GLOBAL FX TRADER

Supply in the Balance

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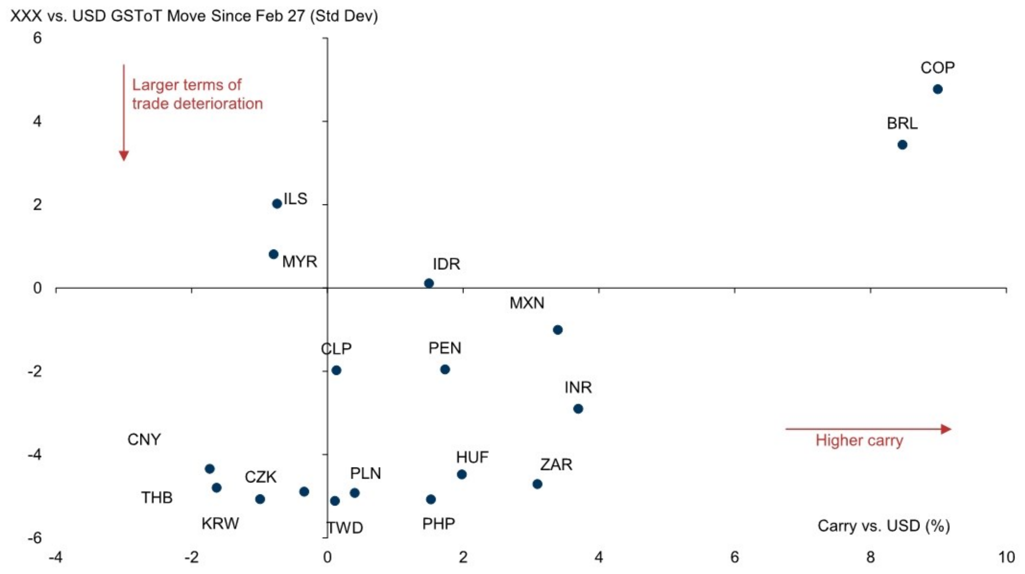
Our thoughts on USD, BRL, GBP, CAD, ILS, INR, AUD & NZD, South East Asia FX, EGP and the FX-Rates Relationship

- **USD: The curious case of the shrinking supply shock.** We have maintained that the ramifications of the conflict in the Middle East will affect economic data, and FX returns, even after peak uncertainty. Higher energy prices and product shortages are rearranging global current account balances and dampening growth momentum, and relative FX returns are increasingly reflecting this differentiation. We have revised our global growth forecasts lower, with smaller revisions in the US and other energy-insulated economies. Our economists are now well below consensus in APAC ex-China, and marginally below consensus in the Euro area, with a widening gap to the US, and our 3-month FX forecasts reflect this with broad Dollar depreciation delayed. However, we must admit that, after a much longer-than-expected disruption to energy flows, the impact so far looks much less conspicuous than what we would have expected at the start of the conflict, perhaps reflecting greater reliance on accumulated inventories so impacts may be delayed. While there are certainly scattered signs of shortages impacting production—and more each day—most of our higher frequency activity trackers have held up surprisingly well. In fact, while the conflict has been more prolonged than we had anticipated, our economists have made minimal further growth revisions and our global forecasts have tracked slightly stronger over the last few weeks. It is possible that global supply is proving to be more elastic than our GDP forecasts imply, which would leave us too cautious on cyclical currencies like AUD and too optimistic on the Dollar, especially in NJA. However, with still-sparse traffic through the Strait and nascent signs of more widespread supply pressures—most prominently in the Euro area PMIs—markets should be more wary of continued upside risks to commodity prices, and mindful that higher-for-longer energy prices have an almost-mechanical impact on current account balances that matter for FX. In that respect, we still believe that European currencies in particular underprice the risk of a more noticeable energy constraint, even as the market has moved slightly in this direction over the last week.
- **BRL: Is this the Real life?** BRL is the best performing currency YTD and is one of the few crosses trading at stronger levels now than before the Iran conflict. We think the Real's outperformance is supported by three key pillars: (1) the surge in

Brazil's terms of trade over the past couple of months (2) the recovery in risky assets (which had been holding BRL back through March), and (3) still elevated carry, matched only by COP (Exhibit 1). We think this BRL relative outperformance has further to go as long as energy prices remain elevated but do not lead to weaker risk sentiment. Moreover, to the extent that higher inflationary pressures keep the BCB on a more cautious easing path (our economists now expect a 25bp cut at next week's meeting), the carry component of total returns will remain even more supported, and FX longs will screen as more attractive than rates receivers. With this in mind, we think that the main near-term risk to BRL returns is a reversal of the recent risk recovery. In our view, expressing BRL longs in a more risk-neutral format, for instance with CLP funding, would be an effective way of adding resilience. Further out, we expect risks to BRL spot performance to shift from 'global' to 'local' as the October Presidential election nears. Earlier in the year, we argued that election risks were asymmetric towards BRL appreciation. But, after the YTD rally, we see risks as more two-sided; and higher volatility around the election will also lead to an erosion of carry-to-vol ratios. Still, we expect focus on the election to only pick-up in a few months, whereas in the near-term we expect the terms of trade and risk implications of the conflict to continue to dominate the price action. To reflect recent market moves and the balance of risks going forward, we revise our USD/BRL forecasts lower to 4.90, 5.00, 5.00 in 3-, 6- and 12-months (from 5.20, 5.30, 5.30 previously).

