

CURRENCY EXCHANGE RATE ASSUMPTIONS

U.S. dollar downtrend may be finally underway

Thushka Maharaj, D.Phil., CFA, *Global Strategist, Multi-Asset Solutions*

Michael Feser, CFA, *Portfolio Manager, Multi-Asset Solutions*

IN BRIEF

- Our long-held view that the U.S. dollar is on a secular downtrend now has a cyclical catalyst: the start of a new synchronized global business cycle. Our conviction in a USD downtrend is also driven by the dollar's expensive starting valuation and relatively higher expected inflation in the U.S. than in the eurozone and Japan.
- Should the U.S. pursue stimulative fiscal policy, and monetary policy focused on stoking inflation expectations, those actions would powerfully support reflation and growth, and an erosion in the dollar's real value.
- Developed market currencies' bilateral relationships with the USD drive our views; above others, we expect the euro to serve as a more credible counterweight to the dollar and potentially to reassert its standing as an alternative reserve currency, boosted by the region's pandemic recovery fund, which underscores the eurozone's new economic solidarity.
- We expect a wide dispersion among emerging market currencies and continue to expect the Chinese yuan to appreciate, albeit to a somewhat lesser degree than implied by its fair value.

STRONGER CONVICTION IN THE CYCLICAL AND STRUCTURAL DEPRECIATION OF THE USD

The 12 months ended September 2020 saw the erosion of U.S. exceptionalism - in terms of its growth rate, its Treasury bonds' yield advantage and the magnitude of the economic fallout from the restrictions required to contain the spread of the COVID-19 pandemic. In sum, from a cyclical perspective, the starting point for the U.S. economy at the beginning of this new cycle is indeed unexceptional vs. other countries'.

Our long-held view that the U.S. dollar is poised to enter a secular downtrend now has a cyclical catalyst (**EXHIBIT 1**) - strengthening our conviction that the necessary conditions for a longer-term USD depreciation have begun to fall in place as more symmetrical fiscal and policy responses across the regions start to tilt the relative growth differential in favor of economies outside of the U.S.

Methodology

As in prior years, we have determined today's fair value exchange rates for G10¹ 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

¹ The Group of Ten in this context is Australia, Canada, the eurozone, Japan, New Zealand, Norway, Sweden, Switzerland, the UK and the U.S.

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 (**EXHIBIT 2**).²

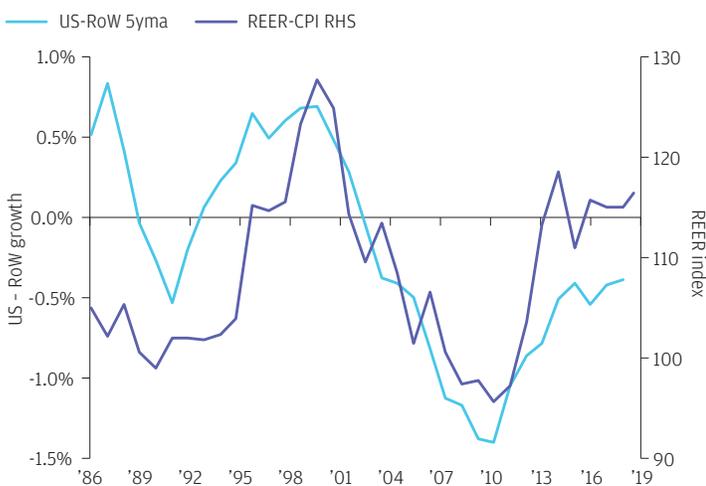
To arrive at a given exchange rate projection over our assumption horizon, which we also refer to as future fair value, we adjust today's fair value exchange rate using the Long-Term Capital Market Assumptions' (LTCMAS') underlying macroeconomic assumptions, as follows: For G10 currencies, we reflect 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 of deteriorating demographics on developed market (DM) economies' growth prospects, expectations for smaller improvements in total

² According to the OECD, 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, social protection, etc. It does not include government final expenditure on those services it supplies to households collectively, such as defense, police and environmental protection.

