

Is higher global inflation here to stay?

The great reflation – As we [predicted last year](#), the global economy has transitioned towards a ‘reflationary’ macro regime, characterized by above-trend growth, accelerating inflation, and expansionary macro policy. While strong growth favours risky assets, one key concern for investors in this environment is whether the economic recovery will cause long-term inflation expectations to ‘de-anchor’, or if pricing pressures will dissipate as supply chains adjust.

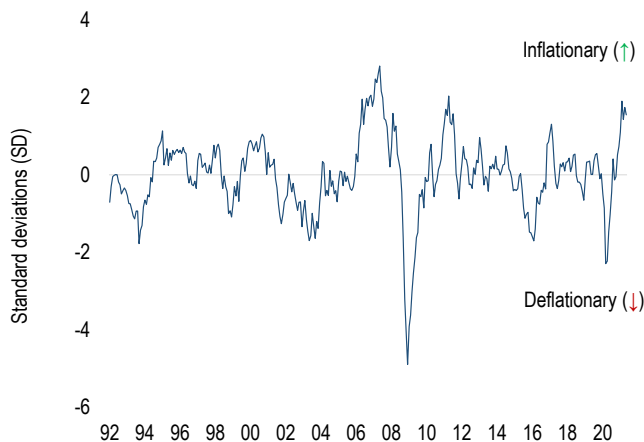
Pricing pressures are especially pronounced at the producer level. In April, worldwide PPI inflation came in at 9.9% year-over-year, its highest reading since the peak of the commodity ‘super-cycle’ in 2006. Accelerating producer prices are primarily the result of [rising raw material prices](#), but high capacity utilization rates in China and production shortages in key manufacturing sectors like semiconductors are amplifying global inflationary pressures.

Unlike earlier in the pandemic, stronger final demand is now allowing producers to increase (or normalize) their mark-ups, thereby [passing on these higher costs](#) to consumers. Global CPI inflation came in at 3.7% YoY in April, one-point higher than its decade-long average. Although country-specific factors like differences in monetary stimulus may amplify or mitigate pricing pressures, high inflation today is fundamentally a reflection of common factors – like rising energy prices or favourable base effects. In April, 9 out of 10 countries in the world recorded higher inflation than over the past 12M, the highest such share in the post-2008 period.

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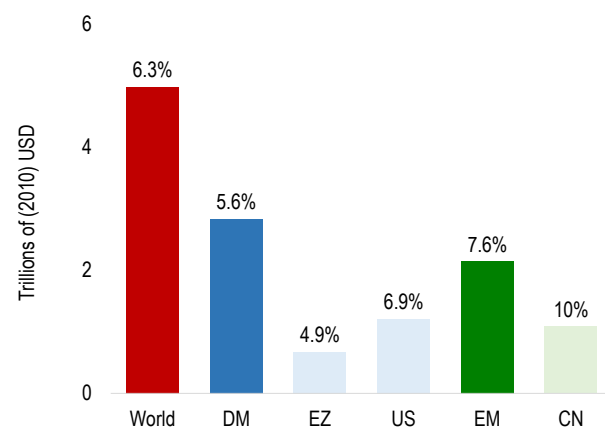
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F1: Commodities activity index
Deviations from trend



Note: Index isolates common fluctuations across a panel of 26 industrial and agricultural commodities, thereby abstracting from market-specific supply shocks. Index adjusts for USD moves. Source: Numera Analytics.

F2: World GDP growth
Baseline outlook - 2021



Note: Chart breaks down the regional contribution to the expected change in global GDP for full-year 2020 (in trillions of USD). Growth rates denotes the projected change by region. Source: Numera Analytics.

T1: Baseline	Quarterly					Annual				
	Q4/20	Q1/21	Q2/21	Q3/21	Q4/21	2018	2019	2020	2021f	2022f
World GDP	7.2%	3.3%	7.1%	5.6%	5.1%	3.1%	2.4%	-3.9%	6.3%	4.8%
Developed	3.7%	2.6%	9.3%	5.4%	4.8%	2.3%	1.6%	-4.8%	5.6%	4.6%
Emerging	14%	4.6%	3.2%	5.9%	5.5%	4.8%	3.9%	-2.1%	7.6%	5.2%