Exhibit 1: BRL's terms of trade surge and high carry are only matched by COP

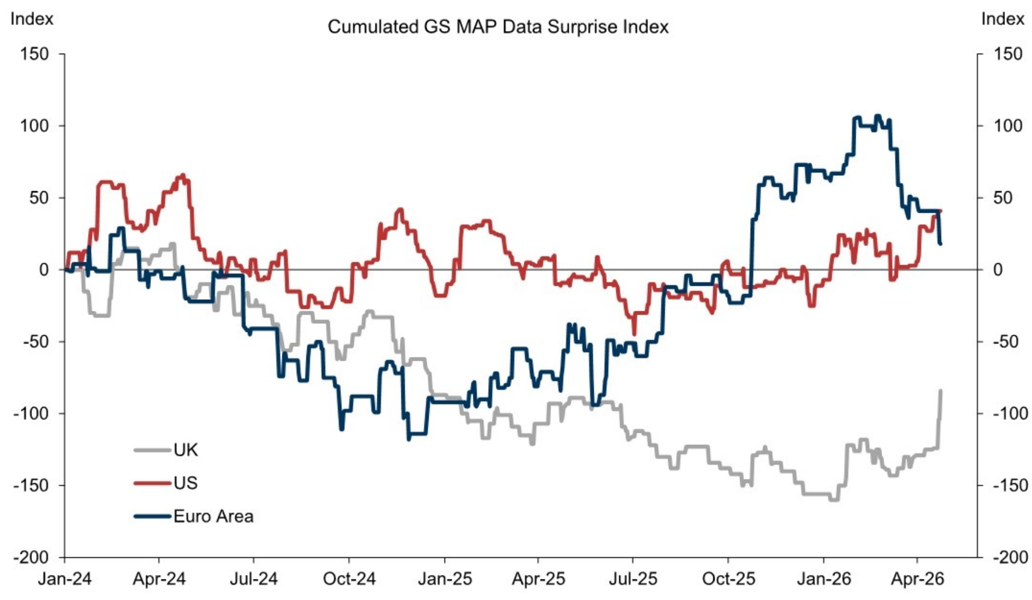


Terms of trade moves scaled by daily volatility of the index

Source: Bloomberg, Goldman Sachs Global Investment Research

- **GBP: From local to global.** Domestic UK macro themes were central to our regional Sterling underperformance view prior to the energy shock, but we think the key drivers of the currency have since shifted. Global dynamics should dominate regional ones as markets grapple with a terms of trade shock that we expect to be longer lasting. The evolution of that shock should dictate Sterling performance above all else, but we think the calculus on the domestic front is changing as well. A clear positive turn in this week's UK data stands in contrast to a deterioration in the Euro area, reversing part of the underperformance in UK data that was a key theme of last year (Exhibit 2). There are caveats and quality concerns around many of these UK releases, but at an aggregate level we think resilient data has been a key source of recent support for the currency. Other domestic considerations meanwhile present more of a challenge to Sterling in our view. Our economists think the BoE is unlikely to meet the material hike premium priced by markets for this year, the currency is still highly overvalued on our structural GSDEER metric, and bouts of fiscal and political risk premium remain a risk. The latter continues to be a market focus ahead of the May 7 local elections, and while we would stress that Sterling's imprint from political uncertainty over prior months has been much more tactical than fundamental, we still see the risks to the currency as asymmetrically negative from this angle. All told, while Sterling should remain highly levered to any further recovery in global risk sentiment, its energy-importer attributes and the balance of the UK's domestic macro themes still imply more value in the negative side of its distribution. We think the case for Sterling underperformance is clearer against terms of trade beneficiaries such as USD or AUD for the time being, rather than in crosses that are more sensitive toward UK domestic considerations, such as EUR/GBP.

