GLOBAL OUTLOOK 2025

NAVIGATING UNPREDICTABILITY

DECEMBER 2024

MARKETS 360™

STRATEGY & ECONOMICS

BNP PARIBAS

The bank for a changing world

Please refer to important information at the end of the report and MAR disclosures

Global Outlook 2025: Navigating unpredictability

KEY MESSAGES

We adopt a scenario-based approach to navigating the 2025 economic and market outlook, with policy unpredictability implying plenty of two-sided risks.

In our central case, US growth settles into a soft landing in early 2025 before idling into 2026 as the impacts of import tariffs and immigration policies outweigh more pro-growth initiatives.

Uncertainty and the return of inflationary pressures in H2 2025 look set to keep the US Federal Reserve on hold throughout 2025.

China is likely to make the fiscal and monetary moves required to meet the authorities' minimum acceptable 4.5% GDP growth rate in the face of US tariffs.

We cut our 2025 GDP growth outlook for the eurozone and see near-term risks skewed to the downside as geopolitics and local political uncertainty weigh. However, US policies could prompt a bolder European policy response and thus a brighter medium-term outlook.

Higher US import tariffs are likely to be particularly negative for growth in open EM economies.

We expect the market to shift to price in higher US inflation and fewer rate cuts than it currently does.

Our forecasts put the end-2025 2y yield differential between the US and Germany at about 45bp wider than forwards currently imply.

Given our expectation of widening front-end interest rate spreads, we expect EURUSD to fall to parity in 2025.

We also see further upside for the USD against the CNY, MXN, CAD, SEK and CEE3 currencies.

Bearish pressures are likely to develop on crude oil prices in H2 2025, as tariffs sap demand growth.

A stronger USD and an on-hold Fed will keep a lid on gold prices into H2 2025, in our view, after hitting new highs in early 2025.

Markets 360 team

BNP PARIBAS GLOBAL MARKETS APP: SCAN THE QR CODE HERE TO READ OUR PUBLICATIONS ON OUR MOBILE APP.

Navigating unpredictability

Radical uncertainty: Prediction is hard, it is said, especially when it's about the future. This wry adage has never felt so apt. The global economy faces a host of 'known unknowns' in 2025, ranging from the evolution of conflicts in the Middle East and Ukraine to the outcome of forthcoming elections (Germany and most likely France).

Many of these are likely to be shaped by the foreign, economic and trade policy of the incoming US administration. President-elect Donald Trump's track record of unpredictability makes forecasting under the circumstances challenging.

The impact on the global economy and markets will depend ultimately on the extent of any changes, their timing and sequencing, and the policy response from other governments. At the time of writing, there is a high degree of uncertainty around all these factors.

Model-based scenario analysis: To navigate this unpredictability, we use a scenario-based approach that builds on macroeconomic models to simulate the effects of various assumptions on import tariffs and other policy measures. These allow us to make a non-partisan assessment and – importantly – to quickly update our estimates as we learn more following President Trump's inauguration.

Our core assumption is that Trump will implement most if not all his campaign promises on foreign, economic and trade policy, including those that could harm the US economy, such as import tariffs. (See *page 5* for a full breakdown of our assumptions and *pages 11–12* for our modelling approach.)

In this respect, our analysis diverges from what we perceive as the implicit market assumptions underlying current pricing.

Our base case assumes that tariffs on China and the rest of the world will increase, rather than merely being used as a negotiating tool. At the same time, while we account for a US growth boost from deregulation and a high-profile focus on government efficiency, we also consider how lost jobs in public administration and/or the dampening effects on productivity from protectionism and tighter immigration policy might shape the economic reality of Trump 2.0.

US exceptionalism for now, but tariff pain later: The result is very much a year of two halves for the US economy. Over the next six months or so, we expect the picture of resilience to continue, underpinned by post-election animal spirits, broadly in line with the soft-landing view we expressed in *Global Outlook Q4 2024*.