USD performance: Closely linked to relative growth differentials between the U.S. and the rest of the world

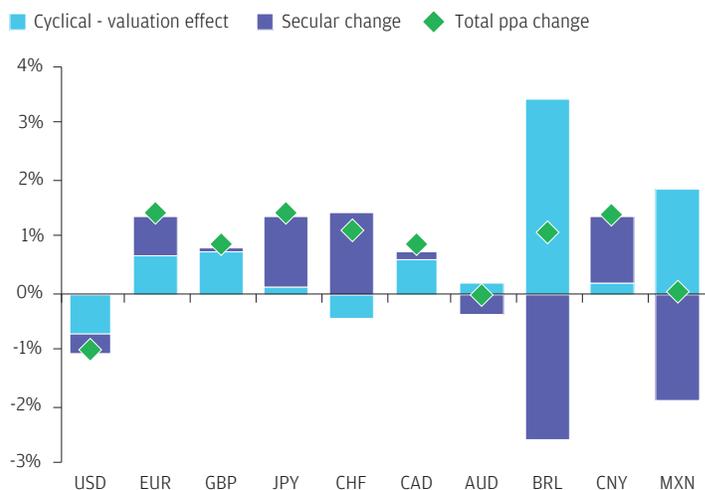
EXHIBIT 1: U.S. VS. ROW GROWTH VS. USD REER



Source: Bloomberg, World Bank; data as of March 2020. ROW: Rest of the world; REER: real effective exchange rate; 5y: 5-year moving average.

The fall in USD is largely driven by its high starting valuation

EXHIBIT 2: CYCLICAL AND SECULAR (INFLATION DIFFERENTIAL) CONTRIBUTIONS TO OUR 2021 CURRENCY EXCHANGE RATE ASSUMPTIONS



Source: OECD, J.P. Morgan Asset Management; data as of September 30, 2020. Ppa: percent per annum.

factor productivity³ and lower levels of human capital development over our forecast horizon (**EXHIBIT 3**). We project that emerging markets, in aggregate, will grow faster than developed markets, given the anticipated larger increases in the size and quality of their labor forces, although with an increasingly wide dispersion in their labor force growth rates. The labor forces in some emerging economies, such as Russia and Korea, are likely to begin shrinking in the coming years.

Our assumption of a USD downtrend is driven equally by a number of factors: the U.S. dollar's expensive starting valuation, improving growth outside the U.S. and higher expected U.S. inflation, in particular relative to the eurozone and Japan.⁴ We expect quantitative easing (QE) and excess USD liquidity to be dominant features of this new cycle, depressing the real rate advantage of the U.S. vs. its major trading partners.

But in order to see an actual period of a weak dollar, U.S. realized inflation and inflation expectations would have to rise above the Federal Reserve (Fed) target and stay there for a sustained period.

That may take a while. As we discuss in the Fixed Income Assumptions section, we expect the Fed to adjust its policy reaction function in this new cycle toward focusing explicitly on average

inflation targeting.⁵ So we don't expect the Fed to even think about raising rates until it sees inflation clearly on track to exceed its longer-term target, following the new mantra: Do not fire until you see the whites of their eyes. To run the economy hot and above full employment for a prolonged period of time is not only acceptable under this policy stance but a necessity for its success. Policymakers are clearly willing to tolerate a temporary inflation overshoot. As to whether they are actually able to generate higher inflation, the burden of proof will be on realized and actual inflation outcomes.

A necessary ingredient for reflation and boosting inflation expectations would be a pro-cyclical fiscal stimulus in the U.S. that remains expansionary well into the recovery. Indeed, we expect fiscal policy to be used as aggressively in this cycle as monetary policy was used in the previous one - as we highlight in two of the theme chapters in this year's edition: on fiscal policy (in "The fiscal decade: The promises, problems and potential of fiscal stimulus") and on high and rising debt loads (in "Debt, debt everywhere: The implications of a high debt world").⁶ Along with raising inflation expectations, we also see this increase in fiscal spending and expanding of federal deficits as necessary ingredients for USD depreciation. While this should suffice to weaken the dollar, it is not clear whether it will usher in a new era of a weak USD, given the currency's continued dominance in global trade and finance.

