GLOBAL MARKETS ANALYST

FX in 2035—Finding Fair and Getting There

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- We are introducing long-term forecasts for global currencies to complement our economists' long-term projections and aid in structural investment decisions. Our new forecasts for 2035 include EUR/USD at 1.21, USD/JPY at 100, GBP/USD at 1.24, and USD/CNY at 5.17. Most of our strongest total return forecasts are in EM, which is consistent with harvesting long-term real carry premia and converging productivity.
- Long-term FX forecasting exercises focus on the mean-reverting properties of real exchange rates, with some adjustments for structural changes over time. Academic consensus shows this approach outperforms a "random walk" and refutes the common misconception that FX forecasting is a futile exercise. GSDEER has been the workhorse model for assessing FX "fair value" at Goldman Sachs for the last 30 years, and we lean on it again to now project the next 10. The model postulates that real exchange rates tend to mean-revert over time, but differences in productivity and terms of trade will influence the underlying trend.
- We make some methodological model updates in our attempt to "find fair" far out in the future. Most notably, we calculate a set of productivity estimates based on long-term population projections and our economists' GDP expectations. Next we work on "getting there"—studying how exchange rates tend to converge towards fair value over time. To help bridge the gap between model estimates and nominal exchange rate forecasts, we also make some idiosyncratic adjustments to account for currency management considerations and discuss some of the most important assumptions that could influence these results (particularly around inflation).
- We think the Dollar is about 15% overvalued right now, and that dictates the broad direction of our results. But the Dollar has already sustained this high valuation for much of the last decade, and it is possible that fresh, AI-led productivity gains will help it defy the odds once again. On the other hand, China has already seen strong productivity gains and the currency is clearly undervalued now, which makes a strong case for the Renminbi to appreciate over time. The Japanese Yen is even more notably undervalued, and has been for some time, but we expect a gradual retreat from extraordinary policy easing measures will allow the currency to strengthen. There is no clear valuation case for the Euro after the course correction earlier this year.

- Our new forecasts show very strong total return potential in many EM currencies that have historically struggled with inflation control, such as Brazil and South Africa. While new bouts of policy pressures are always a risk, these strong forecasts are consistent with academic findings that markets tend to overcompensate for drawdown risks in EM currencies, especially after economic conditions have already converged substantially. This helps highlight our overriding takeaway from this exercise: when thinking about the trends that could influence markets over the next 10 years, it pays to be imaginative.

1. In the Long Run, We Are All Fair

We are introducing long-term forecasts for global currencies to complement our economists' long-term projections and aid in structural investment decisions. Many market participants—such as firms with multinational operations and considering international acquisitions or funds that are making long-term direct investments—need to make investment decisions and manage their FX risks over very long horizons. While these decisions will typically have some cyclical components, structural factors are increasingly important over this timespan.

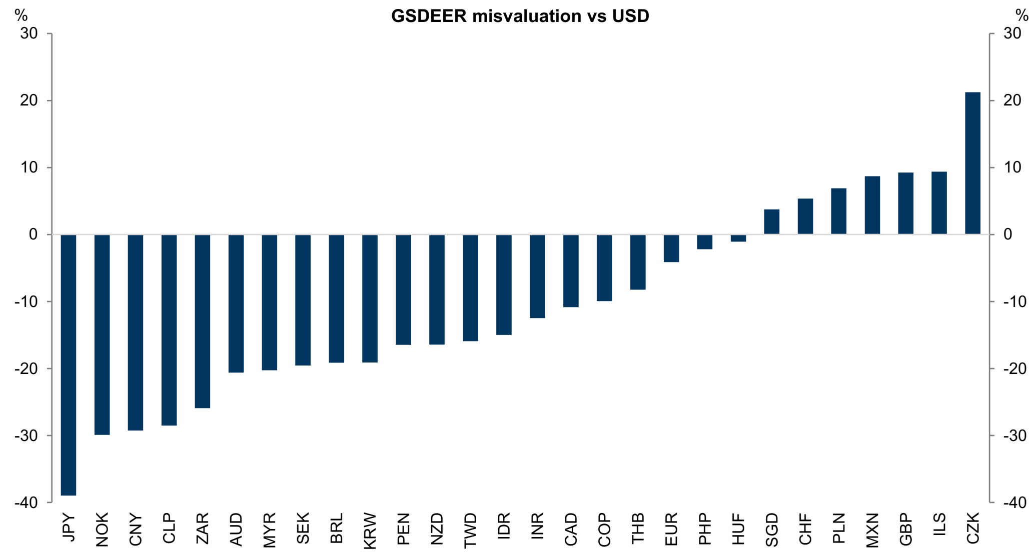
Our GSDEER model is well-suited for this exercise. GSDEER has been the workhorse model at Goldman Sachs for assessing FX "fair value" for the last 30 years. The model postulates that real exchange rates tend to mean-revert over time, but changes in structural factors such as productivity and terms of trade can influence the underlying trend. Current model estimates and research papers stretching back to 1995 can be found here. Consistent with the academic literature, we have found that models like this perform well over long investment horizons.

We proceed in three steps.

- First, we prepare the model to be run over a long time horizon by calculating forward estimates for terms of trade and productivity, so we get a sense of how each currency's "fair value" is likely to evolve in the coming decade.
- Next, we refresh our estimates of how quickly currencies tend to converge towards fair value over time.
- Finally, we combine these findings with our current cyclical assessments and make a few currency-specific adjustments to formulate our long-run forecasts.

We think the Dollar is about 15% overvalued right now, and that dictates the broad direction of our results and our forecasts, which we discuss in greater detail in the final sections (Exhibit 1).

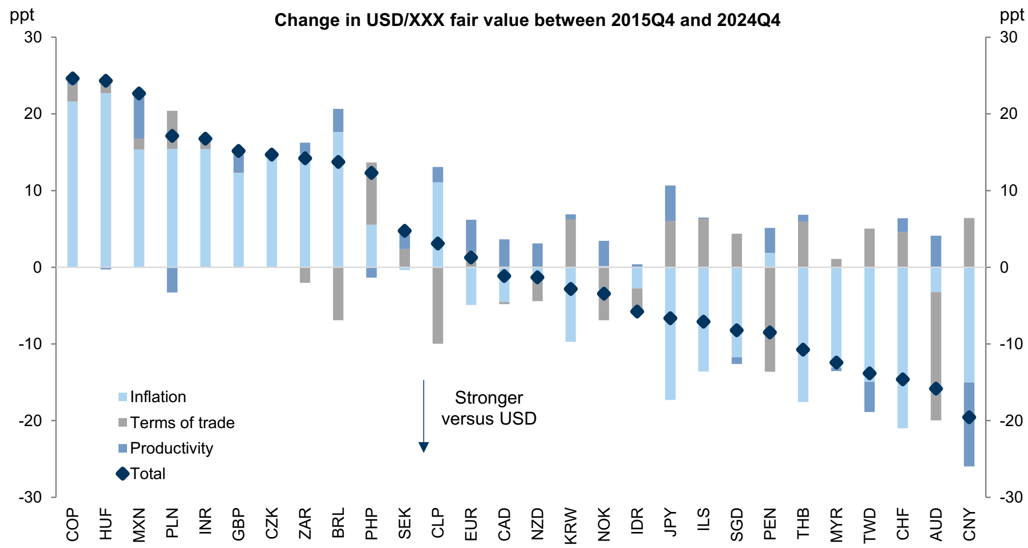
Exhibit 1: Currently, JPY, NOK, CNY and CLP have the largest undervaluation signal versus the Dollar, whereas CZK, GBP and MXN are among the most overvalued