Exhibit 2: Firmer recent UK data has unwound part of last year's underperformance relative to the Euro area



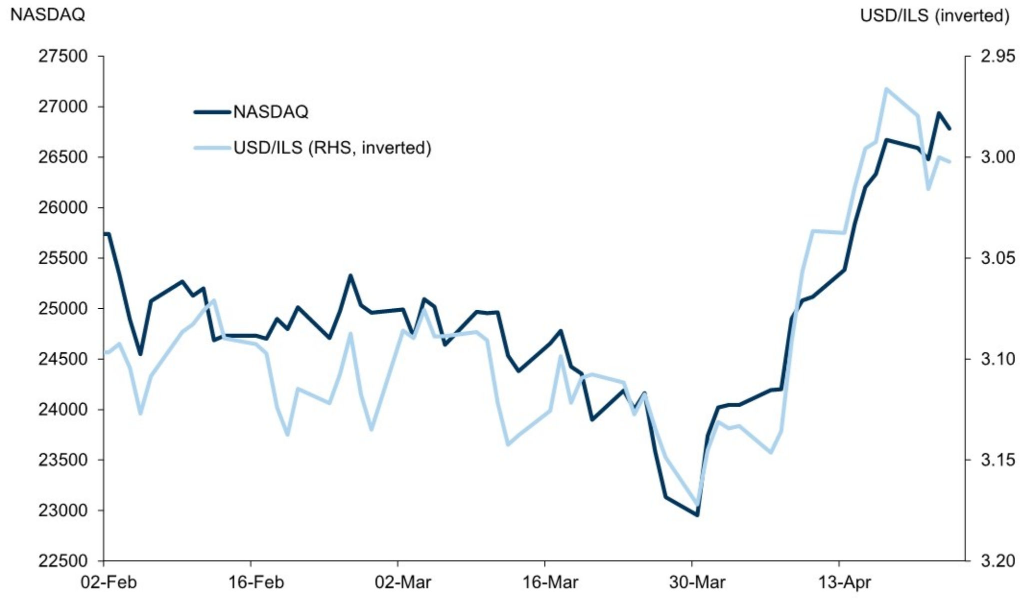
Source: Goldman Sachs Global Investment Research

- **CAD: Relative resilience.** CAD has been one of the more resilient G10 currencies in recent weeks, despite somewhat softer domestic data. March inflation surprised to the downside notwithstanding the energy shock, and the latest employment report indicated stabilization but little improvement from a year ago, which our economists expect should allow the BoC to remain on hold at the April meeting. Fundamentally, this leaves us less constructive CAD in the more medium term, especially with

USMCA uncertainty likely to weigh on the currency ahead of the July 1 deadline. However, as long as the terms of trade implications of the energy shock remain at the fore, Canada's idiosyncratic domestic considerations should remain secondary FX drivers. In that environment, CAD should continue to outperform, consistent with its high sensitivity to oil-price shocks in our GSTOT framework and its positive correlation with the broad Dollar. That said, CAD's Dollar beta cuts both ways and poses the risk of underperformance in the case of a sustained recovery in risk sentiment and relaxation in commodity markets.

- **ILS: Tech takeover.** The Shekel's initial strength on March 2nd reversed through the rest of the month as the Middle East conflict extended for longer than initially expected. However, since early April, USD/ILS has moved over 5% lower and is trading below 3.00 for the first time since 1995. We ascribe most of this ILS appreciation to its high 'beta' to tech stocks, which had been increasing prior to March and was tracking at its strongest level in many years (Exhibit 3). While it is possible to see brief divergence between the performance of tech stocks and ILS, especially around conflict-related headlines or around periods of domestic political uncertainty, we expect the Shekel's global betas to remain in the driver's seat for now. This is not only due to this tight correlation to tech stocks, but also because geopolitical risks for USD/ILS remain two-sided—with scope for higher Israel-specific premium to be priced on one hand, but also the potential for a lower threat from regional adversaries on the other—and thus are unlikely to provide a clear directional view while uncertainty remains elevated. Looking ahead, a continued rally in tech stocks points to further appreciation pressures on the Shekel. However, over time, we think the currency's increasing overvaluation signal (now at over 14% vs the USD on our GSDEER model) will act as a restraint to further appreciation. In large part, this is because we expect the Bank of Israel to be responsive to currency strength, especially as competitiveness concerns come increasingly into focus, though in the near-term the central bank is likely to continue to sound cautious while the conflict is ongoing. All in, we revise our USD/ILS forecasts to 3.00, 3.05, 3.10 in 3-, 6- and 12-months (from 3.15, 3.20, 3.25 previously).

Exhibit 3: The Shekel's recent appreciation has tracked closely the rally in US tech stocks