Further ahead, however, our analysis suggests that the overall combination of proposed policy measures is likely to boost prices and dampen economic growth in the US, as well as leading to tighter policy from the US Federal Reserve than would otherwise be the case.

Crucially, we take into account the current state of the US economy, which is vastly different from 2018, when Trump first implemented tariffs. With inflation above target, price expectations vulnerable to renewed shocks and growth above trend, we do not think that the Fed will simply 'look through' a tariff-driven pickup in inflationary pressures.

In addition, the US labour market is likely to tighten further if net new arrivals are cut, reducing the economy's ability to absorb higher imported prices. Even assuming no retaliatory tariffs from the rest of the world, the US policy agenda should therefore drag down activity and stimulate inflation.

Global ripple effects: We expect the US policy shift to be felt across the world, from both an economic and geopolitical perspective.

In the eurozone, where growth is already fragile, the imposition of import duties is unlikely to prove inflationary, allowing the European Central Bank to continue to chart a swift path back to a more neutral policy setting.

► BNP Paribas key forecasts for 2025

GDP growth (annual, y/y)		**Market rates** (year end)	
US 2.1%	Eurozone 1.0%	US 10y 4.65%	Germany 10y 2.25%
CPI inflation (annual average, y/y)		**FX** (year end)	
US 2.9%	Eurozone 2.1%	EURUSD 1.00	USDJPY 156
Policy rates (year end)		**Brent** (Q4 average)	
Fed 4.25–4.50%	ECB 2.00%	USD75/bbl	

Luigi Speranza, Global Head of Markets 360 and Chief Economist | BNP Paribas London Branch | and Markets 360 team

On the positive side, we expect a fiscal stimulus in the latter part of 2025, driven by a rethinking of the debt brake in Germany and a likely increase in defence spending.

Responses to Trump 2.0: Chinese authorities too will probably respond to US policies with additional fiscal and monetary stimulus. However, with at least part of the likely measures aimed at investment, and hence adding to capacity, we expect this to prove disinflationary for the rest of the world.

We anticipate mixed policy responses across emerging markets, with larger moves in those economies with weak growth starting points and the most acute hits to net trade and rerouting from tariffs (CE3 and Southeast Asia, we think). There would be more caution elsewhere (e.g. in Latam).

Risks abound: To provide a framework for analysis, this section of our Global Outlook presents three scenarios, while modelling the potential impact of our central assumption about the US administration's policies.

Our base case is subject to a multitude of risks, detailed on *page 13*, stemming both from the extent to which Trump's policies are implemented and from their effects on the economy. At the top of the list, we put the possibility that the policies trigger non-linear dynamics, such as a US recession or a sustained inflationary push that forces the Fed to raise rates rather than pause its cuts, in a scenario that would be an even deeper challenge to current market pricing.

Other risks include renewed concern over fiscal dynamics. Should growth disappoint expectations and/or inflation limit the scope for monetary policy to respond, a more concerning feedback loop could ensue. Across emerging markets, Brazil and Colombia stand out, but advanced economies are not immune from the risk of deteriorating fiscal positions – recent spread widening in France being a case in point.

Our key market views

Higher US inflation and a more cautious Fed: We expect the market to shift to price in higher US inflation (we are paid US breakevens), and fewer rate cuts than it currently does.

Widening Fed–ECB policy rate differential: The interest rate differential between the US and the eurozone will widen, we expect, with the Fed holding rates and the ECB cutting rates to 2% in 25bp steps. We expect the 2y yield differential between the US and Germany to be around 45bp wider than forwards currently imply by the end of 2025.

Long duration views in the eurozone: Thanks to the combination of divergent policy and attractive valuations, we consider the eurozone a more appealing place than the US to express long duration views, with a potential for the 10y Bund yield to fall below 2% in Q1.

EURUSD to reach parity: Our forecast is for widening front-end interest rate spreads to lead to a decline in EURUSD to parity in 2025.

USDRMB to 7.50: The fair value of USDRMB will stabilise around 7.50, we expect, with the PBoC's counter-cyclical measures preventing an even sharper depreciation of the RMB.