Source: Goldman Sachs Global Investment Research

While exercises like this are more purposeful than a "random walk," they are certainly not without their hazards and sometimes crisscrossed navigational beacons. We are essentially trying to predict two things—how measures of "fair value" are likely to evolve, and to what extent currencies will converge towards that value. We have made many critical assumptions, assessments and choices along the way that dictate our results. And there are quite a few degrees of freedom—our estimates of fair value have shifted substantially over the last 10 years, and are likely to do so again (Exhibit 2). As we discuss, this leaves us with some interesting market takeaways, but these paths are certain to shift over time. The last decade is a case in point, as the Dollar consistently defied the odds and stayed "overvalued" for much of the time. That could certainly happen again, but we think it is much more likely that structural forces will move currency markets into better balance over time.

Exhibit 2: Changes in fair values over the last 10 years have mostly been driven by the inflation component, with larger terms of trade contributions in commodity-exporter currencies



All inputs are computed as a differential to the US

Source: Goldman Sachs Global Investment Research

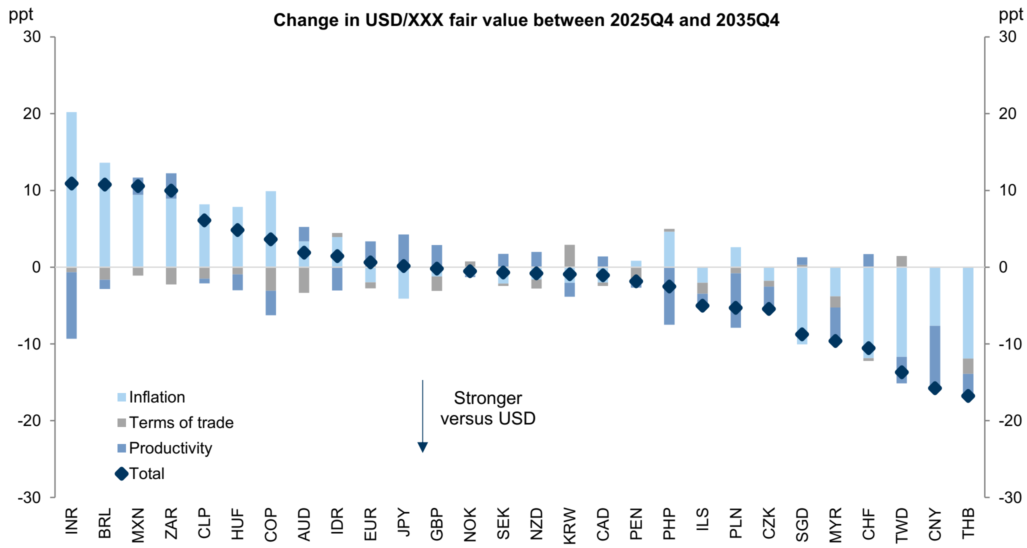
2. The Road to 2035: 10-year Fair Values

The first step in this long-term forecasting exercise is to extend forward our GSDEER fair values to 10 years. Regular readers of our FX research will know that we tend to rely also on GSFEER fair values—which pin down currency fair values that bring about external and internal balance. But, as we have demonstrated previously, the signal from GSFEER is most helpful in forecasting on shorter cyclical horizons such as the next 12 months, while GSDEER tends to dominate over longer horizons.

We can extend forward our GSDEER fair values by (1) leveraging our economists' inflation forecasts, (2) projecting forward terms of trade using commodity price change expectations and (3) forecasting labour productivity trends by combining our economists' real GDP growth forecasts with recent employment trends and the United Nations' projections for working-age population. We have made methodological changes in (2) and (3) relative to our prior infrastructure, which we detail in Box A below.

In Exhibit 3 below, we show the contribution of each input to the change in the GSDEER fair value between end-2025 and end-2035. And in Exhibit 4, we show the time series of our fair values over the next 10 years. As a reminder, these variables are inputted as a differential to the US as the output is a fair value versus the Dollar. For instance, if a country's inflation rate is 3% relative to US inflation of 2%, this will have a 1% contribution to the fair value.

Exhibit 3: Higher (lower) inflation pushes EM high-yielder (low-yielder) fair values weaker (stronger), mixed productivity contributions, and limited terms of trade impact



All inputs are computed as a differential to the US

Source: Goldman Sachs Global Investment Research

Overall, the trends in fair values over the next 10 years are consistent with those over the last 10, albeit slightly smaller in magnitude. The fair valuation anchor for currencies of economies that tend to target higher levels of inflation such as INR, MXN, ZAR and BRL should continue to drift weaker (that is, higher in USD/XXX terms). On the other side, lower inflation in Switzerland, China and many other Asian economies argues for nominal currency appreciation. Many EM currencies are projected to continue to benefit from improving productivity. With a few exceptions, the projected impact from terms of trade is relatively small, but that is mostly by construction as we use market forwards for this exercise. It is also worth noting that our relatively strong US productivity projections help offset somewhat higher US inflation to keep fair value more "pinned" in places such as Japan and the Euro area.