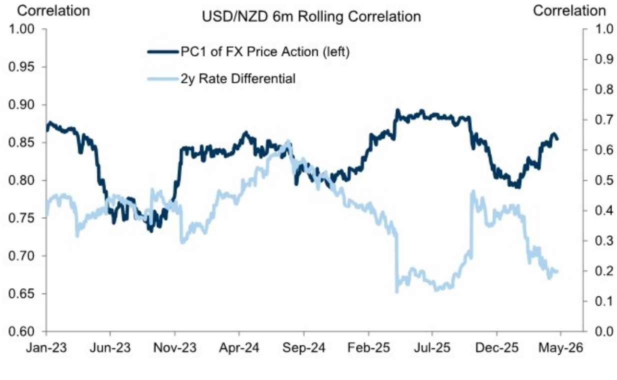


Source: Bloomberg, Goldman Sachs Global Investment Research

- **INR: Falling fast and slow.** As the energy shock from the Iran conflict and the Strait of Hormuz blockade has dragged on, the Rupee has continued to trade on the back foot. The ceasefire and the associated compression in the upside energy tail probably played a role in the RBI partially easing restrictions on currency derivative transactions by banks, and as a consequence, the market should be able to focus again on macro and currency fundamentals. In that regard, on the positive side, the currency is (very) modestly undervalued on a real trade-weighted basis, and the economy has demonstrated impressive resilience in the early part of this shock, with data surprising to the upside relative to the demand destruction we were factoring in. However, as long as the energy blockage persists, we think that the negatives outweigh the positives. The shock is still likely to leave an imprint on the BoP data with both higher-for-longer energy import prices and lower remittances from the middle-east; we expect limited capital inflows both given the negative terms-of-trade shock and a much more constructive outlook for equity earnings in North Asia and LatAm within EM; and even in the event of further de-escalation, we would expect policy authorities to focus on rebuilding reserves (and unwinding the short forward book) rather than encouraging currency appreciation. That said, the pace of depreciation may slow relative to the fast moves in March, especially since inflation concerns may also re-enter the policy calculus if administered pump prices are shifted higher in the following months, given elevated crude oil prices.

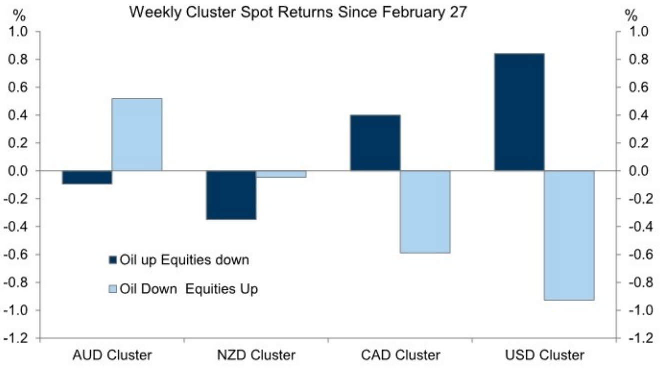
- **AUD & NZD: Deserved divergence, for now.** In recent weeks, AUD has been among the top G10 performers while NZD has been among the weakest. N underperformed cyclical factors on our GSBEER model since the sta shock and AUD/NZD has broadly become dislocated from rate diffe start of the year. As a result, we think AUD/NZD could see some rev medium term, though we note our economists remain most dovish t on the RBNZ. More importantly, the ongoing energy shock should allow lower realized vol in rate differentials to persist, keeping relative policy a secondary FX driver in the near term. NZD, in particular, tends to be one of the least "idiosyncratic" currencies with one of the highest historical correlations to a first principal component of FX price action. Recently, this correlation has increased as NZD's beta to rate differentials has declined (Exhibit 4). Instead, energy prices and risk sentiment should continue to dominate. Though the relative performance of AUD and NZD seemingly boils down to the relative terms of trade, our clustering framework reveals asymmetries across the two regimes that have defined recent weeks. While AUD has outperformed when equities rebound and oil prices decline, it has also been relatively resilient in risk-off drawdowns as the terms-of-trade impulse offsets that of weaker equities (Exhibit 5). This stands in contrast to NZD which has underperformed in both regimes, potentially due to increasingly net short positioning. This recent price action suggests AUD can remain an outperformer—and NZD an underperformer—in the near team as markets continue to oscillate between these backdrops.

Exhibit 4: NZD's correlation to a PC1 of FX price action has increased while its correlation to rate differentials has declined



Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 5: While AUD has outperformed when equities rebound and oil prices decline, it has also been relatively resilient in risk-off drawdowns