Not bearish on energy initially: The new US administration is unlikely to increase energy supply meaningfully, and sanctions on Iranian exports will support crude prices in the near term, but we see bearish pressures developing in the second half of 2025.

Credit: Carry, cyclicals and Europe can outperform the US in H1 2025. Political uncertainty is unusually high, and credit spreads are tight, but the context is a benign, mid-cycle credit environment and high yields attract demand and curtail supply.

Luigi Speranza, Global Head of Markets 360 and Chief Economist | BNP Paribas London Branch | and Markets 360 team

Trump 2.0: Our key assumptions

Our base case sees higher US import tariffs, a sharp fall in net immigrant arrivals, and some fiscal easing and deregulation

Policy	▼ Lower impact ▼	► BNP Paribas base case ◄	▲ Higher impact ▲
Tariffs	Only targeted tariff increases are imposed, with modest macroeconomic effects. Trump uses the threat of tariffs to extract concessions from foreign governments, including on indirectly related topics such as defense cooperation and immigration flows.	**Tariffs on China rise by 25pp to a total effective rate of around 40%, starting in Q1 2025 with a 10pp increase, with the rest starting in Q3 2025 and phased in over four quarters.** **Tariffs on other countries rise by 3pp on average to a total rate near 5%, starting in Q4 2025 and phased in over four quarters.** **Some countries, such as Canada and Mexico, escape tariffs in the near term. Trump avoids increasing tariffs on goods with highly visible prices, such as energy and unprocessed foods.**	Tariffs on China rise to a total effective rate of about 60% and those on the rest of the world by 7pp to a total rate of 10%. The tariffs are announced on social media after unsuccessful negotiations with foreign trading partners and are accompanied by significant uncertainty. Tit-for-tat tariffs and trade restrictions are imposed on some US export goods, although this has a modest direct macroeconomic impact on the US.
Immigration	The number of irregular arrivals falls, but net new immigrant arrivals run ahead of Trump's first term.	**Net new irregular immigrant arrivals fall to about 300,000 in 2025 from 1 million in 2024 YTD, compared with a net rate of −126,000 in 2019. There are no large-scale involuntary departures.**	There is a sharper decline in net new immigrant arrivals as significant involuntary departures combine with tight border policy and very strict application of legal immigration rules.
Fiscal policy	Tax cuts under the Tax Cuts and Jobs Act of 2017 are extended, combined with spending cuts to social welfare programs late in the decade, yielding a neutral fiscal impulse. The deficit stays at around 6.5% of GDP in 2025–26.	**TCJA tax cuts are extended with a few additional sweeteners, combined with spending cuts primarily to social welfare programs, some of which occur in 2025–26. These yield a modestly negative fiscal impulse relative to 2024.** **The deficit narrows by 0.10pp of GDP a year in 2025–26.**	TCJA tax cuts are extended and combined with significant cuts to corporate taxes and social welfare programs in 2025–26, creating a net negative fiscal impulse. The deficit narrows by 0.25–0.50pp of GDP a year in 2025–26.
Deregulation	Some administrative processes are streamlined and some rulemaking paused, but more substantial change is stymied by litigation, industry opposition, and (on some topics) international pressure, leaving little macroeconomic impact.	**A broad 'pause' in new rulemaking, streamlining of administrative processes, and targeted deregulation boost business fixed investment, especially in the energy sector.**	A sweeping deregulatory push fundamentally transforms rules around environmental protection, labor markets, banking and financial services, energy, healthcare, and other areas. This significantly boosts business investment.
Productivity	Productivity growth normalizes downward from recent highs (2.4% q/q saar in the four quarters to Q3 2024) but, thanks to a lack of significant tariff increases, remains above the historical average from 2012–19 (1.1%).	**Productivity growth slows about 0.45pp by end-2026 over the 'lower impact' scenario, due to inefficiencies created by tariffs and disruptions reflecting reduced new immigrant arrivals, though some of this downdraft is offset by greater capital deepening.**	An initial rapid fall in productivity as policy uncertainty magnifies tariff and labor market effects is only partly offset by the boost from deregulatory exuberance over time.