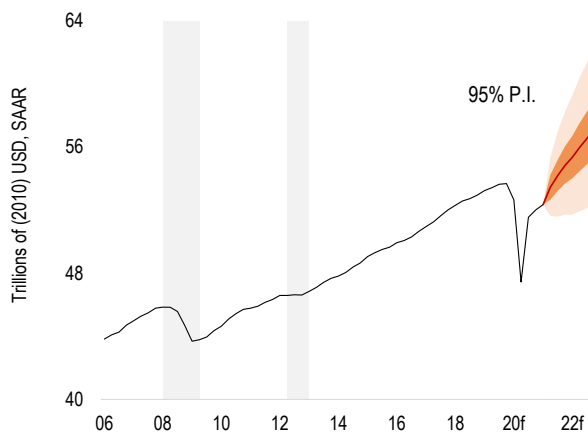
Note: Quarterly figures are QoQ SAAR (%). Source: History: World Bank; Forecast: Numera Analytics

Both PPI and CPI inflation should remain elevated for the remainder of the year, fueled by tight operating conditions in goods-producing sectors and stronger demand for services as public health risks ease. Global away-from-home (AfH) traffic is up a staggering 11 points over the past six weeks, with significant improvements in both developed and emerging markets. In fact, consumer mobility worldwide is now at its highest point since the onset of the pandemic, surpassing its peak in July of last year before the onset of the second wave in Europe and North America.

The most likely outcome is for global PPI inflation to average 8% in 2021, in what would constitute the highest yearly inflation rate in 27 years. Consumer prices will expand at a more modest pace, but should still exceed their long-term average – especially over the next 6M. Inflationary pressures will likely ease in 2022 as base effects disappear and commodity prices stabilize. The extent of the slowdown, however, will depend on whether long-term inflation beliefs remain anchored, and the speed at which global GDP reverts to its pre-COVID path.

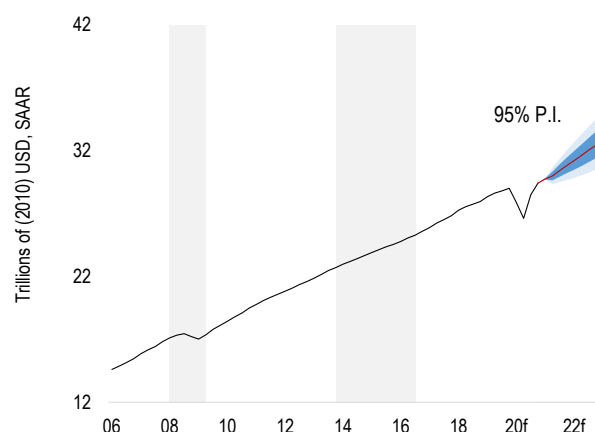
Our baseline scenario calls for worldwide CPI inflation of 3.6% this year and 2.7% in 2022. This is consistent with a gradual improvement in economic activity, with global GDP reverting to its pre-COVID path by H1/22. Demand-side factors will amplify inflationary pressures in countries with ample discretionary stimulus – like the US (see p.6).

F3: DM quarterly outlook
Real GDP - 2020-2022



Note: Fan chart corresponds to 70% and 95% prediction intervals. Grey bars are OECD recession dates. Source: History: World Bank; Forecast: Numera Analytics

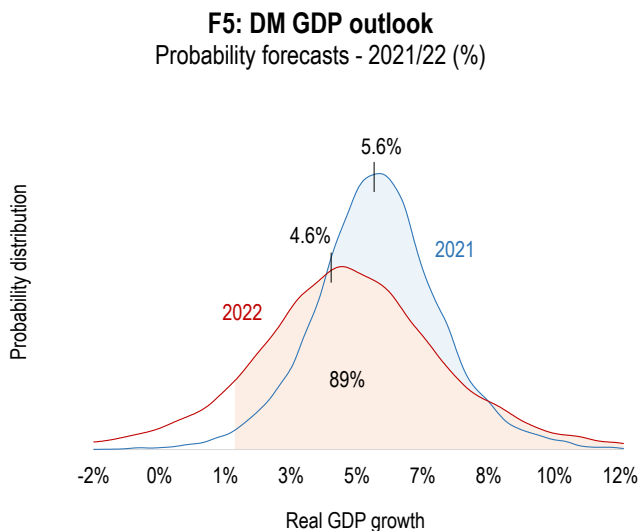
F4: EM quarterly outlook
Real GDP - 2020-22