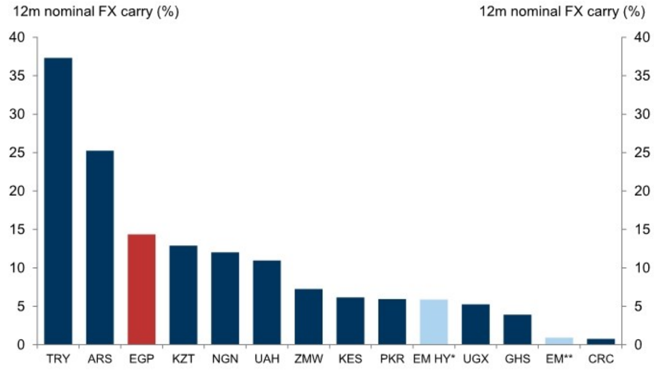


Source: Bloomberg, Goldman Sachs Global Investment Research

- **IDR, PHP & THB: Defensive postures.** Asian currencies have been on the defensive over the past week, as Brent oil prices rose back above USD100/bbl. In particular, currencies in South East Asia—IDR, PHP, and THB have all been the biggest underperformers in April (even as MYR continued to outperform). Partly in response to the pressures, the Philippines central bank (BSP) hiked rates by 25bps to 4.0% with a hawkish tone. The BSP revised up their 2026 average headline CPI forecast to 6.3% (from 5.1% previously), while 2027 CPI is projected at 4.3% (vs their target range of 2-4%). We expect BSP to hike rates again in June with risks tilted towards more hikes thereafter. Philippines will be included into the JPM GBI-EM Global Diversified index as of January 2027, with an estimated weight of 1.8%, and we think this could prompt around USD 5-6bn of index related inflows into the market, although this is more likely to materialise next year. Bank Indonesia (BI) kept rates on hold at 4.75% but said it would go "all out" to defend the currency. BI also announced that it would allow primary dealers (subject to approvals) to sell USDIDR NDFs, as part of its efforts to deepen financial markets. BI expect the NDF curve to converge towards the DF curve, thereby enhancing IDR stability. While currency weakness is less of an immediate policy concern in Thailand, a key development this week is that the finance minister said the authorities are open to raising the debt ceiling to 75% of GDP from 70%. This news impacted THB rates markets, although we attribute the THB's underperformance to Thailand's direct exposure to oil and indirect exposure via tourism (from higher air fares and disruption to aviation hubs). Going forward, we expect oil prices and the terms of trade dimension to drive Asian FX performance in the coming weeks.

- **EGP: Stepping back into long EGP.** Last week we expressed our view that EGP would likely outperform in a de-escalation scenario, especially as the spot rate had somewhat lagged the retracement of post-war losses seen across EM FX following the ceasefire announcement and the progress achieved on negotiations. In other words, we think the ~10% depreciation against the Dollar since the start of the conflict has made for an attractive entry level for a number of reasons. First, EGP is still one of the highest carry currencies across Frontier and EM HY FX, with more than 14% 12-month nominal carry (Exhibit 6). Second, we think that central bank reserves and banking sector net foreign assets will be sufficient to absorb the current shock and fund further foreign portfolio outflows, and we only see limited further reserve drawdown across all three of our commodity team's price scenarios. Further, the recent foreign positioning drawdown mitigated one of the key vulnerabilities of long EGP trades and makes for a cleaner technical backdrop for such trades. And third, despite the adverse terms of trade shock, taking that into account with inflation and productivity fundamentals points to a deep GSDEER valuation buffer, with the recent price action having made EGP the most undervalued currency in our Frontier coverage (Exhibit 7). Taken together, we think these carry, reserve and valuation buffers should (i) contain spot depreciation against negative geopolitical headlines given a still weak currency relative to pre-war levels, and should (ii) buffer total returns from such sell-offs should they occur. With global markets increasingly pricing a 'relief' scenario based on the reduction of deep tail risks, we think the time is right to re-enter a long EGP position: we recommend going short USD/EGP, with an initial total return target of 6%, and a stop-loss of -3%.

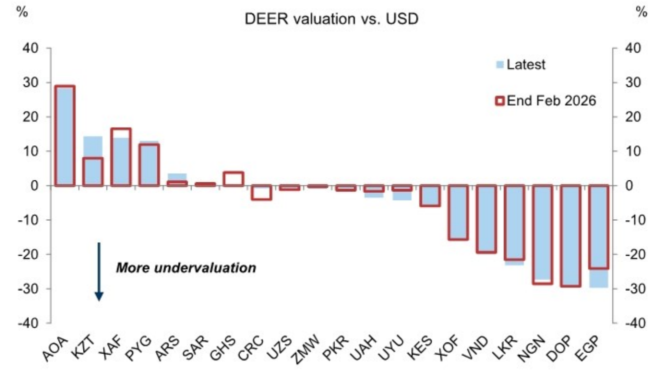
Exhibit 6: The EGP is still one of the highest carry currencies across Frontier and EM HY FX ...



*Median carry of BRL, COP, MXN and ZAR. **Median carry of BRL, CLP, CNY, COP, CZK, HKD, HUF, IDR, ILS, INR, KRW, MXN, MYR, PEN, PHP, PLN, RON, SGD, THB, TRY, TWD and ZAR.

Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 7: ... And its post-war sell-off has deepened its GSDEER valuation buffer and has made it the most undervalued currency in our Frontier coverage

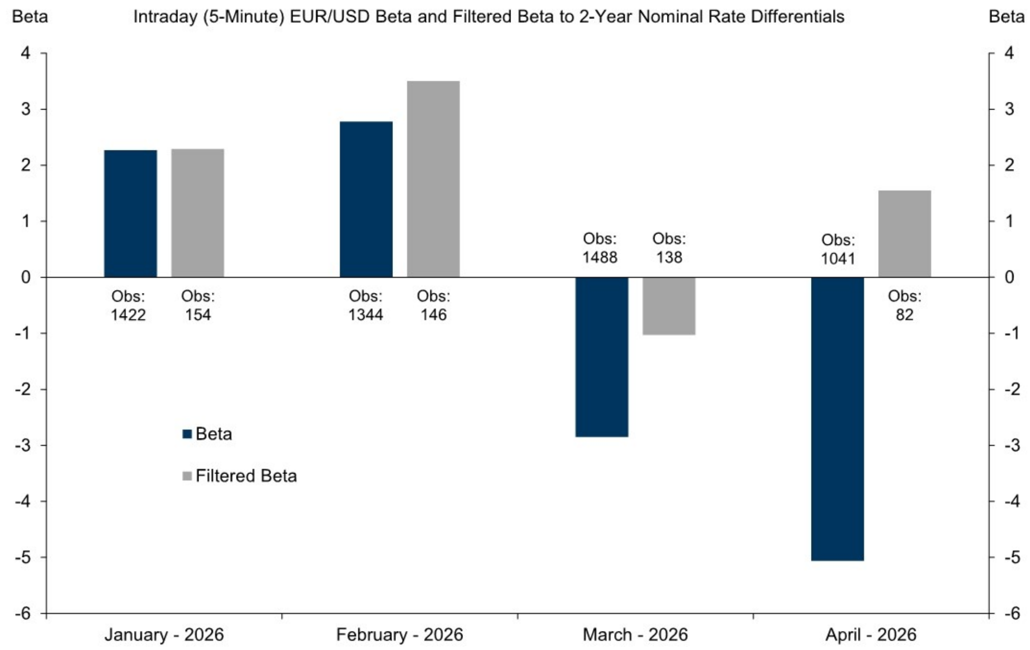


Our GSDEER model is an augmented purchasing power parity model that takes as inputs CPI, terms of trade and productivity differentials with the US.

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

- **The FX-Rates Relationship in an Energy Shock**. Nominal rate differentials have explained a lower-than-usual portion of daily FX moves throughout the energy shock so far. This is unsurprising given the scale of the vol spillovers from energy and equity markets, but we think other factors are at play as well. First, while rates markets have seen exceptionally large moves throughout the shock, the moves across G10 markets have generally been directionally uniform in response to the ebb and flow in energy prices. This has driven lower realised vol in rate differentials than in outright rates, and it is the former that matters more for FX markets. Second, FX's relationship to nominal rate differentials specifically has broken down in recent months, while the relationship to real rates has remained more stable. We find that this is typically the case in supply-driven inflation regimes, and we expect this higher relevance of real versus nominal rate differentials to persist so long as ongoing energy shock dominates inflation pricing. While the connection between FX and rates has been disrupted at an aggregate level, narrowing in on intraday correlations meanwhile offers a slightly different perspective. EUR/USD's beta to nominal rate differentials across 5-minute intervals has flipped to being negative in March and April, isolating for rates-led moves specifically still produces a more 'typical' positive beta in April (Exhibit 8). We think this argues for rates-specific shocks, including for example at next week's host of G10 central bank meetings, to generate similar FX reactions to in normal times.

Exhibit 8: Isolating for rates-led intraday moves argues that the more typical FX-rates relationship likely still exists under the surface



Filtered beta captures EUR/USD's beta to shifts in EU-US 2-year nominal rate differentials within a sample reduced to intervals where rates differentials have moved by at least half a standard deviation, and oil has moved by less than one standard deviation. Standard deviations in both cases are estimated in-sample.