Source: BNP Paribas

James Egelhof, Chief US Economist | Andrew Schneider, Senior US Economist | Andrew Husby CFA, Senior US Economist | BNP Paribas Securities Corp | Francisco Tiago Carvalho, Europe Economist | BNP Paribas Portugal Branch | Niccolo Carrara, Emerging Markets Economist

Trump 2.0: Impact on US – Growth

Some positives, more impactful negatives: In short, our expectation of the net impact of the combination of the new administration's likely policy measures is lower growth, higher inflation and tighter monetary policy.

While we think the US economy will remain resilient for the next six months or so, we expect growth to slow to a below-trend rate from mid-2025 onwards. As discussed overleaf, we expect the inflationary consequences of these policies to keep monetary policy restrictive for longer, further weighing on activity.

Tax cuts: While the full extension of the TCJA tax cuts should provide a moderate boost to the fiscal impulse relative to a counterfactual of a Kamala Harris victory with a divided Congress, it does not provide any new impulse versus the current policy setting. Public spending cuts – in the pursuit of 'efficiency' – could also stifle employment and growth, at least in the short run.

Tariffs: President Trump's planned tariffs will weigh heavily on growth, we think. Although the full suite of tariffs is unlikely to be implemented immediately, a near-term rise in trade-related uncertainty could dampen business sentiment.

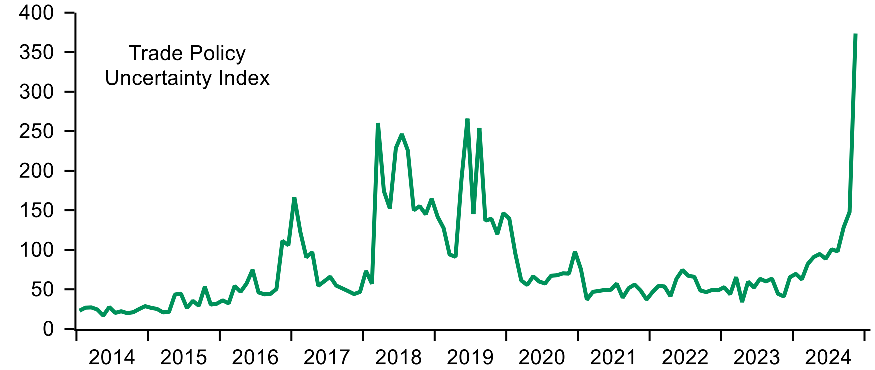
After the effect of a stronger dollar, we expect retailers to largely pass on new tariffs to US consumers, in turn eroding real disposable incomes and constraining real spending growth.

Tariffs might also be a drag on productivity growth: by incentivizing firms to invest to seek ways to substitute imports, they could redirect resources from areas where US workers and firms have greater skill, expertise and scale.

Immigration: We expect irregular arrivals across the US–Mexico border to fall sharply from current levels and remain historically low during Donald Trump's presidency. A decline in new immigrant flows means slower economic growth, in our view, as fewer people working means less gets done. It may also hinder job matching, introducing frictions into the labor market.

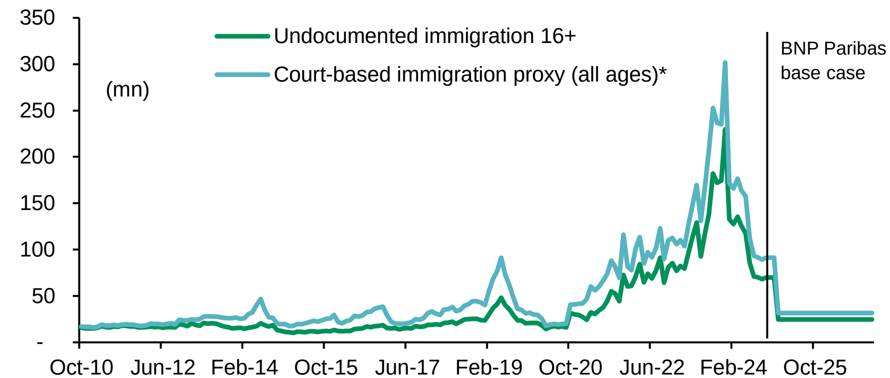
Deregulation: Along with tax cuts, deregulation has the most obvious positive impact on US GDP growth. Indeed, deregulation has been shown to have a positive impact on business dynamism (for example, see *Égert and Gal*, 2017).