³ Total factor productivity (TFP) 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.

⁴ We downgraded our inflation assumptions for Europe and Japan last year.

⁵ The Fed's policy up to now has been to target 2% inflation without regard for past periods in which inflation may have gone above or below that level. By contrast, with average inflation targeting, the Fed takes the past into account, so that if past inflation was below 2% for a period of time, it would aim to compensate with a period in which it is above 2%.

⁶ John Bilton et al., "The fiscal decade: The promises, problems and potential of fiscal stimulus," and Thushka Maharaj et al., "Debt, debt everywhere: The implications of a high debt world," *2021 Long-Term Capital Market Assumptions*, J.P. Morgan Asset Management, November 2020.

Assumptions for selected changes in currency exchange rates vs. USD, nominal and real

EXHIBIT 3: OUR LONG-HELD VIEW OF A SECULAR USD DOWNTREND HAS A CYCLICAL CATALYST IN THE NEW CYCLE

	Spot September 30, 2020	2021 assumptions LTCMA forecast	2021 vs. 2020 assumptions % change p.a.			2020 assumptions 2020 nominal p.a.	Change
			2021 nominal p.a.	Inflation differential	Real		
EUR	1.17	1.39	1.40%	0.70%	0.70%	1.90%	-0.50%
GBP	1.29	1.43	0.80%	0.00%	0.80%	1.50%	-0.70%
JPY	105.45	88.62	1.40%	1.30%	0.10%	1.70%	-0.30%
CHF	0.92	0.80	1.10%	1.50%	-0.40%	1.50%	-0.40%
CAD	1.31	1.21	0.80%	0.20%	0.60%	1.20%	-0.40%
AUD	0.72	0.71	-0.10%	-0.30%	0.20%	0.50%	-0.60%
BRL	5.61	4.97	1.00%	-2.30%	2.70%	0.60%	0.40%
CNY	6.79	5.85	1.20%	-0.50%	-0.90%	2.00%	-0.60%
MXN	22.11	22.04	0.00%	-1.70%	1.00%	0.70%	0.80%

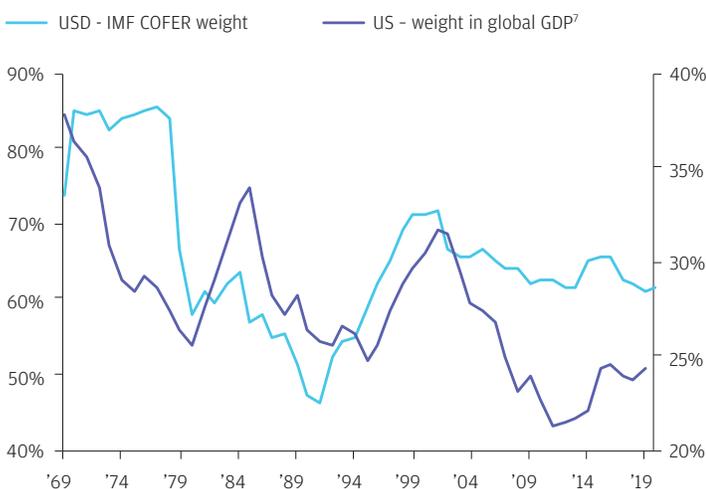
Source: Bloomberg spot FX, J.P. Morgan Asset Management; estimates as of September 30, 2020. P.a.: per annum.

Spot FX rates are quoted using market convention; % changes p.a. are quoted uniformly vs. USD such that a positive number reflects appreciation vs. USD, and vice versa.

While our core macro scenario calls for a weaker USD, we do also realize that the U.S. dollar continues to play a unique role in global trade and finance. As **EXHIBIT 4** illustrates, even though the weight of U.S. GDP in global GDP fell from 32% to below 25%, the USD was still a large weight in international FX reserves, according to International Monetary Fund (IMF) data.⁷ We see this largely as a reflection of the noneconomic benefits and usage of the U.S. dollar in trade and finance. This unique position in the global economy and financial architecture is likely to act as a partial offset and limit the USD secular decline to less than what other fundamental data may imply.

