U.S. dollar strength: A cyclical pause, not a new long-term trend

Michael Feser, CFA, Portfolio Manager, Multi-Asset Solutions
Thushka Maharaj, DPhil, CFA, Global Strategist, Multi-Asset Solutions
Jonathon Griggs, Head of Applied Research, Global Fixed Income, Currency & Commodities

In Brief

• U.S. fiscal stimulus has improved economic activity, corporate earnings and consumer sentiment, producing a divergence between the cyclical position of the U.S. and those of other countries — and abetted the Federal Reserve’s policy rate normalization — a dynamic that has halted what had been an aggressive unwinding of the overvalued U.S. dollar.

• For most currency pairs, we expect this U.S. dollar reversal will produce only a transient impact, likely to subside as the effects of the fiscal impulse from the U.S. tax reform begin to wear off toward the end of 2019.

• We assume some recovery of pound sterling over our assumption horizon, although the currency has remained impaired given the political and economic costs of Brexit — though, at the time of writing, it is unclear what form Brexit may take, so the uncertainty around our sterling assumption is high.
CYCLICAL CHANGES AND SECULAR TRENDS

Year over year, the U.S. DXY index has hardly moved since we published the 2018 Long-Term Capital Market Assumptions (LTCMAs). But this headline FX market stability is an illusion masking a pretty volatile 12 months in currency markets. That volatility has been a tale in two parts: Between October 2017 and January 2018, a period of synchronized global growth across emerging and developed markets weakened the U.S. dollar. Then a strong fiscal package passed by the U.S. Congress in 4Q 2017 – in an economy already operating close to capacity – disrupted that incipient synchronized uplift in global growth.

Apparent USD stability masks a rather volatile year in currency markets

EXHIBIT 1: USD VS. EURO, YEN AND A BASKET OF EM CURRENCIES (JP MORGAN EM CURRENCY INDEX)

Source: Bloomberg; data as of September 30, 2018.

As the year progressed, trade concerns escalated and major developed market (DM) economies outside the U.S. saw a weak growth patch in Q1. Despite a weaker economic outlook outside the U.S., the Federal Open Market Committee (FOMC) continued resolutely raising interest rates. The confluence of growth and rate differentials boosted the U.S. dollar again, especially vs. emerging market (EM) currencies (Exhibit 1). In most cases, these disparities among economies’ cyclical growth rates have not materially impacted our expectations for longer-term inflation and growth trends – nor our assessment of the future fair value of currency exchange rates.

What has changed, however, compared with last year’s Long-Term Capital Market Assumptions, is that a number of starting valuations have shifted decidedly further away from fair value. In a few emerging markets, economic vulnerabilities have become apparent that may also adversely impact their currencies’ longer-term fair-value trajectory.

As in prior years, we have determined today’s fair value exchange rates for G10 currencies through a relative purchasing power parity (PPP) approach, based on the long-term average of each currency’s real exchange rate. To calculate the fair value for emerging market currency exchange rates, we take an absolute PPP-based approach that builds on the PPP estimates for actual individual consumption, as calculated by the World Bank and the Organization for Economic Co-operation and Development (OECD) for their international price comparison program.

To arrive at a given exchange rate projection over our assumption horizon, which we also refer to as future fair value, we adjust today’s fair value exchange rate using the LTCMAs’ underlying macroeconomic assumptions, as follows: For G10 currencies, we reflect the expected change in a country’s terms of trade over the assumptions horizon by adjusting today’s fair value for the projected inflation rate differential between the two countries. For emerging markets, we make an additional adjustment for the expected differential in GDP per capita growth.

Our assumptions continue to reflect the adverse impact on developed market economies’ growth prospects of deteriorating demographics, smaller improvements in total factor productivity (TFP) and lower levels of human capital development. We now believe that the echo of the global financial crisis will continue to impact the effectiveness of developed market central banks’ policies over the LTCMA horizon as they struggle to achieve their inflation targets. In particular, we expect that over the assumptions horizon, the G10 economies will experience longer periods of below-target inflation, followed by shorter periods above-target, fluctuating within a narrow band. For emerging market economies, in most cases we expect relatively stable inflation environments, at levels somewhat above their respective central bank targets.