Source: Bloomberg, Goldman Sachs Global Investment Research

Global FX Forecasts

	Current Spot	3-Month Horizon		6-Month Horizon		12-Month Horizon	
		Forward	Forecast	Forward	Forecast	Forward	Forecast
G10							
EUR/$	1.17	1.17	1.14	1.18	1.18	1.18	1.20
£/$	1.35	1.35	1.33	1.34	1.34	1.34	1.33
AUD/$	0.71	0.71	0.72	0.71	0.73	0.71	0.74
NZD/$	0.59	0.59	0.60	0.59	0.61	0.59	0.62
$/CAD	1.37	1.36	1.36	1.36	1.34	1.35	1.32
$/CHF	0.79	0.78	0.78	0.77	0.76	0.76	0.76
$/NOK	9.35	9.36	9.91	9.38	9.49	9.42	9.17
$/SEK	9.26	9.22	9.65	9.18	9.15	9.11	8.75
$/JPY	160	158	160	157	158	155	155
EMEA							
$/CZK	20.9	20.8	21.5	20.8	20.7	20.8	20.2
$/HUF	314	316	311	317	297	320	288
$/PLN	3.63	3.63	3.77	3.63	3.60	3.65	3.54
$/RON	4.36	4.38	4.52	4.41	4.39	4.45	4.38
$/RUB	77.08	77.08	80.0	79.47	85.0	84.86	90.0
$/UAH	44.0	44.9	44.0	46.3	46.0	48.7	48.0
$/TRY	44.97	48.78	46.0	53.07	48.0	61.86	52.0
$/ILS	3.00	3.00	3.00	2.99	3.05	2.98	3.10
$/ZAR	16.63	16.74	16.50	16.87	16.00	17.15	15.75
$/NGN	1352	1396	1325	1438	1300	1517	1250
Americas							
$/ARS	1392	1468	1630	1558	1720	1746	1870
$/BRL	5.02	5.13	4.90	5.24	5.00	5.45	5.00
$/MXN	17.43	17.57	17.75	17.71	18.00	18.02	18.00
$/CLP	898	898	920	898	900	899	860
$/PEN	3.47	3.48	3.40	3.50	3.35	3.53	3.30
$/COP	3558	3630	3600	3710	3700	3878	3750
Asia							
$/CNY	6.83	6.78	6.85	6.74	6.80	6.66	6.70
$/HKD	7.83	7.81	7.80	7.78	7.80	7.75	7.80
$/INR	94.11	95.07	97.00	95.96	96.00	97.58	96.00
$/KRW	1479	1476	1460	1471	1440	1465	1420
$/MYR	3.97	3.96	3.90	3.95	3.80	3.94	3.70
$/SGD	1.28	1.27	1.28	1.26	1.25	1.25	1.24
$/TWD	31.6	31.7	31.5	31.7	31.0	31.6	30.5
$/THB	32.44	32.42	34.00	32.27	33.50	31.93	33.00
$/IDR	17295	17353	17000	17414	17100	17562	17200
$/PHP	60.48	60.65	62.00	60.86	61.00	61.20	61.00
Euro Crosses							
EUR/GBP	0.87	0.87	0.86	0.88	0.88	0.88	0.90
EUR/CHF	0.92	0.91	0.89	0.91	0.90	0.90	0.91
EUR/NOK	10.92	10.98	11.30	11.04	11.20	11.15	11.00
EUR/SEK	10.82	10.82	11.00	10.81	10.80	10.79	10.50
EUR/CZK	24.36	24.44	24.50	24.50	24.40	24.60	24.20
EUR/HUF	367	370	355	373	350	379	345
EUR/PLN	4.24	4.26	4.30	4.28	4.25	4.32	4.25
EUR/RON	5.09	5.14	5.15	5.19	5.18	5.27	5.25
EUR/RUB	90.0	90.4	91.2	93.5	100.3	100.5	108.0

Note: Spot values are as of Thursday's close.

See dynamic table here (or click image above): https://publishing.gs.com/content/themes/fx-forecasts.html