While U.S. GDP has fallen as a percentage of global GDP, USD still made up a large proportion of international foreign exchange reserves

EXHIBIT 4: USD IN FX RESERVES VS. U.S. GDP IN GLOBAL GDP (% WEIGHT)



Source: IMF, J.P. Morgan Asset Management; data as of December 31, 2019.

Across DM currencies, it is the bilateral relationships with the dollar that drive our FX views. As was the case last year, the trade-weighted indices for EUR, GBP, CNY and JPY are not significantly misaligned vis-à-vis one another. Our assumptions therefore do not imply a significant loss in the relative competitiveness of any one region vs. another (**EXHIBIT 5**).

⁷ As measured by Currency Composition of Official Foreign Exchange Reserves (COFER), an official database managed by the International Monetary Fund.

Trade-weighted indices (TWI) for the euro, pound sterling, yen and yuan are not misaligned with one another; we focus on each currency’s relationship with USD

EXHIBIT 5: TRADE-WEIGHTED INDEX, PER ANNUM CHANGE

	2021	2020
USD	-1.04%	-1.32%
EUR	0.57%	0.76%
GBP	-0.29%	0.02%
JPY	0.35%	0.31%
CNY	0.51%	0.86%
USD DXY	-1.27%	-1.77%

Source: J.P. Morgan Asset Management; data as of September 30, 2020.

MAJOR CURRENCY PAIRS

The euro

We expect the euro will be a key counterweight to USD. In the last cycle, the euro was dogged with sovereign debt default risk, a central bank reluctant to engage in QE, fiscal austerity and the glaring lack of a centralized fiscal authority that could facilitate a transfer from the rich northern countries to those in the south and east. We see the announcement of the Next Generation European Union (EU) recovery instrument and the coronavirus response recovery plan as crucial components for establishing a more credible fiscal authority at the euro area level. Recovery funds, which will be used to support countries according to their level of structural unemployment and loss of growth due to the COVID-19 shock, ensure that fiscal spending continues well after the recovery from the COVID-19 recession. The linking of the recovery fund to the EU’s seven-year budget is a bold innovation underscoring the solidarity with which the EU is providing help for countries facing the harshest challenges.

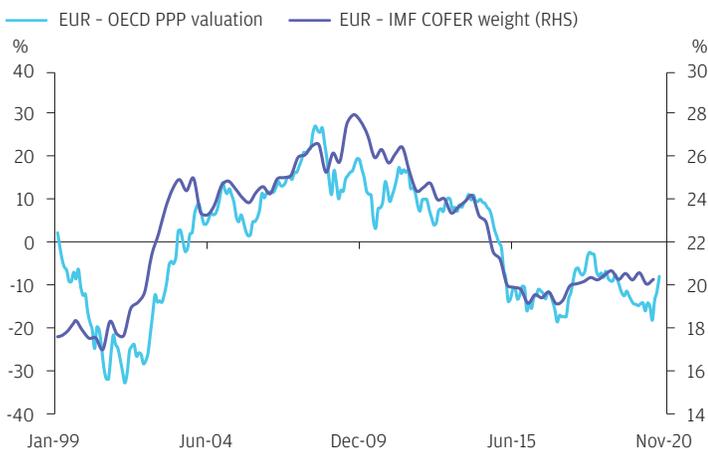
Policymakers were well aware that this recession could be the defining moment for the EU and that divergent recoveries afterward could spell the end of the euro project. Crucially, the establishment of this recovery fund aims to restart economic convergence and catalyze increased prosperity for all EU members, not just a choice few.

The recovery fund’s spending plan and the institutional framework laid out to fund it set important precedents for how the EU may deal with future recessions, and form a blueprint for a truer and closer fiscal union – the closest we have seen since the 1999 inception of the euro. The plan also adds an alternative, euro-denominated safe haven asset to the market.

Essentially, this new framework removes the redenomination risk premium⁸ built into the euro, introducing the conditions for an era of EU exceptionalism in terms of sustained growth and transformation toward a more sustainable economic model. A depreciating dollar is crucial if the EUR is to behave in a less cyclical manner and reassert its standing as a credible alternative reserve currency to the USD (EXHIBIT 6).