1 In this context we refer to the G10 as the following currencies: USD, EUR, JPY, GBP, CHF, AUD, CAD, NZD, SEK, NOK.
2 PPP for actual individual consumption covers all households, consumption expenditure and that part of government final expenditure that covers services it supplies to individual households – for example, housing, health, education and social protection. It does not include government final expenditure on those services it supplies to households collectively, such as defense, police and environmental protection.
3 Total factor productivity is a residual that in developed economies likely reflects technological change. It encompasses productivity growth not explained by capital stock accumulation or the labor force (increased hours worked), but rather captures the efficiency or intensity with which inputs are utilized.
We do, however, acknowledge that populism continues to be on the rise, and in a growing number of countries, increasing the risk that economic trajectories may shift significantly — toward relatively less growth, more inflation and weaker currency exchange rates. Still, political risks to our assumptions for the eurozone remain low, even as Brexit continues to cloud the UK’s prospects. Meanwhile, changes in U.S. trade policy are making China’s transition from investment-led growth to a more balanced growth model an even more challenging endeavor.

**LONG-TERM CURRENCY EXCHANGE RATE ASSUMPTIONS**

While global growth has remained robust and continues at or above potential, divergences among the cyclical positions of the U.S. and other developed and emerging market economies have returned since last year’s edition. Fiscal stimulus in the U.S., and the subsequent improvements in economic activity, corporate earnings and consumer sentiment, have made it easier for the Federal Reserve (Fed) to move forward with its policy rate normalization at a steady and somewhat faster pace than before.

Despite a tight labor market (unemployment below NAIRU), we are not seeing a meaningful pickup in inflation.

![Graph: U.S. Unemployment (Y/Y) and Inflation (Core PCE), 1986–2018](image)


The U.S. economy continues to operate in the flat part of the Phillips curve, with core inflation rising only gradually, despite unemployment levels that for quite some time have been well below the Fed estimate of NAIRU (Exhibit 2). In this context, the current Fed interest rate normalization process appears to be well advanced, and further rate hikes later in 2019 are likely to become much more data-dependent.

At the same time, in the euro area, economic activity data has softened, inflation remains well below target and, while the labor market is much improved from the days of the sovereign debt crisis, considerable slack still remains. It has therefore been unsurprising that the European Central Bank has adopted a more dovish tone and signaled that it will not start to raise interest rates for a while.

Abstracting from the volatility of activity data, growth in Japan has been respectably above trend for the last 12 months, mainly led by private consumption and investment spending. But inflation disappointed and remains stubbornly below 1%.

In acknowledgment of a delay in the time it will take to reach the inflation target, the Bank of Japan (BoJ) was forced to modify its yield curve control framework. The 10-year yield range was shifted upward, the logic being that by allowing the 10-year yield to move between 0 and 20 basis points, the BoJ will be able to conduct easy monetary policy for longer, and at least until the consumption tax hike in 2019. The irony of the signal from this is not lost on us: The need to push long-term bond yields up, in order to maintain an easy monetary policy stance over a longer horizon, is an example of the quandary central banks are facing and are likely to face again in the coming years. Despite this, the BoJ is not expected to meet its inflation goal over our forecast horizon.

Over the past couple of years, Japan’s current account surplus, which previously appeared to be vanishing, has stabilized at a high level, partly thanks to strong income receipts associated with international assets. This highly favorable external position contributes to the view that JPY will appreciate in nominal terms over the long run.

This dynamic has brought the aggressive pace at which the overvalued U.S. dollar had begun to unwind — historically, a seven-year process, on average — to a screeching halt. For DM currency pairs, this reversal of the U.S. dollar is not supported by a change in its long-term fair value, but rather produces a more transient impact likely to subside as the effects of the fiscal impulse from the U.S. tax reform begin to wear off toward the end of 2019.

Sterling has remained impaired as the political and economic costs of a soft Brexit have become more and more apparent, a shift that has also had the effect of elevating the risk that the process overall may unravel and end inadvertently in a hard Brexit.

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4 Low inflation and low unemployment, in this model of the relationship between unemployment and higher wages and consumer prices.

5 NAIRU (non-accelerating inflation rate of unemployment) is defined as the lowest rate of unemployment at which inflation should begin to increase.
Emerging market economies

The path to our equilibrium assumptions for EM FX is not expected to be smooth, and the current market volatility is likely to persist while the Fed tightens policy and U.S. foreign policy focuses on tariffs. Because the U.S. dollar remains the preeminent funding currency for emerging markets, the ripple effects of Fed policy tightening have been clearly visible, even with other central banks still on hold and the absolute level of tightening still fairly benign. A number of emerging market economies, particularly in Latin America but also India and Indonesia, had to tighten their monetary policy in response, to limit exchange rate depreciation and to prevent the inflation rate from spiking. In some countries, this external tightening pressure has been compounded by internal vulnerabilities — either as a result of unfinished reform efforts such as in Argentina or due to profligate fiscal policies as in Turkey, Brazil and South Africa (Exhibit 3).