Exhibit 4: GSDEER fair values between 2025 and 2035

		GSDEER Fair values for USD/XXX (AUD, EUR, GBP, NZD as XXX/USD)									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
G10	AUD	0.83	0.83	0.83	0.82	0.82	0.82	0.81	0.81	0.80	0.80
	CAD	1.25	1.25	1.25	1.24	1.24	1.24	1.24	1.24	1.25	1.25
	CHF	0.83	0.81	0.81	0.80	0.79	0.79	0.78	0.78	0.77	0.77
	EUR	1.22	1.22	1.22	1.22	1.22	1.22	1.21	1.21	1.21	1.20
	GBP	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.21
	JPY	93.2	92.7	92.7	92.6	92.8	93.1	93.4	93.7	94.1	94.6
	NOK	7.27	7.23	7.21	7.22	7.21	7.20	7.19	7.19	7.18	7.18
	NZD	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	SEK	7.41	7.39	7.38	7.38	7.38	7.39	7.40	7.41	7.42	7.43
EM	BRL	4.35	4.40	4.44	4.48	4.52	4.57	4.62	4.68	4.73	4.79
	CLP	661	667	672	675	680	685	690	695	700	705
	CNY	4.81	4.72	4.65	4.59	4.53	4.46	4.41	4.35	4.30	4.25
	COP	3587	3592	3588	3580	3591	3607	3626	3648	3671	3693
	CZK	24.71	24.53	24.36	24.21	24.11	24.03	23.96	23.91	23.86	23.82
	HUF	332	334	335	336	338	340	343	346	348	351
	IDR	14316	14334	14320	14326	14333	14349	14364	14384	14403	14424
	ILS	3.50	3.47	3.46	3.43	3.42	3.42	3.41	3.40	3.40	3.39
	INR	80.92	81.80	82.75	83.65	84.66	85.70	86.81	87.96	89.10	90.27
	KRW	1179	1181	1187	1185	1186	1183	1179	1173	1168	1162
	MXN	20.63	20.94	21.10	21.28	21.48	21.71	21.93	22.17	22.42	22.66
	MYR	3.29	3.26	3.23	3.19	3.16	3.14	3.11	3.09	3.06	3.04
	PEN	2.78	2.78	2.78	2.77	2.76	2.76	2.77	2.77	2.77	2.77
	PHP	56.81	56.30	55.99	55.71	55.56	55.47	55.39	55.33	55.27	55.19
	PLN	3.78	3.76	3.74	3.72	3.70	3.69	3.68	3.67	3.66	3.65
	SGD	1.33	1.32	1.31	1.30	1.29	1.27	1.26	1.25	1.24	1.24
	THB	29.23	28.76	28.33	27.81	27.37	27.00	26.65	26.31	25.96	25.63
	TWD	25.58	25.34	25.00	24.74	24.43	24.12	23.81	23.49	23.18	22.88
	ZAR	12.93	13.07	13.19	13.29	13.44	13.60	13.78	13.95	14.13	14.32
Euro crosses	EUR/CHF	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92
	EUR/GBP	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99
	EUR/NOK	8.88	8.85	8.83	8.84	8.81	8.78	8.74	8.70	8.66	8.63
	EUR/SEK	9.05	9.04	9.03	9.04	9.02	9.01	8.99	8.97	8.95	8.94
	EUR/CZK	30.20	30.00	29.82	29.66	29.46	29.28	29.10	28.94	28.79	28.64
	EUR/HUF	406	408	410	412	413	415	416	418	420	423
	EUR/PLN	4.62	4.60	4.58	4.55	4.52	4.50	4.47	4.44	4.42	4.39

Our fair value series is quarterly; here we display the Q4 fair value for each year

Source: Goldman Sachs Global Investment Research

Box A. An updated productivity forecast using our economists' growth forecasts

Productivity trends affect exchange rates through the Balassa-Samuelson effect. As an economy grows richer, typically productivity in the tradeable sector increases relative to the non-tradeable sector. Labour market equilibrium means that wages in the non-tradeable sector increase faster than productivity as they catch up with wages in the more productive tradeable sector. Thus, the overall wage level increases relative to productivity, driving up prices domestically and leading to a real appreciation of the currency relative to its PPP fair value. In sum, a higher productivity differential will lead to a stronger fair value for a given currency relative to the Dollar.

Given this wage- and price-setting mechanism we measure productivity through labour productivity, which captures the output per worker in an economy. This will be highly correlated with other measures of productivity such as total factor productivity (TFP).

We now forecast productivity growth by estimating the growth rate of output and employment (see equations below). Relative to our previous regression-based approach, this depends less on past productivity trends and embeds forward-looking variables, including our economists' real GDP growth forecasts. We then proxy employment growth with two variables: (1) working-age population growth, which we obtain from the United Nations' World Population Prospects, and (2) the growth rate of the employment-to-working-age-population ratio, where we take the average growth rate between 2015 and

2024, excluding the Covid shock. Growth rates are obtained through a natural log linearization as per the equations below. While standard working-age population typically includes 15- to 65-year-olds, we use the 15-75 year-old population to account for growing participation and later retirement.

Labour Productivity = Output / Employed Persons

Labour Productivity growth = Output growth – Employed Persons growth

Labour Productivity growth = Real GDP growth – (Working-age population growth + Employment/Working-age population growth)

We carry out two separate country-specific adjustments. For New Zealand, we leverage the RBNZ's projections for working-age population so that productivity growth is more in line with its recent history. For India, while our forecasting data sources are the same, we use the RBI's KLEMS database to obtain historical data on employment. We combine this with real GDP data to update the historical productivity series.

This methodology change will be reflected in our GSDEER model hereafter.

Separately, we also refresh the sensitivities of Terms of Trade indices to commodity price shifts keeping the same underlying methodology but estimating this in a 2000 to 2024 window. Our regular updating of GSDEER will continue to leverage our commodities team's forecasts and therefore will not necessarily equal the estimates in this note, which need to rely on long-term market forwards.

3. A Roadmap to Reaching Fair Value

In earlier work, we show that real exchange rates tend to mean-revert over time, with a half-life of roughly 3 years—broadly consistent with the prevailing consensus in the literature. That forms the basis for what has been our "rule of thumb" for long-run FX forecasts, or a 20% per year "mean-reversion" rate. Here, we test how well that assumption still holds, as well as determine the best target for convergence.

The full set of GSDEER real exchange rate convergence results point to an average rate of convergence broadly consistent with our 20% per year rule of thumb (Exhibit 5). These convergence rates vary meaningfully across currencies though, and, as we have highlighted in previous work, we see several key reasons why GSDEER's performance as a long-term anchor differs across currencies. First, the quality of the economic data underpinning our GSDEER estimates differs across countries, and we have shown in previous work that using different measures of inflation can meaningfully alter model performance. Second, fair value models in general tend to perform better for countries with greater economic openness. And third, and most straightforwardly, managed exchange rates tend to see lower convergence rates—or no convergence at all—as the typical market forces driving convergence no longer apply, or at least not to the same extent as for free-floating currencies.

For the Dollar pairs we consider for this exercise, we make currency-specific assumptions for USD/SGD, and apply a lower convergence rate of 10% per year for USD/CNY and USD/CZK to account for tighter FX management. For all other pairs, we apply our 20% per year rule of thumb convergence rate.

Exhibit 5: Currencies tend to converge to fair value by about 20% per year

1-Year Real Exchange Rate GSDEER Convergence				
	Real Exchange Rates			
	Beta	T-Stat	R-Squared	RMSE
Average (All)	-0.17	-1.30	0.09	10.02
Average (G10)	-0.22	-1.61	0.11	10.28
Average (EM)	-0.15	-1.22	0.09	9.38
Panel (All)	-0.14	-5.94	0.06	10.56
Panel (G10)	-0.18	-4.51	0.08	10.72
Panel (EM)	-0.12	-4.19	0.05	10.46

Real out-of-sample convergence rates to our GSDEER fair value estimates. Annual data, 2000-2025.