We see conditions for EU area exceptionalism bolstering the euro’s ability to become an alternative reserve currency

EXHIBIT 6: EUR WEIGHT IN IMF FX RESERVES VS. EUR PPP VALUATION



Source: Bloomberg, IMF COFER; data as of June 30, 2020.

Pound sterling

In the UK, sterling is driven in the near term by Brexit uncertainty. We expect a trade deal by the end of 2020 but expect it to be narrow, leaving a high degree of uncertainty. An agreement on a trade deal is only the first of many steps in the journey to establishing a new trading arrangement with the EU. Our forecasts for a higher pound largely emanate from our secular view on USD depreciation. This year, we reflect the narrowness of a trading agreement and heightened uncertainty even after an agreement is reached, with a higher haircut adjustment to the fair value for GBPUSD.

Emerging market currencies

Our outlook for emerging markets moderates our assumption about the magnitude of the USD fall: Emerging economies would need to heal and recover strongly for a uniformly large dollar decline. What we expect instead is more likely a wide dispersion of outcomes. Our assumptions anticipate inflation remaining persistently high for certain Latin American countries and South Africa while falling further in Asian economies, including Korea and Taiwan. Emerging market central banks have started to engage in QE for the first time

⁸ Redenomination risk premium refers to the risk that a euro asset will be redenominated into a devalued legacy currency.

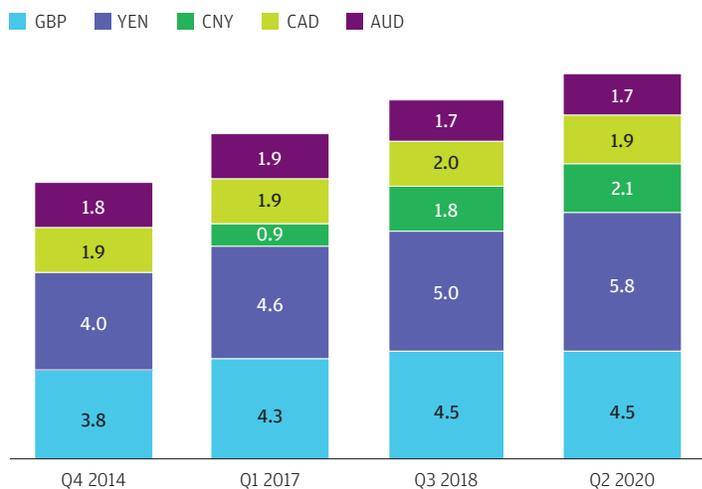
and are less concerned about the inflationary consequences. For a select number of countries, this concurrent fiscal and monetary largesse is likely unsustainable, and economic reforms may well stall. In those cases, we expect currency depreciation to be the main release valve to reequilibrate relative competitiveness. Hence, our forecasts are for the Mexican peso to remain above 22 in equilibrium and the South African rand to depreciate 1.2% annually vs. the USD. The Brazilian real, by contrast, appreciates by 1% per year.

The Chinese yuan

The Chinese yuan remains in its infancy as a reserve currency (reserve managers hold 1%-2% of reserves in CNY), and it is hard to envisage its widespread adoption as an alternative to USD without further liberalization of capital and trade markets. Geopolitical tensions now appear to be less focused on currency manipulation or tariffs, but an ongoing headwind from Sino-U.S. strategic rivalry remains a long-term theme. The area of most acute tension has shifted toward tech dominance and strategic control of resource-rich regions, which impact currency exchange rates less directly, but their persistence over time is a key reason we expect the CNY to appreciate less than its fundamental fair value would imply (EXHIBIT 7).

While still in its infancy as a reserve currency, the Chinese yuan’s weight in IMF FX reserves is higher than Australia’s and Canada’s

EXHIBIT 7: CNY WEIGHT IN FX RESERVES (%)



Source: Bloomberg, IMF COFER; data as of June 30, 2020.

PORTFOLIO INSIGHTS



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