With polarized choices in elections in several emerging markets, political uncertainty and volatility are unusually elevated this year. This makes it hard to derive high conviction views on the economic fundamentals over the longer term. But we acknowledge that the revelation of specific vulnerabilities in parts of emerging markets, and a deterioration in the EM-U.S. inflation differential, adversely impact our longer-term fair value equilibrium assumptions for a number of EM currencies.

For the Chinese RMB, compared with last year’s edition, our 2019 assumptions build in a modestly weaker exchange rate vs. the USD. Continued convergence between Chinese economic fundamentals and the global frontier, particularly in terms of growth in export volumes and unit labor costs, has lowered our estimate of fair value. This year, volatility in the RMB increased as headwinds from U.S.-China trade tariffs, and China’s domestic deleveraging effort, weighed on growth. As China transitions toward a more balanced growth model, the currency is likely to gain more traction in nontrade international transactions — a welcome development. However, the currency may also have to act as a cushion in smoothly managing that transition.

Exhibit 4 provides an overview of some of our 2019 long-term currency exchange rate assumptions.

After a broad-based U.S. dollar reversal over the last year, our assumptions point toward significant future weakness

<table>
<thead>
<tr>
<th>Currency</th>
<th>Current levels</th>
<th>Per annum % change from current*</th>
<th>2019 FX rate assumptions</th>
<th>2018 FX rate assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro</td>
<td>EUR/USD 1.16</td>
<td>+1.00</td>
<td>1.32</td>
<td>1.34</td>
</tr>
<tr>
<td>Japanese yen</td>
<td>USD/JPY 114</td>
<td>+1.75</td>
<td>92</td>
<td>93</td>
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<tr>
<td>Swiss franc</td>
<td>USD/CHF 0.98</td>
<td>+1.50</td>
<td>0.85</td>
<td>0.88</td>
</tr>
<tr>
<td>British pound</td>
<td>GBP/USD 1.30</td>
<td>+0.75</td>
<td>1.43</td>
<td>1.47</td>
</tr>
<tr>
<td>Canadian dollar</td>
<td>USD/CAD 1.29</td>
<td>+0.75</td>
<td>1.18</td>
<td>1.14</td>
</tr>
<tr>
<td>Australian dollar</td>
<td>AUD/USD 0.72</td>
<td>-0.50</td>
<td>0.68</td>
<td>0.71</td>
</tr>
<tr>
<td>Chinese renminbi</td>
<td>USD/CNY 6.87</td>
<td>+1.00</td>
<td>6.07</td>
<td>5.87</td>
</tr>
<tr>
<td>Brazilian real</td>
<td>USD/BRL 4.02</td>
<td>0.00</td>
<td>4.02</td>
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</tr>
<tr>
<td>Mexican peso</td>
<td>USD/MXN 18.72</td>
<td>-0.75</td>
<td>20.56</td>
<td>15.63</td>
</tr>
</tbody>
</table>


*For consistency and ease of conversion, we have assumed that the forecast horizon for the per annum change in percentage terms is 12.5 years. Differing from market convention, we have also used a uniform signing convention, such that a positive figure represents a strengthening of the currency vs. the U.S. dollar, and vice versa.
BUILDING BLOCKS—CURRENCY EXCHANGE RATES

The annualized compound rate of change expresses the difference between two currencies’ current exchange rate and our estimate of their fair value exchange rate at the end of our assumptions horizon — for consistency we use 12½ years.

A DEVELOPED MARKETS

- Starting fair value exchange rate based on the theory of purchasing power parity (PPP)
  + Expected future inflation rate differential between domestic economies
  + Review qualitatively and adjust currencies selectively to ensure internal consistency and incorporate secular factors and trends other than relative inflation that would otherwise not be captured
  + The prevailing spot exchange rate level on September 29, 2018

B EMERGING MARKETS

- Starting fair value exchange rate based on the theory of purchasing power parity (PPP)
  + Expected future inflation rate differentials and GDP per capita growth differentials* between domestic economies
  + Review qualitatively and adjust currencies selectively to ensure internal consistency and incorporate secular factors and trends other than relative inflation that would otherwise not be captured
  + The prevailing spot exchange rate level on September 29, 2018

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