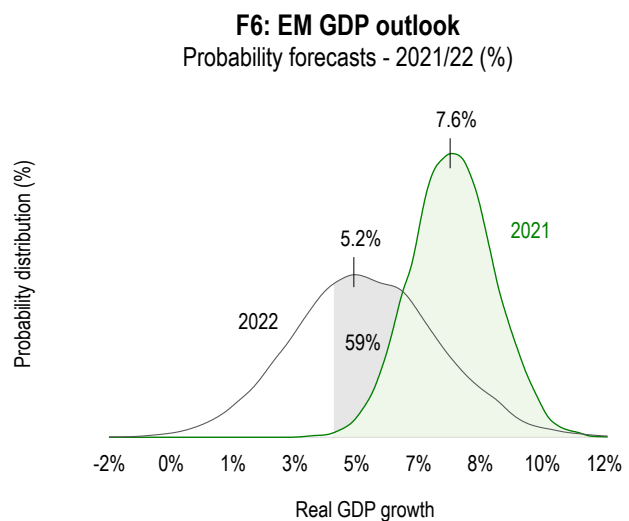
Note: Fan chart corresponds to 70% and 95% prediction intervals. Grey bars are OECD recession dates for non-member economies. Source: History: World Bank; Forecast: Numera Analytics

Growth Outlook:

- All DM – Reflation.** Consistent improvements in DM vaccination rates are lifting mobility and economic sentiment, while reducing policy uncertainty. Cell phone tracking data reveals DM AfH traffic is up 10 points since early May, pointing to higher spending on services. As a result, we have **upgraded our baseline growth scenario** for 2021 by 30 bps to 5.6%+. The most likely outcome is for DM GDP to revert to its pre-COVID path by Q1/22.
- Eurozone – Recovery.** Accelerating vaccinations and rapidly falling infection rates have caused mobility to soar since early May. AfH traffic in the Euro area is now only 5% below pre-COVID levels, versus a 35% shortfall only six weeks ago. Improved public health prospects point to a faster recovery than we anticipated earlier this year. As a result, we have upgraded our baseline growth scenario by 70 bps to 4.9%+ for full-year 2021.
- United States – Possible overheating.** A high vaccine coverage, falling infection rates, improving confidence and high personal savings are all boosting household spending. Growth should accelerate during the summer months, eliminating the output gap by Q3/21 and expanding 7%+ in 2021. There is a 70% chance that the US will outpace other DMs this year, although converging vaccination rates should narrow the US growth premium by year-end.
- All EM – Uncertain recovery.** High frequency indicators reveal EM economic activity strengthened in May, propped up by falling COVID cases and sizeable improvements in mobility in Asia and EMEA. In addition, improved vaccine availability has cut back the estimated time towards 70%+ immunity by half to less than six months – boosting consumer and business sentiment. We now expect EM GDP growth of 7.6%+ in 2021 (F6).
- China – Normalization.** China remains the only major economy to have fully recovered from the COVID-19 shock. As we **predicted earlier this year**, cyclical conditions are now normalizing as Beijing reigns in the pace of macro stimulus (e.g. total lending is back to pre-COVID growth rates). While China should expand by near double-digits in full-year 2021, quarterly GDP growth will likely converge to a more sustainable 6-6.5% SAAR in H2.



Note: Baseline scenarios are the mean of each predictive distribution. Shaded area denotes likelihood of above-potential growth (1.7%+) in 2021 and 2022. Source: Numera Analytics

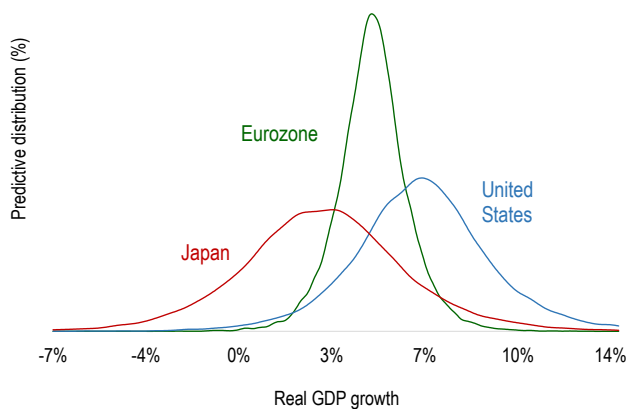


Note: Baseline scenario is the mean of the predictive distribution. Shaded area denotes likelihood of above-potential growth (4.8%+) in 2021 and 2022. Source: Numera Analytics

T2: DM GDP	2021 probabilities (%)							
	Baseline outlook			Downside risk ²		Upside		Potential ³
	2020	2021f	2022f	Growth-at-risk	Recession	> 2020	> potential	
All DM ¹	-4.8%	5.6%	4.6%	1.8%	16%	100%	98%	1.7%
Australia	-2.4%	5.9%	5.3%	1.5%	26%	98%	96%	2.5%
Canada	-5.4%	6.1%	3.9%	4.3%	9%	100%	100%	1.6%
Eurozone	-6.7%	4.9%	5.1%	1.9%	12%	100%	99%	1.2%
France	-8.2%	6.9%	5.2%	3.6%	5%	100%	98%	1.4%
Germany	-5.1%	3.1%	4.3%	0.1%	12%	98%	95%	1.7%
Italy	-8.9%	4.8%	4.8%	1.4%	19%	100%	98%	0.3%
Japan	-4.9%	3.1%	2.1%	-1.9%	45%	99%	79%	0.6%
South Korea	-0.9%	4.1%	4.1%	1.7%	15%	100%	93%	2.5%
United Kingdom	-9.8%	5.6%	6.6%	-0.9%	7%	100%	93%	1.4%
United States	-3.5%	6.9%	5.0%	3.9%	11%	100%	97%	2.2%