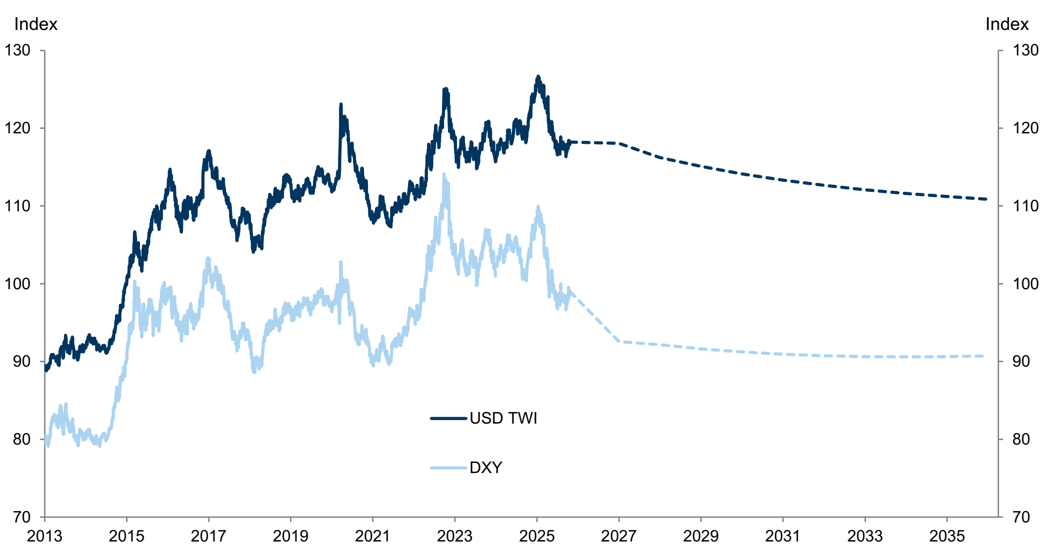
Source: Goldman Sachs Global Investment Research

4. Our 10-year-ahead FX Forecasts

We combine the results of our GSDEER methodology and findings on convergence rates to form our 10-year forecasts. We take our 12-month forecasts as the cyclical “starting point,” and from 2027 onwards we embed an annual 20% convergence of exchange rates to the GSDEER fair value in real terms, one year at a time as the fair value itself evolves over time.

We discuss five specific takeaways from our forecasts in the next section, but, at a high level, our forecasts point to continued Dollar depreciation which is consistent with its starting point of around 15% overvaluation in our GSDEER framework. Our forecasts point to greater DXY downside in the first few years with a gradual “catch-down” of the USD TWI Index (Exhibit 6).

Exhibit 6: Our forecasts point to continued Dollar depreciation



Source: Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

Exhibit 7 below displays our FX forecasts from 2026 to 2035. Our new forecasts for 2035 include EUR/USD at 1.21, USD/JPY at 100, GBP/USD at 1.24, and USD/CNY at 5.17. Exhibit 10 compares these forecasts to the available data on 10-year FX forwards.