Trade policy uncertainty has returned with a vengeance



Sources: Economic Policy Uncertainty, Macrobond, BNP Paribas

We expect undocumented arrivals to continue falling



**Estimate of number of undocumented immigrants; for more, see Appendix 2 of Immigration: Invisible hands, dated 17 October*
Our base case assumes 30k deportations a month in 2025, which is reportedly the likely maximum feasible for the Immigration and Customs Enforcement (for more, see Politico, 28 July).
Sources: Transactional Records Access Clearinghouse, BNP Paribas

James Egelhof, Chief US Economist | Andrew Schneider, Senior US Economist | Andrew Husby CFA, Senior US Economist | BNP Paribas Securities Corp

Trump 2.0: Impact on US – Inflation

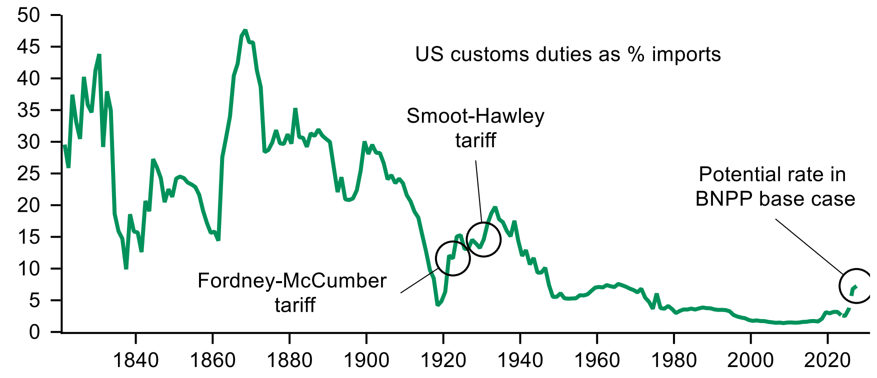
Another shock to prices: Some argue that Trump's policies (in particular tariffs), will not be inflationary on the basis that (i) he will not implement them (ii) the dollar will entirely offset the impact and (iii) there will not be any second-round effects. We think this framework is misguided.

- We think Trump will implement – even if not in full – large swathes of his tariff threat (see *page 5*).
- The dollar will not fully offset the impact of higher tariffs, in our view, particularly in the case of USDRMB, as the People's Bank of China is likely to be unwilling to let the RMB fully depreciate to offset the impact. In addition, FX pass-through is limited by about 95% of US imports being priced in dollars. In other words, the brunt of the adjustment is more likely to be felt by US consumers than foreign exporters.
- The sheer degree of anticipated tariffs – a 3pp increase in global tariff rates excluding China and 25pp increase in tariffs on China – suggests that the direct lift to consumer prices could be around 80bp on its own. However, we see tariffs affecting inflation not only through rising prices for imported goods, but also via second-round effects on the general price level. Our modeling finds that rises in import prices – for example, from USD depreciation – transmit broadly to other goods, services and wages, and are amplified through short-term momentum (see *page 11*).

The impact on inflation from immigration restrictions is less clear, as new arrivals are a source of both supply and demand. Our modeling suggests that the reduction in labor supply and corresponding upward pressure on wages lead to a net impact that leans inflationary.