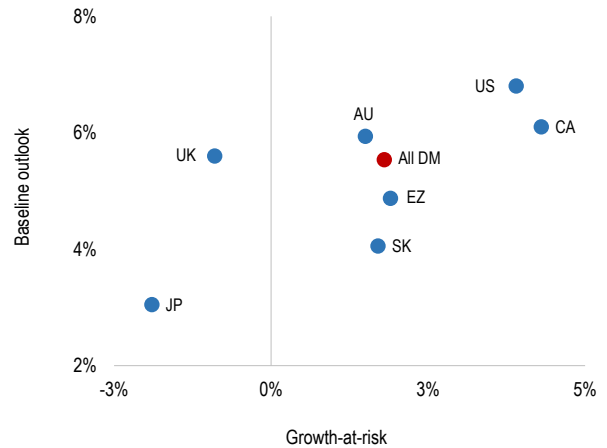
1. Regional breakdown matches country classification in the IMF's World Economic Outlook.
 2. Conditional growth-at-risk refers to expected GDP growth below the 5% quantile. Recession defined as two or more consecutive quarters of contraction.
 3. Potential growth refers to an economy's sustainable growth path. For the Eurozone and US, Numera estimates. For other DMs, OECD estimates.
- Source: History: World Bank; Forecast: Numera Analytics

F7: DM forecasts by region
Probability forecasts - 2021



Note: Baseline scenarios are the mean of each predictive distribution. Projections consider the joint distribution between regions, which allows comparability. Source: Numera Analytics.

F8: DM growth and downside risk
Baseline and growth-at-risk - 2021



Note: Vertical axis corresponds to the baseline outlook for 2020. Horizontal axis shows (conditional) growth-at-risk, defined as expected GDP growth below the 5% quantile. Source: Numera Analytics.

T3: EM GDP	2021 probabilities (%)							
	Baseline outlook			Downside risk ²		Upside		Potential ³
	2020	2021f	2022f	Growth-at-risk	Recession	> 2020	> potential	
All EM ¹	-2.1%	7.6%	5.2%	5.2%	6%	100%	99%	4.8%
EM Asia	-0.5%	9.1%	6.5%	5.9%	7%	100%	97%	6.3%
China	2.0%	9.6%	6.4%	5.9%	11%	100%	96%	6.4%
India	-7.1%	12%	8.8%	2.8%	32%	100%	83%	7.4%
Indonesia	-2.0%	5.4%	6.6%	2.6%	5%	100%	53%	5.1%
EMEA	-1.9%	4.4%	2.1%	0.1%	41%	99%	75%	3.2%
Russia	-2.9%	4.8%	1.7%	1.4%	46%	100%	98%	1.5%
Turkey	1.6%	5.1%	2.9%	-0.3%	39%	92%	35%	6.0%
Latin America	-6.4%	6.1%	2.1%	0.1%	51%	99%	92%	2.2%
Brazil	-4.4%	6.2%	1.8%	3.1%	41%	100%	99%	1.5%
Mexico	-8.5%	5.4%	2.8%	-3.1%	50%	100%	76%	2.4%

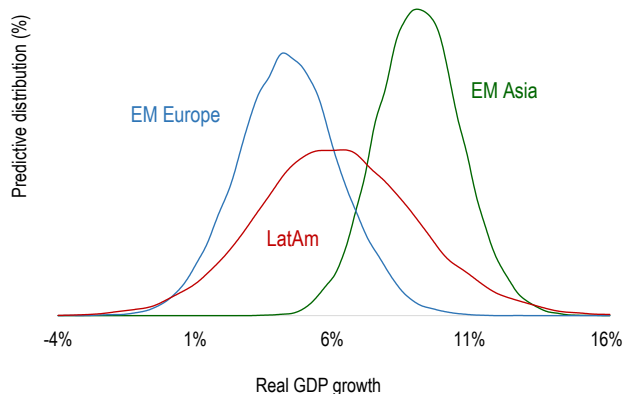
1. Regional breakdown matches country classification in the IMF's World Economic Outlook.

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3. Potential growth refers to an economy's sustainable growth path. For all EMs, OECD estimates.