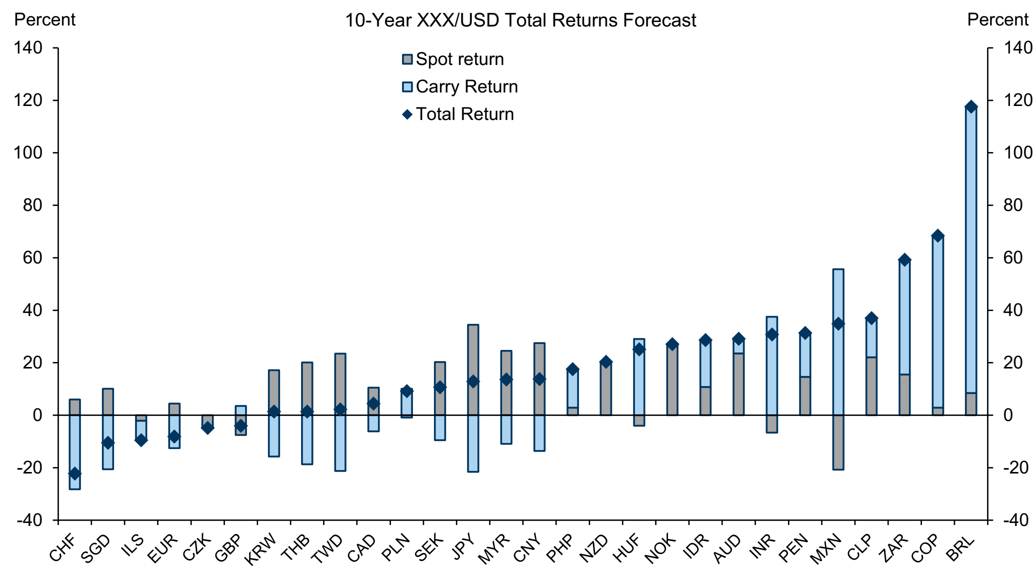
Exhibit 7: GS FX forecasts through 2035

			GS Forecasts for USD/XXX (AUD, EUR, GBP, NZD as XXX/USD)									
		Spot	12m	2027	2028	2029	2030	2031	2032	2033	2034	2035
G10	AUD	0.65	0.68	0.71	0.74	0.76	0.77	0.78	0.79	0.80	0.80	0.80
	CAD	1.40	1.36	1.33	1.31	1.30	1.29	1.28	1.27	1.26	1.26	1.25
	CHF	0.80	0.74	0.74	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	EUR	1.16	1.25	1.24	1.23	1.23	1.23	1.23	1.22	1.22	1.22	1.21
	GBP	1.33	1.39	1.35	1.32	1.30	1.29	1.27	1.26	1.25	1.24	1.24
	JPY	153	145	133	124	118	112	108	105	103	101	100
	NOK	10.02	9.04	8.67	8.38	8.14	7.94	7.79	7.66	7.56	7.48	7.41
	NZD	0.57	0.63	0.64	0.65	0.66	0.67	0.68	0.68	0.68	0.69	0.69
	SEK	9.39	8.48	8.22	8.04	7.90	7.79	7.70	7.63	7.58	7.54	7.52
EM	BRL	5.39	5.10	5.03	4.98	4.93	4.90	4.88	4.88	4.89	4.91	4.93
	CLP	942	900	858	827	802	783	769	759	751	746	743
	CNY	7.09	6.90	6.58	6.35	6.14	5.95	5.77	5.60	5.44	5.30	5.17
	COP	3853	3800	3799	3795	3779	3768	3762	3761	3765	3772	3782
	CZK	20.92	19.12	19.54	20.00	20.40	20.75	21.06	21.33	21.57	21.78	21.97
	HUF	336	304	311	318	324	329	333	338	342	345	349
	IDR	16606	16000	15671	15442	15262	15127	15023	14941	14880	14834	14802
	ILS	3.28	3.20	3.22	3.26	3.29	3.32	3.33	3.35	3.35	3.36	3.36
	INR	87.85	86.00	86.28	87.03	87.84	88.71	89.63	90.60	91.63	92.69	93.79
	KRW	1439	1310	1280	1260	1244	1231	1221	1211	1203	1195	1187
	MXN	18.45	18.75	19.40	19.90	20.31	20.69	21.04	21.36	21.67	21.97	22.26
	MYR	4.22	4.10	3.91	3.77	3.64	3.54	3.44	3.37	3.30	3.24	3.19
	PEN	3.38	3.60	3.43	3.30	3.20	3.12	3.05	3.00	2.96	2.92	2.90
	PHP	58.64	55.50	55.71	55.98	56.17	56.32	56.43	56.49	56.54	56.56	56.56
	PLN	3.65	3.44	3.50	3.55	3.60	3.63	3.65	3.67	3.68	3.69	3.69
	SGD	1.30	1.25	1.23	1.21	1.20	1.19	1.18	1.18	1.17	1.17	1.17
	THB	32.68	31.50	30.55	29.86	29.20	28.54	27.99	27.49	27.03	26.59	26.18
	TWD	30.84	29.50	28.31	27.39	26.62	25.95	25.36	24.83	24.35	23.90	23.49
	ZAR	17.24	16.50	15.88	15.47	15.15	14.92	14.77	14.69	14.65	14.66	14.71
Euro crosses	EUR/CHF	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.91	0.91
	EUR/GBP	0.87	0.90	0.92	0.93	0.94	0.95	0.96	0.97	0.97	0.98	0.98
	EUR/NOK	11.65	11.30	10.73	10.33	10.01	9.75	9.54	9.36	9.22	9.09	8.98
	EUR/SEK	10.92	10.60	10.18	9.92	9.72	9.56	9.44	9.33	9.24	9.17	9.10
	EUR/CZK	24.32	23.90	24.18	24.67	25.11	25.48	25.80	26.07	26.29	26.47	26.61
	EUR/HUF	390	380	385	392	398	404	409	413	416	420	423
	EUR/PLN	4.24	4.30	4.33	4.38	4.43	4.46	4.47	4.48	4.48	4.48	4.47
	DXY	98.95	92.56	92.16	91.63	91.23	90.93	90.74	90.64	90.61	90.64	90.72
	USD TWI	118.21	118.06	116.21	115.09	114.13	113.32	112.65	112.08	111.61	111.20	110.86

Source: Bloomberg, Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

Our forecasts relative to the forwards imply the majority of the currencies we forecast should deliver positive total returns versus the Dollar over the coming 10 years—with the Dollar's still-elevated current structural valuation a primary driver of that result. High-carry currencies make up four of the top five performing currencies under our implied total return forecasts and, zooming out, that theme extends across our forecasts.

Exhibit 8: LatAm currencies lead the way for our the 10-year total returns implied by our forecasts

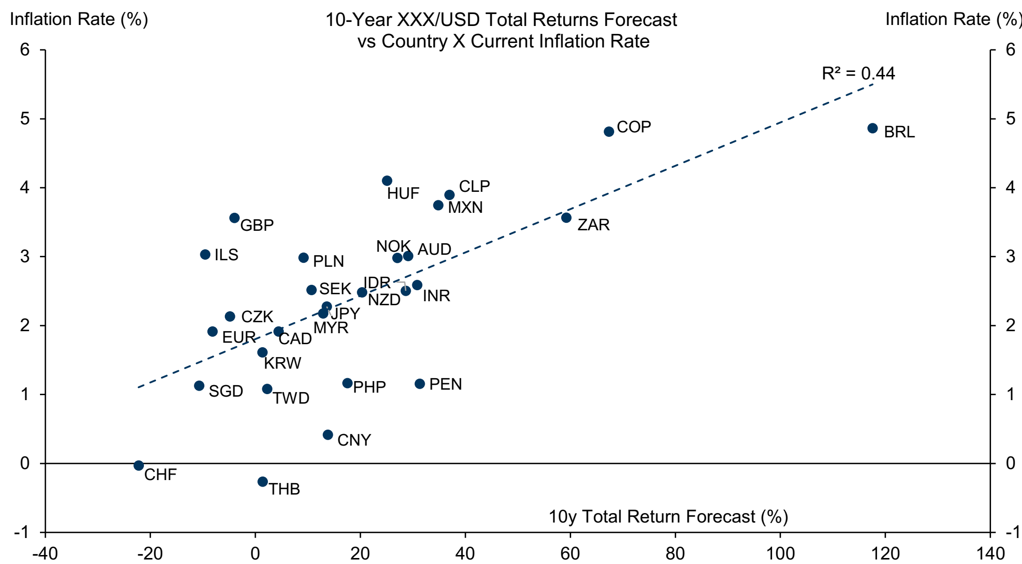


Source: Bloomberg, Goldman Sachs Global Investment Research

There is a clear positive correlation between our forecast-implied total return expectations and current inflation rates across currencies (Exhibit 9). We see two key reasons for this result. First, the risk-adjusted path for inflation and carry embedded by the market in the 10-year FX forwards may differ from our economists' modal inflation forecasts, and that difference is likely greater in higher-inflation countries—we explore this effect in more detail in Box B. Second and more fundamentally, the higher 10-year total returns implied by our forecasts for higher-inflation (and higher-carry) currencies currently is consistent with the well-documented result of excess returns being delivered by harvesting risk premium for 'riskier' high carry currencies.[1]

[1] For more details on the forward premium puzzle – the failure of uncovered interest rate parity – see *Global Markets Analyst: The Long-term Risk Premium in EM FX* (2019) for our own work, or see, for example, Brunnermeier, M.K., Nagel, S. and Pedersen, L.H., 2008. Carry trades and currency crashes. *NBER macroeconomics annual, 23*(1), pp.313-348).

Exhibit 9: There is a significant positive relationship between our 10-year forecast-implied total return projections, and current inflation rates across currencies



Current inflation rates represent our economists' Q3 forecasts across countries.

Source: Bloomberg, Goldman Sachs Global Investment Research

Relative to that positive relationship between 10-year total returns and current inflation, there are a few key deviations, and it is here that the current GSDEER valuations play a clearer role. CNY and other Asian low-yielders (including THB, TWD, and PHP) offer greater total return prospects than their current carry offering would imply on its own, putting them to the right of the line of best fit in Exhibit 9. These currencies, and the Renminbi in particular, are some of the most deeply undervalued currently under our GSDEER framework. Meanwhile, GBP, HUF, and ILS stand out as the currencies furthest to the left of that line of best fit, and are among the currencies with an overvaluation signal comparable with the Dollar currently.

