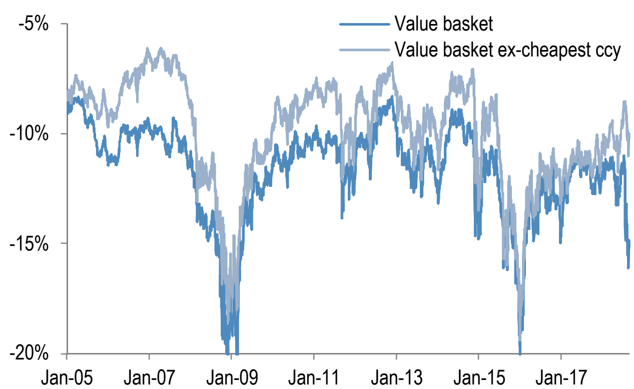
Dispersion in valuations (difference between the average mispricing of the rich and cheap global baskets; %)



Source: J.P. Morgan

Chart 15: The FX value basket is cheap, but this has been primarily about TRY; valuations for the rest of the basket are far from stretched

Average REER deviation of the global cheap basket* from 15-year average; %



* Takes the average mispricing of the six cheapest currencies on a REER basis (ranked on percent deviation of current REER from 15y average). Report available daily in page 13 in the *Daily FX Alpha chartpack*. Blue line excludes the cheapest currency on this metric which is currently TRY. Source: J.P. Morgan

Not enough has changed in our single-factor frameworks for decisive broad dollar weakness

Putting it all together, the take-away is that **while investor positioning is cleaner and some initial signs of normalizing growth momentum outside the US have emerged, our single-factor systematic frameworks are not yet signaling a resumption of *broad* USD weakening**. In addition, while returns from FX carry have undershot thus far, historical relationships indicate that some stability in the EM growth outlook is needed for a confident view on mean reversion. Data-watching will thus still be paramount in the coming weeks and **we will continue to focus on EASIs as a timely indicator of this dynamic**.

Clients are able to access J.P. Morgan EASIs on DataQuery on jpmm.com or via Bloomberg (JPEX | Global FX Strategy | Economic Activity Surprise Indices).

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