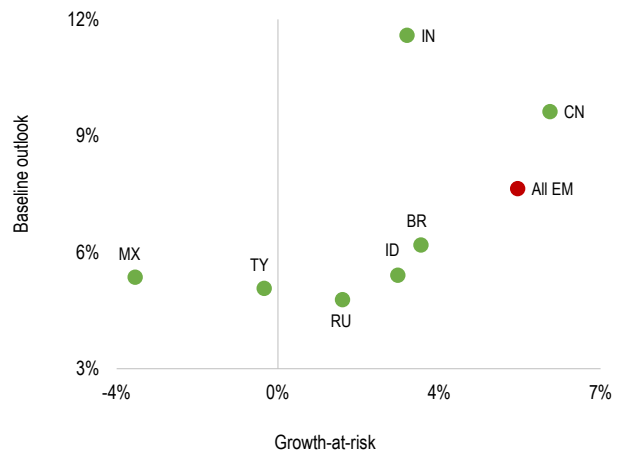
Source: History: World Bank; Forecast: Numera Analytics

F9: EM forecasts by region
Probability forecasts - 2021



Note: Baseline scenarios are the mean of each predictive distribution. Projections consider the joint distribution between regions, which allows comparability. Source: Numera Analytics.

F10: EM growth and downside risk
Baseline and growth-at-risk - 2021



Note: Vertical axis corresponds to the baseline outlook for 2020. Horizontal axis shows (conditional) growth-at-risk, defined as expected GDP growth below the 5% quantile. Source: Numera Analytics.

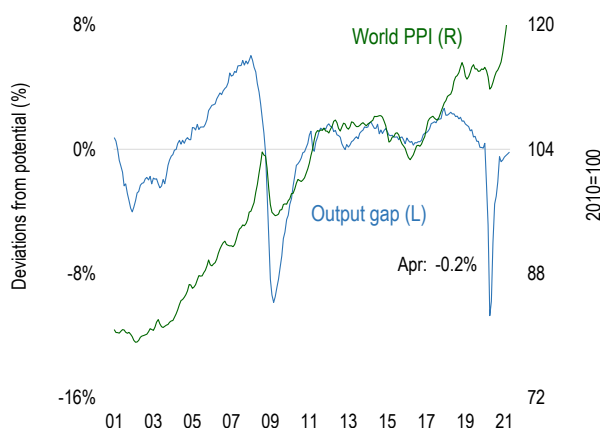
Inflation Outlook:

- Producer prices – Rising.** Inflationary pressures remain elevated, with global producer prices rising 15% annualized in March (PPI inflation has now exceeded its long-term average for nine consecutive months). We now expect global PPI inflation to average 8% or more in full-year 2021, on the back of rising raw material prices and elevated capacity utilization rates as global demand for manufactured goods outstrips supply.
- Consumer prices – Rising.** Rising input costs, stronger final demand and higher inflation expectations are lifting CPI inflation in most countries in the world. Global inflation came in at 3.7% YoY in April, its highest reading since Q4/11. 9 out of 10 countries in the world are now experiencing higher inflation than over the 12 previous months, highlighting the global nature of the shock. We expect worldwide CPI inflation to average 3.6% or more in 2021.

T4: Inflation	Baseline outlook			12M probabilities (%)			
	2020	2021f	2022f	Deflationary risk		Inflationary risk	
				5% quantile	Deflation	> current	> target (2%)
World PPI	-0.2%	8.1%	2.5%	-2.6%	20%	1%	-
World CPI	2.1%	3.6%	2.7%	1.2%	0.4%	16%	-
Eurozone	0.2%	2.0%	1.9%	0.2%	4.9%	47%	45%
United Kingdom	0.9%	1.5%	1.8%	0.2%	2.6%	59%	33%
United States (PCE)	1.2%	3.1%	2.3%	0.6%	1.0%	11%	58%

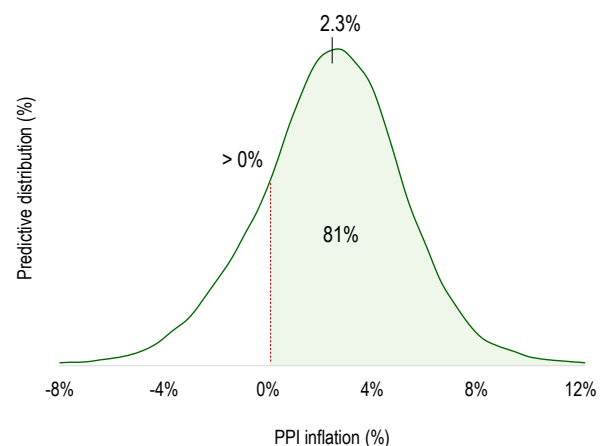
Source: History: Numera Analytics, Eurostat, BEA; Forecast: Numera Analytics

F11: Global manufacturing output gap
Deviations from potential (%)



Note: The manufacturing output gap is the % deviation of global factory output from potential. Potential output, in turn, is the level of production that is consistent with stable PPI inflation. Source: Numera Analytics.