Box B. Inflation Slips & Currency Slides: Implications of Inflation Target Slippage for our FX Forecasts

As noted above, differences in the paths for inflation underpinning our forecasts and embedded by markets in the forwards will contribute to our forecast-implied total return results. Even for a small difference in steady-state inflation assumed by our economists in their modal views and indirectly reflected in the forwards by markets, the impact can be significant over 10-year horizons as that small difference is compounded.

Our modal inflation views often assume inflation will gradually return to central banks' targets. Meanwhile, markets' discounting of future inflation—as observable in traded inflation markets for example—is not typically anchored around those inflation targets in the same way. We view that difference in inflation target anchoring as one source of variation between our FX forecasts and the forwards. As an illustrative exercise to investigate that point of difference, we estimate the historical misses on inflation targets across central banks, and phase that historical 'slippage' into our modal inflation assumptions underpinning our FX forecasts. We phase in that slippage at a rate of 20% per year for 2026-2030, with our 2031-2035 forecasts fully embedding that slippage. We follow this approach as a proxy for the type of adjustment to the path for inflation that the forwards are incorporating, and present our alternative FX fair values alongside these slippage rates in Exhibit 10.

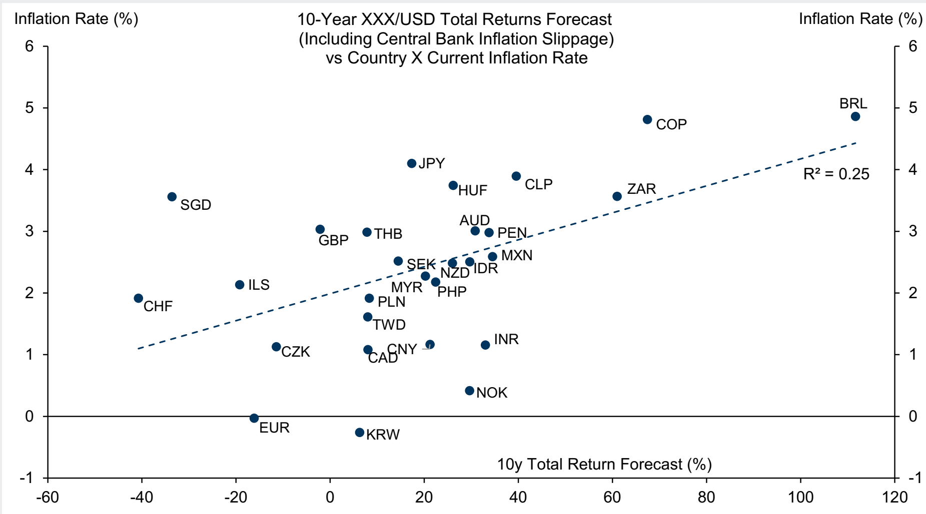
Exhibit 10: Incorporating historical inflation target slippage into our FX forecasts brings those forecasts closer to the forwards for most higher-inflation economies

		Historical CB Inflation Target Slippage (pp)	2035Q4 GSDEER Fair Value	2035Q4 Fair Value Including Slippage	10y FX Forwards
G10	AUD	0.37	0.80	0.81	0.61
	CAD	0.20	1.25	1.21	1.32
	CHF	-1.42	0.77	0.71	0.57
	EUR	0.14	1.20	1.25	1.31
	GBP	1.42	0.82	0.87	1.29
	JPY	-0.63	95	86	119
	NOK	0.09	7.18	6.89	10.14
	NZD	0.63	0.70	0.70	0.57
	SEK	-0.04	7.43	7.07	8.52
EM	BRL	1.91	4.79	5.25	11.27
	CLP	0.83	705	715	1096
	CNY	-1.12	4.25	4.02	6.15
	COP	1.20	3693	3848	6448
	CZK	1.17	23.82	24.79	20.95
	HUF	1.54	351	376	433
	IDR	0.92	14424	14737	19554
	ILS	-0.52	3.39	3.10	3.05
	INR	0.93	90	92	121
	KRW	-0.15	1162	1096	1206
	MXN	1.41	22.66	23.98	28.69
	MYR	-	3.04	2.90	3.77
	PEN	0.93	2.77	2.83	3.96
	PHP	0.25	55.19	53.63	66.77
	PLN	0.83	3.65	3.71	4.03
	SGD	-	1.24	1.18	1.03
	THB	-0.10	25.63	24.27	26.64
	TWD	-	22.88	21.83	24.17
	ZAR	0.69	14.32	14.38	25.01

Source: Bloomberg, Goldman Sachs Global Investment Research

For the most part, the introduction of these inflation slippage adjustments would not differ much from our forecasts. For the majority of the high-carry currencies, the slippage adjustment would take our FX forecasts closer to the forwards, lowering their 10-year total return prospects. Relatedly, the slippage adjustment also weakens the strength of the positive relationship between current inflation and 10-year total returns, with an R-squared of 30% for that relationship with the slippage adjustments (Exhibit 11), versus ~50% for the unadjusted results (Exhibit 9). While the slippage implications for total returns in lower-carry currencies is more mixed, we view the result of weaker returns in high-carry currencies as reflective of the higher-than-target inflation run-rates that we think are typically embedded in these markets.

Exhibit 11: The correlation between projected 10-year total returns and current inflation rates is lower when incorporating historical inflation target slippage into our FX forecasts



Total returns estimated via 10y forwards relative to our 2035Q4 GSDEER fair values (incorporating our measure of historical central bank slippage).

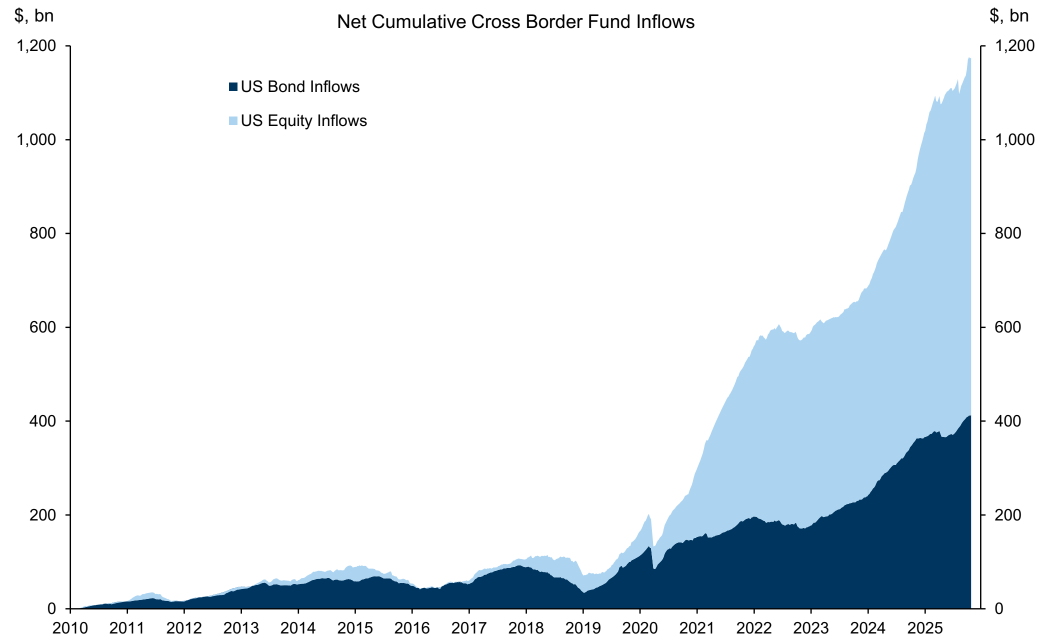
Source: Bloomberg, Haver Analytics, Goldman Sachs Global Investment Research

5. Who is the Fairest of them all?

In this section we discuss in detail five highlights of our long-term forecasts.