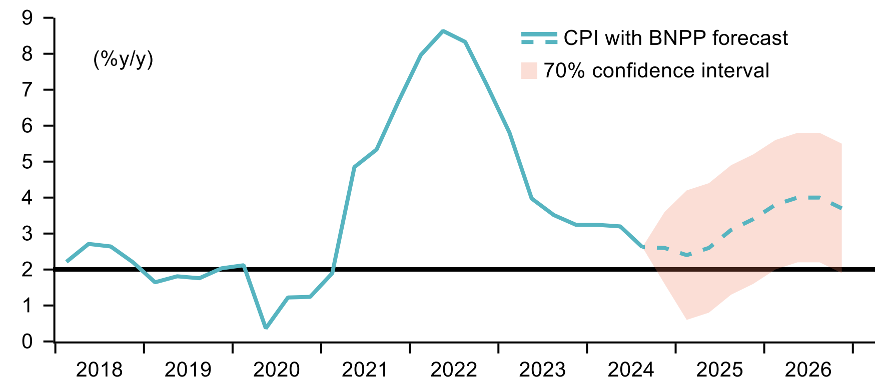
No unanchoring: We envisage a permanent shock to the level of consumer prices in the US (around 2pp), and a temporary impact – albeit throughout our two-year forecast horizon – on US inflation. But we do not expect any unanchoring of inflation expectations. In other words, we assume that in maintaining restrictive policy for longer than would otherwise be the case, the US Federal Reserve keeps long-term inflation expectations in check.

US effective tariff rate could approach highest since 1940 under our base case of a broad-based tariff



Sources: BEA, Census, USITC, Macrobond, BNP Paribas

Large swathes of tariffs to lift inflation

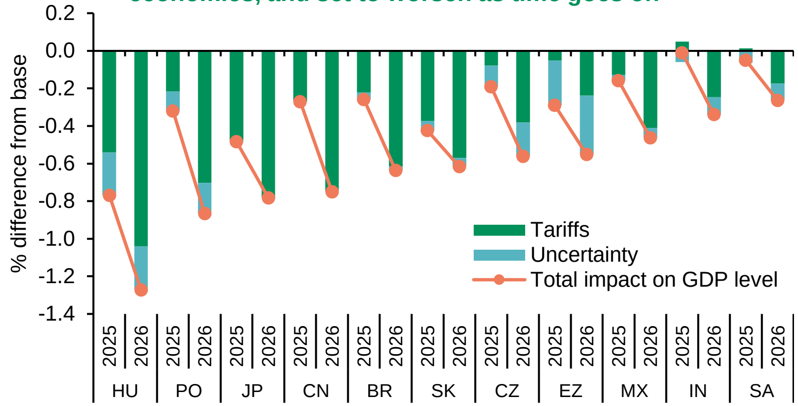


Error ranges are measured as +/- root mean squared error of projections for 2004–23 released in the fall by private and government forecasters, compiled by the Federal Reserve.
Sources: BLS, Federal Reserve, Macrobond, BNP Paribas

James Egelhof, Chief US Economist | Andrew Schneider, Senior US Economist | Andrew Husby CFA, Senior US Economist | BNP Paribas Securities Corp

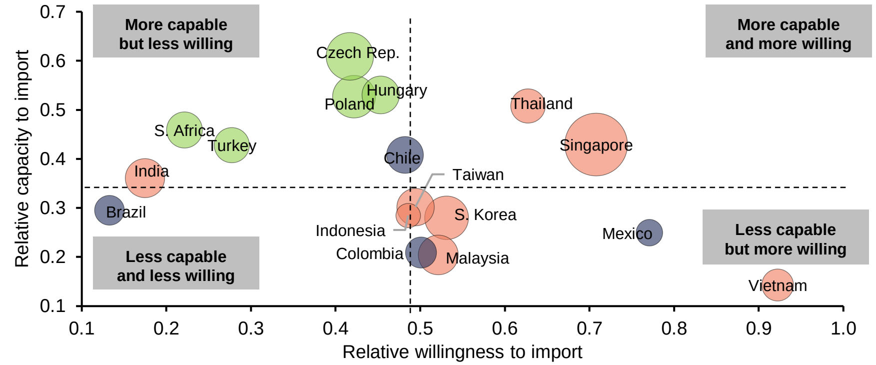
Trump 2.0: Tariff impact on rest of world – Growth