Source: Goldman Sachs Global Investment Research

Return Forecasts & Valuations

		Forecast: 12-Month Return (%)				GSDEER			GSFEER				
							Misalignment			Misalignment			
	Current Spot	Spot	Carry	Total	NEER	Estimate	Bilateral	Trade-Weighted	Estimate	Bilateral	Trade-Weighted	Average Estimate	PPP*
G10													
EUR/$	1.17	2.7	-1.3	1.4	2.2	1.22	-4%	8%	1.15	2%	-1%	1.19	1.51
GBP/$	1.35	-1.0	0.5	-0.5	-2.3	1.23	9%	23%	1.26	7%	5%	1.25	1.48
AUD/$	0.71	3.8	0.9	4.8	1.8	0.84	-15%	7%	0.67	6%	8%	0.77	0.69
NZD/$	0.59	5.9	-0.7	5.2	3.7	0.69	-15%	2%	0.58	1%	1%	0.64	0.66
$/CAD	1.37	3.8	-1.3	2.5	3.3	1.20	-12%	-7%	1.37	0%	0%	1.27	1.18
$/CHF	0.79	3.7	-3.7	-0.1	2.3	0.83	6%	15%	0.830	6%	4%	0.83	0.94
$/NOK	9.35	2.0	0.8	2.8	0.1	6.53	-30%	-23%	9.23	-1%	-7%	7.61	9.07
$/SEK	9.26	5.9	-1.6	4.2	3.9	7.32	-21%	-12%	9.32	1%	-2%	8.12	8.36
$/JPY	159.7	3.0	-2.8	0.1	1.6	93	-42%	-32%	144	-10%	-6%	114	94
EMEA													
$/CZK	20.85	3.4	-0.3	3.1	1.4	24.9	19%	29%	21.5	3%	0%	23.5	15.9
$/HUF	314	9.2	2.0	11.4	7.3	326	4%	12%	352	12%	4%	337	263
$/PLN	3.63	2.6	0.4	3.0	1.1	3.86	6%	16%	3.8	5%	2%	3.84	2.48
$/RON	4.36	-0.4	2.2	1.8	--	--	--	--	5.35	23%	17%	--	--
$/RUB	77.1	-14.4	10.1	-5.7	-15.5	74.99	-3%	13%	82.49	7%	2%	77.99	43.19
$/UAH	43.95	-8.4	10.8	2.3	--	--	--	--	--	--	--	--	--
$/TRY	44.97	-13.5	37.5	19.0	-13.9	32.01	-29%	-24%	46.75	4%	2%	37.91	28.97
$/ILS	3.00	-3.2	-0.7	-3.8	-3.7	3.50	17%	31%	3.30	10%	5%	3.42	4.85
$/ZAR	16.6	5.6	3.1	8.9	4.0	12.79	-23%	-13%	16.1	-3%	-5%	14.10	18.89
$/NGN	1352	8.1	12.2	20.4	--	--	--	--	--	--	--	--	--
Americas													
$/ARS	1391.6	-25.6	25.5	-0.1	-26.4	--	--	--	--	--	--	--	--
$/BRL	5.02	0.4	8.5	8.9	0.8	4.14	-18%	-3%	5.72	14%	12%	4.77	5.28
$/MXN	17.43	-3.2	3.4	0.1	-4.1	19.12	10%	18%	18.05	4%	2%	18.69	20.72
$/CLP	898	4.5	0.1	4.5	4.2	652	-27%	-13%	887	-1%	0%	746	778
$/PEN	3.47	5.1	1.7	6.9	4.9	2.78	-20%	-8%	3.05	-12%	-11%	2.89	4.05
$/COP	3558	-5.1	9.0	3.4	-5.4	3412	-4%	10%	4026	13%	10%	3657	3231
Asia													
$/CNY	6.83	2.0	-2.6	-0.7	0.5	4.94	-28%	-18%	6.05	-11%	-11%	5.38	5.95
$/HKD	7.83	0.4	-1.1	-0.6	-1.6	6.87	-12%	10%	6.80	-13%	-7%	6.84	6.00
$/INR	94.11	-2.0	3.7	1.7	-3.1	84.15	-11%	-1%	90.10	-4%	-5%	86.53	57.47
$/KRW	1479	4.1	-0.9	3.1	2.8	1180	-20%	-3%	1210	-18%	-20%	1192	902
$/MYR	3.97	7.2	-0.7	6.4	5.2	3.21	-19%	-1%	4.26	7%	8%	3.63	2.00
$/SGD	1.278	3.1	-2.4	0.6	0.8	1.35	6%	26%	1.36	6%	8%	1.35	0.58
$/TWD	31.57	3.5	0.2	3.7	1.4	25.4	-20%	1%	26.7	-16%	-14%	25.9	13.9
$/THB	32.44	-1.7	-1.6	-3.2	-3.7	29.48	-9%	12%	35.12	8%	9%	31.74	19.17
$/IDR	17295	0.6	1.5	2.1	-1.4	13931	-19%	-1%	16167	-7%	-2%	14825	10996
$/PHP	60.48	-0.8	1.2	0.3	-2.8	57.42	-5%	18%	64.37	6%	12%	60.20	51.91
Euro Crosses													
EUR/GBP	0.87	-3.6	1.8	-1.8	-2.3	0.99	14%	23%	0.91	5%	5%	0.96	1.02
EUR/CHF	0.92	1.0	-2.4	-1.4	2.3	1.02	11%	15%	0.95	4%	4%	0.99	1.41
EUR/NOK	10.92	-0.7	2.1	1.4	0.1	7.97	-27%	-23%	10.59	-3%	-7%	9.02	13.68
EUR/SEK	10.82	3.1	-0.3	2.8	3.9	8.93	-17%	-12%	10.69	-1%	-2%	9.64	12.61
EUR/CZK	24.36	0.7	1.0	1.6	1.4	30.38	25%	29%	24.63	1%	0%	28.08	23.98
EUR/HUF	367	6.3	3.3	9.6	7.3	398	8%	12%	404	10%	4%	401	397
EUR/PLN	4.24	-0.2	1.7	1.6	1.1	4.71	11%	16%	4.4	3%	2%	4.58	3.75
EUR/RON	5.09	-3.0	3.5	0.5	--	--	--	--	6.14	21%	17%	--	--
EUR/RUB	90.0	-16.6	11.4	-5.2	-15.5	91.5	2%	13%	94.6	5%	2%	92.8	--
Addendum													
USD	--	-1.2	-2.0	-3.0	-1.7	--	--	17%	--	--	2%	--	--

Note: USD returns average of all other currencies (except ARS, NGN and UAH) with opposite sign; *EM estimates adjusted for per capita income. Spot values as of Thursday.

See dynamic table here (or click image above): https://publishing.gs.com/content/themes/table.html?criteriaKey=1k2HGqqS2h

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

We, Kamakshya Trivedi, Michael Cahill, Danny Suwanapruti, Teresa Alves, Karen Reichgott Fishman, Stuart Jenkins, Victor Engel and Lexi Kanter, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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