- **USD: Will AI save the day?** The Broad Dollar TWI has depreciated this year as a less exceptional macro and market performance is no longer consistent with its high valuation. Against that backdrop—and coupled with heightened policy uncertainty—the US is finding it harder to attract unhedged capital inflows to fund its large current account (and fiscal deficit). That shift has still left the Dollar about 15% overvalued relative to our fair value metrics—primarily against the Yen, Yuan and other EM currencies. Over the next decade, we expect some of that overvaluation to erode further, with the broad Dollar TWI moving another 6%-7% lower, but with more of that move coming versus Asia and EM, compared with the more Euro-centric move in 2025. There are two primary risks to that view: on the one hand, tight currency management in the rest of the world prevents that shift from occurring, and on the other, a fresh AI-led bout of productivity gains and market performance causes US exceptionalism to regain some of its shine. Our economists do expect US productivity to benefit from the spread of AI through the economy, and US 'tech exceptionalism' is part of what has sustained the Dollar's still rich valuation. But even then, to boost those already rich valuations further, the key questions over the next few years are whether that shift in productivity growth remains confined to the US or broadens out globally, and whether the returns on capital invested meet the high return expectations reflected in lofty US tech equity valuations.

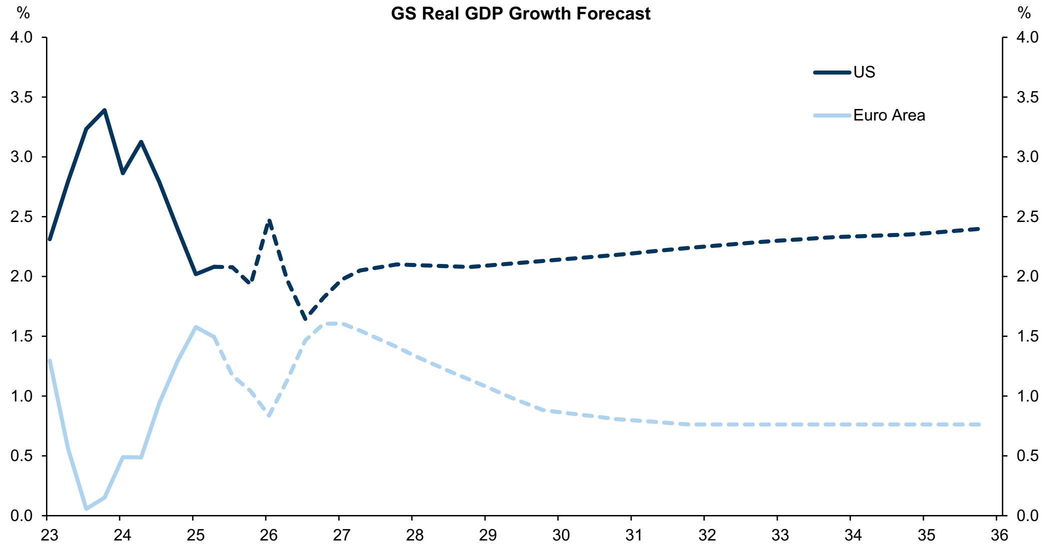
Exhibit 12: US equity inflows have outstripped bond inflows in recent years



Source: EPFR, Haver Analytics, Goldman Sachs Global Investment Research

- **EUR: No reason for overvaluation.** For many currencies, lengthening the horizon involves entertaining the possibility of more ambitious moves, but for EUR/USD that is conspicuously not the case. With much of Euro's undervaluation eroded in 2025 year-to-date on the back of the German fiscal shift and its growth consequences, from here we see the Euro asymptoting towards its fair value over the next 12 months and then trading sideways after that around the 1.20 level. More relevant to the 10-year-ahead forecasts, we forecast little change in the fair value itself—with slightly better inflation performance relative to the US offset by relatively worse productivity outcomes. And a stronger move into overvalued territory requires more confidence in a structural European growth and/or capital market outperformance, rather than simply narrowing the gap to the US (which has been the story of the past year).

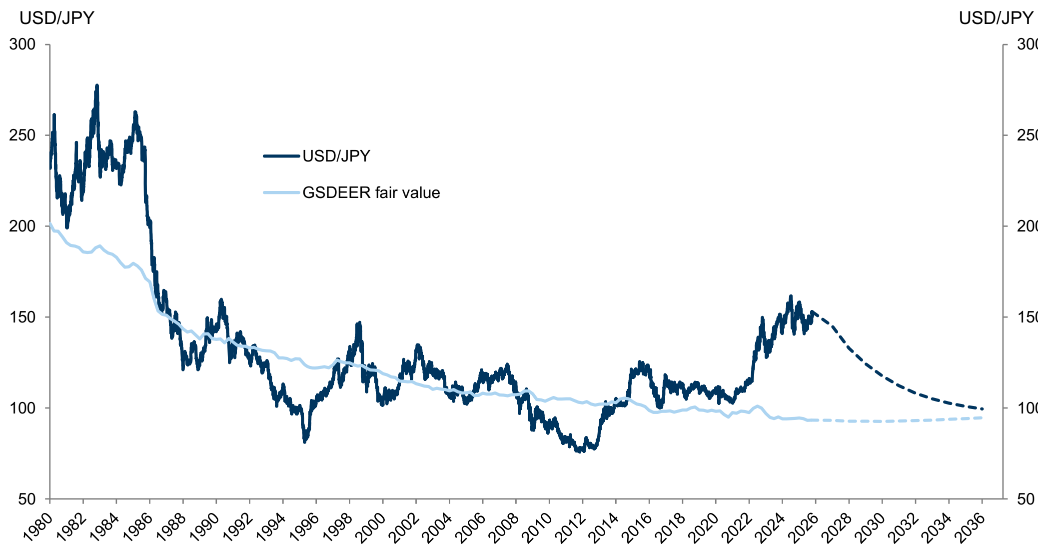
Exhibit 13: Convergence between US and Euro area growth unlikely to last



Source: Goldman Sachs Global Investment Research

- **JPY: It feels cheap, it is cheap.** A common refrain from the surge of tourists visiting and investing in Japan is how 'cheap' it feels, and our FX metrics validate this. Extraordinary policy easing such as 'Yield Curve Control' have cheapened the Yen significantly relative to fair value, and over the next 10 years, as policy rates normalize gradually, the Yen undervaluation should also erode in what is the largest move relative to spot on our 10y forecasts (Exhibit 14). A move back towards 100 in 10 years (relative to forward pricing between 115 and 120) is less extreme than it may seem at first glance: we were nearly there less than 5 years ago in early 2021, a renewed pivot towards 'Abenomics' under new PM Takaichi is likely to be much more muted given the political unpopularity of inflation, and despite large multi-year swings away from fair value on both sides, USD/JPY has a strong record of moving back to GSDEER fair values over time.