F12: World PPI inflation
Probability forecast - 12M ahead



Note: Baseline scenario is the mean of the predictive distribution. Shaded area denotes PPI inflation probability 12M ahead. Source: Numera Analytics.

Currency Outlook:

- CAD per USD – Underweight USD.** The CAD appreciated nearly 2% in May on the back of rising crude oil prices and a surge in COVID vaccinations. While the loonie is no longer trading at a discount, a tight oil market balance increases the likelihood of further CAD appreciation. The loonie should gain 5¢ or more 12M out.
- EUR per USD – Underweight USD.** Narrowing vaccine differentials and improved business optimism continue to lift the Euro. Both factors also reduce the likelihood of future USD appreciation. There is now a 39% chance that the USD strengthens against the EUR 12M out, 9 points lower than two months ago.
- GBP per USD – Underweight USD.** The UK pound continues to appreciate, buoyed by favourable vaccine rate differentials and strong demand for UK financial assets. Soaring business confidence, rising mobility and strong global growth should continue to lift the GBP, which we expect will trade below 70 cents to the dollar 12M out.
- JPY per USD – Underweight USD.** Japan's slow vaccine rollout has so far weighed on the yen, but the JPY should strengthen as vaccinate rates converge. As a result, we now recommend underweighting the USD against the JPY 12M out. Since both are 'safe haven' currencies, strong global growth has a limited impact on the outlook.
- BRL per USD – Underweight USD .** The BRL is up 7% since late April on the back of rising commodity prices, rising BR vaccination rates and reduced pressure from US Treasury yields. The BRL should strengthen further over the next 12M, fueled by strong global growth, further commodity inflation and favourable interest spreads.
- CNY per USD – Neutral.** The CNY continues to strengthen, benefiting from reduced pressure from US long-term yields and narrowing vaccination rates. The CNY is trading close to its 'fair' value, but we expect it to strengthen moderately over the next 12M on the back of favourable interest rate and productivity differentials.

F13: EUR vs. USD outlook

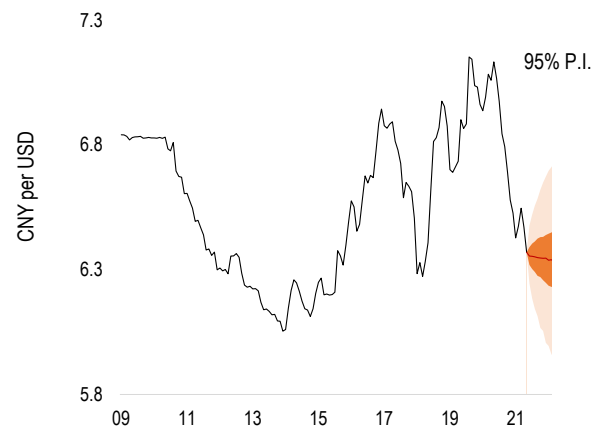
Base scenario and prediction intervals



Note: Fan chart corresponds to 70% and 95% prediction intervals. Source: History: Federal Reserve; Forecast: Numera Analytics.

F14: CNY vs. USD outlook

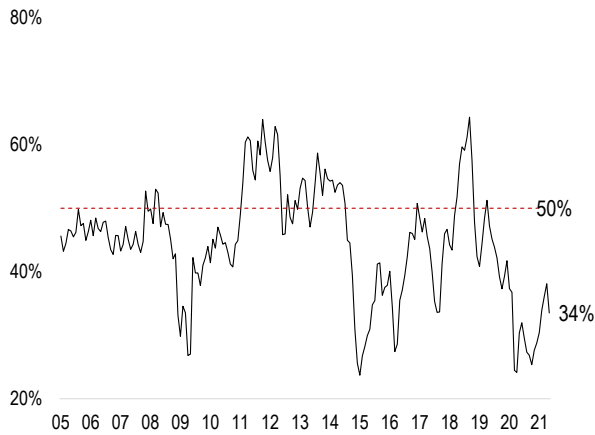
Base scenario and prediction intervals



Note: Fan chart corresponds to 70% and 95% prediction intervals. Source: History: Federal Reserve; Forecast: Numera Analytics.