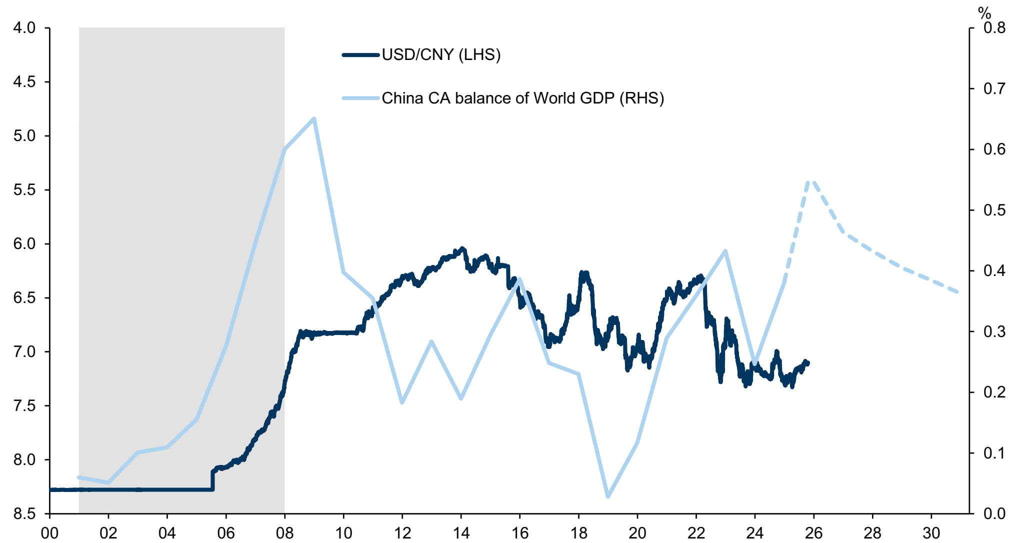
Exhibit 14: The GSDEER fair value has been a strong anchor for the Yen over the past 50 years



Source: Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

- **CNY (and its NJA competitors): Turning a super tanker.** The CNY is one of the most undervalued currencies on our refreshed GSDEER fair value estimates. Especially in the aftermath of Covid, China's low and deflating prices compared with the inflation surge in the rest of the world has resulted in a super competitive real exchange rate. And while there are large confidence intervals around such fair value estimates, the very strong export performance and large trade surpluses (as a share of global GDP) in recent quarters are also a testament to the competitiveness of China's exports. That said, CNY is a heavily managed currency, and so our convergence estimates for CNY are meaningfully lower than in the case of the full sample. Putting these together, our framework expects USD/CNY to move a fair distance towards fair value. Whether it will depends on whether the tight currency management regime of recent years is relaxed or not. And while policy authorities appear in no mood to do so in the near term, a decade is a long time, and the last time China's external sector was similarly dominant (at the time of the first China shock), it was followed by a large currency appreciation (Exhibit 15). Bottom line, the gravitational pull towards currency strength is going to remain in place, and if we see policymakers allow that currency strengthening to play out, that would also imply much stronger appreciation across NJA's smaller more open economies that are competitors to China.

Exhibit 15: The last time China's external sector was similarly dominant (at the time of the first China shock), it was followed by a large currency appreciation

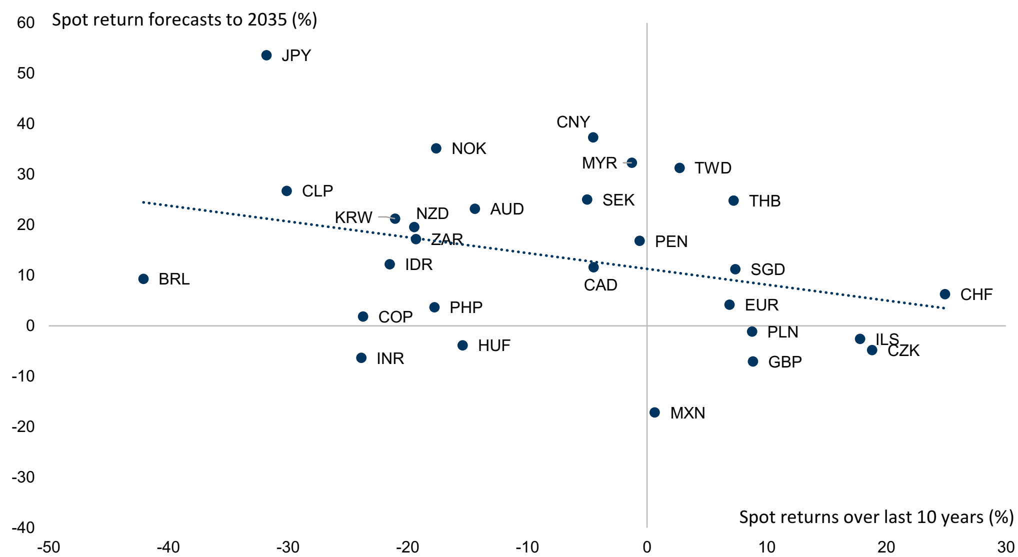


Dashed series reflects IMF projections

Source: Haver Analytics, IMF, Goldman Sachs Global Investment Research

- **BRL & ZAR: There's always potential.** BRL, COP and ZAR are three currencies that offer the scope for the highest potential total returns over the 10-year period we consider. That is mostly about the high-yield or carry in those currencies, cumulated over a decade. But in the case of BRL and ZAR, we also envisage scope for meaningful spot appreciation, reversing some of the weakness of the past decade. Outside of a brief period in 2018-19, both these currencies have traded cheap relative to fair value— where a mix of anaemic growth and fiscal risks have warranted a risk premium in local assets over the past decade. Addressing those twin challenges against an unsettled political backdrop will not be straightforward, but a concerted effort could unlock the value embedded in these currencies.

Exhibit 16: After a long-lasting cheapening more potential upside in BRL and ZAR



Source: Goldman Sachs FICC and Equities, Goldman Sachs Global Investment Research

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Reg AC

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