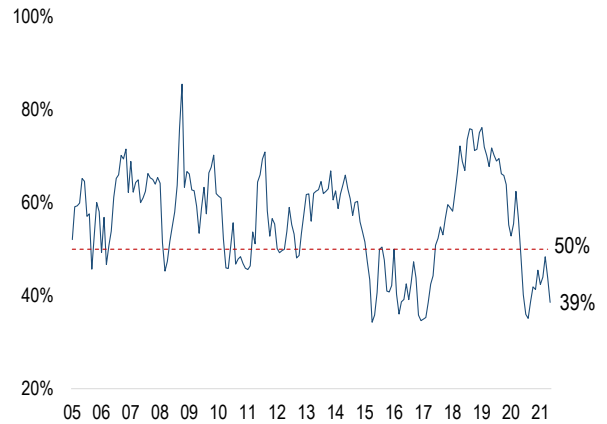
T5: DM currencies	Baseline outlook			12M probabilities (%)		
	05/21	3M	12M	-5%	US dollar appreciation	+5%
CAD per USD	1.21	1.19	1.16	43%	34%	15%
EUR per USD	0.82	0.80	0.80	40%	39%	20%
GBP per USD	0.70	0.70	0.69	39%	41%	23%
JPY per USD	109.4	108.1	106.7	38%	41%	21%

F15: USD vs. CAD appreciation
12M ahead probability (%)



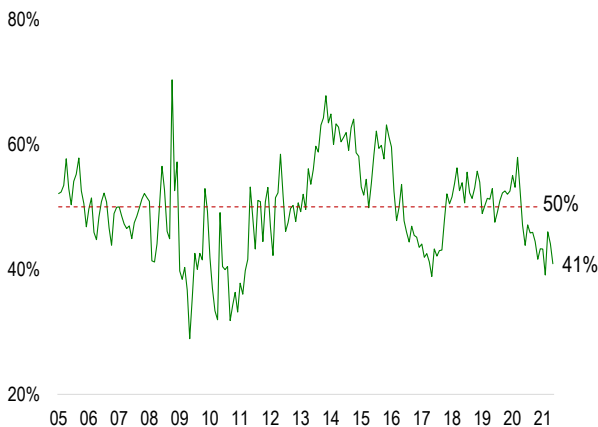
Note: Chart tracks the likelihood of the US dollar strengthening against the CAD 12M out. Probabilities above 50% (dashed red line) indicates USD appreciation is the most likely outcome. Source: Numera Analytics.

F16: USD vs. EUR appreciation
12M ahead probability (%)



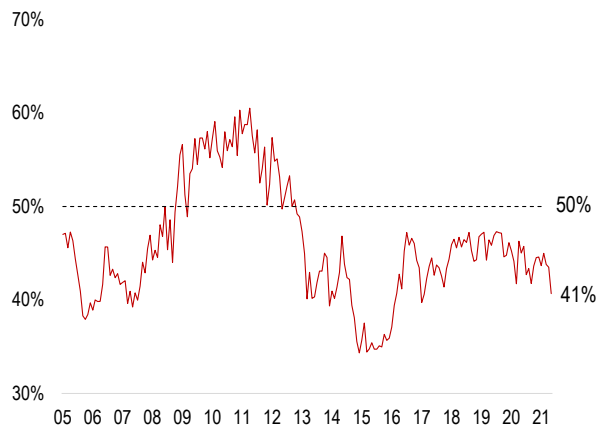
Note: Chart tracks the likelihood of the US dollar strengthening against the EUR 12M out. Probabilities above 50% (dashed red line) indicates USD appreciation is the most likely outcome. Source: Numera Analytics.

F17: USD vs. GBP appreciation
12M ahead probability (%)



Note: Chart tracks the likelihood of the US dollar strengthening against the GBP 12M out. Probabilities above 50% (dashed red line) indicates USD appreciation is the most likely outcome. Source: Numera Analytics.

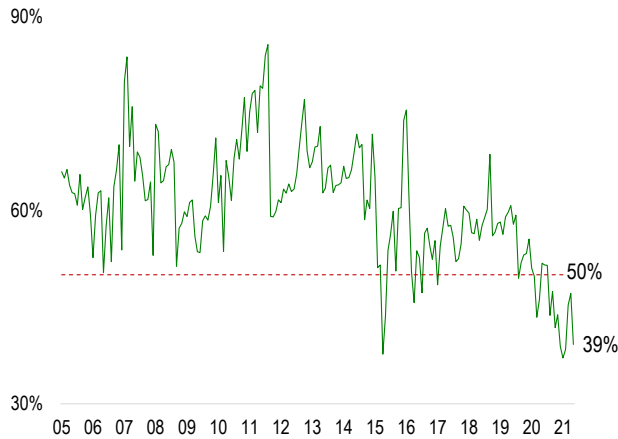
F18: USD vs. JPY appreciation
12M ahead probability (%)



Note: Chart tracks the likelihood of the US dollar strengthening against the JYP 12M out. Probabilities above 50% (dashed black line) indicates USD appreciation is the most likely outcome. Source: Numera Analytics.

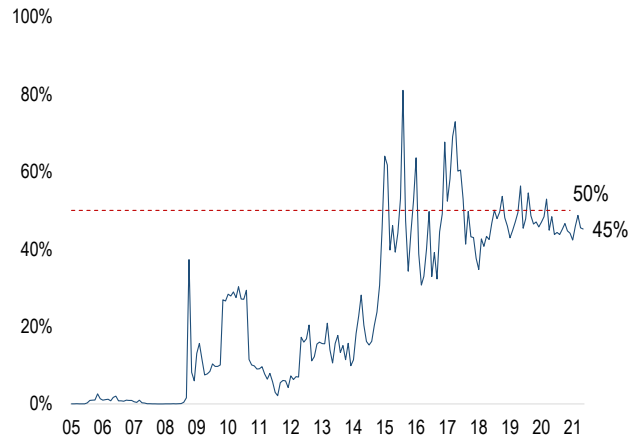
T6: EM currencies	Baseline outlook			12M probabilities (%)		
				-5%	US dollar appreciation	+5%
	05/21	3M	12M			
BRL per USD	5.25	5.22	5.16	45%	39%	26%
CNY per USD	6.37	6.35	6.34	13%	45%	7.9%
MXN per USD	19.9	19.9	20.1	26%	54%	32%
RUB per USD	73.3	72.3	72.7	31%	48%	24%

F19: USD vs. BRL appreciation
12M ahead probability (%)



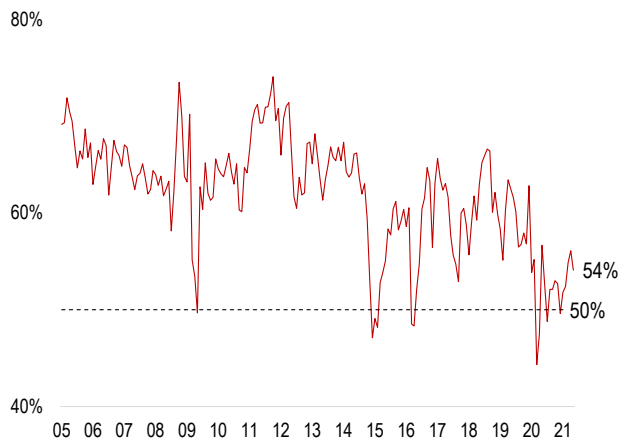
Note: Chart tracks the likelihood of the US dollar strengthening against the BRL 12M out. Probabilities above 50% (dashed red line) indicates USD appreciation is the most likely outcome. Source: Numera Analytics.

F20: USD vs. CNY appreciation
12M ahead probability (%)



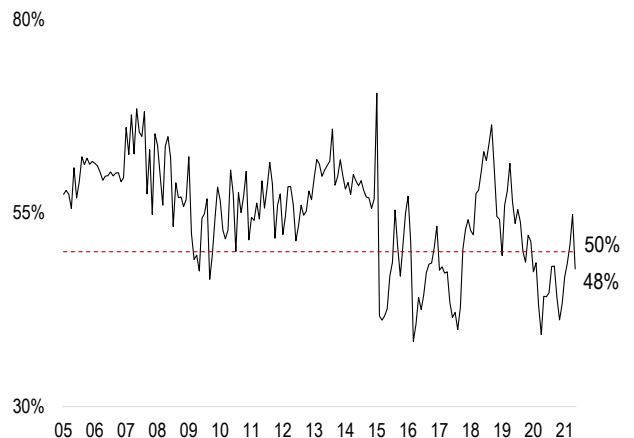
Note: Chart tracks the likelihood of the US dollar strengthening against the euro 12M out. Probabilities above 50% (dashed red line) indicates USD appreciation is the most likely outcome. Source: Numera Analytics.

F21: USD vs. MXN appreciation
12M ahead probability (%)



Note: Chart tracks the likelihood of the US dollar strengthening against the Mexican peso 12M out. Probabilities above 50% (dashed black line) indicates USD appreciation is the most likely outcome. Source: Numera Analytics.

F22: USD vs. RUB appreciation
12M ahead probability (%)



Note: Chart tracks the likelihood of the US dollar strengthening against the Canadian dollar 12M out. Probabilities above 50% (dashed red line) indicates USD appreciation is the most likely outcome. Source: Numera Analytics.