The growth impulse of US policy is unequivocally negative for other economies, and set to worsen as time goes on



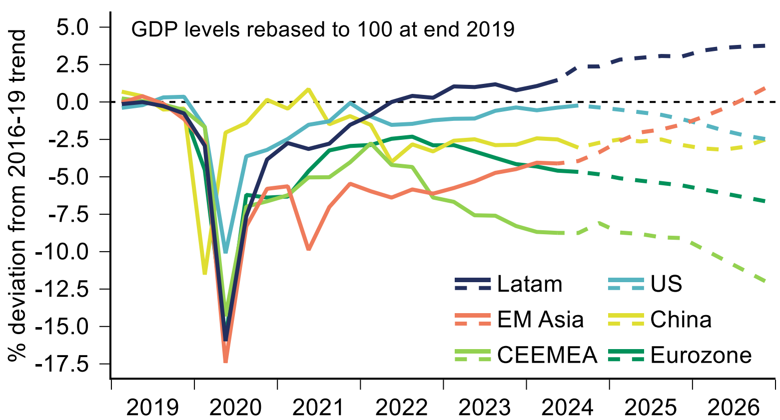
See *pages 11–12* *for details on how we calibrate our baseline simulation.*
Sources: NiGEM, BNP Paribas

CE3 and Southeast Asia seem most vulnerable to a deterioration in net trade performance stemming from tariffs



The size of the bubble denotes relative FDI attractiveness. Colour codes: Orange for EM Asia, green for CEEMEA and blue for Latam. Dotted lines denote median values.
Sources: various data sources (for sources and methodology, see Are EMs ready for China trade re-routing?, 4 November), BNP Paribas

Weak starting points for growth will matter for policy responses



Dashed lines denote BNP Paribas forecasts.
Sources: US BEA, Eurostat, World Bank, Macrobond, BNP Paribas

Modelling our working assumption on the sequence, timing and level of US import tariffs on China and the rest of the world (RoW) lowers 2026 GDP by 0.7% for developed and 0.6% for emerging markets, on average, relative to the baseline.

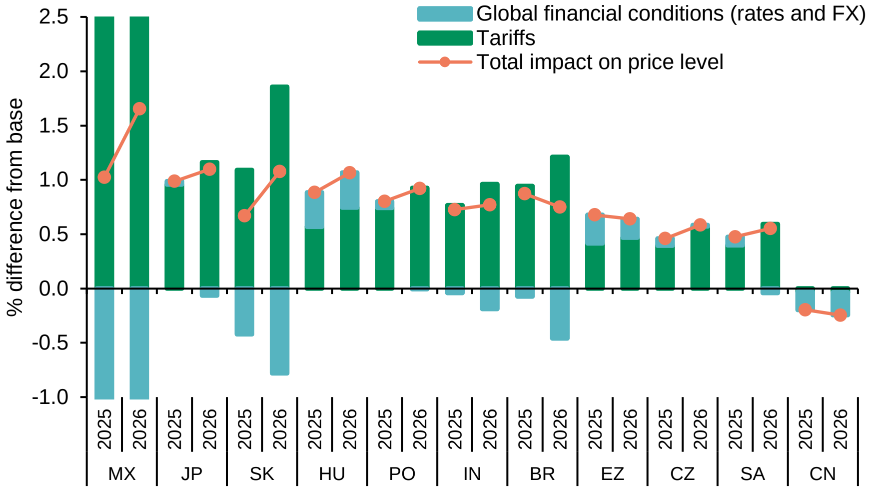
Starting points matter: For China and the eurozone, a worsening of their already weak growth outlook is likely to prompt support from fiscal and monetary policy. In the eurozone, we think this reinforces the need for continued ECB rate cuts until mid-2025 and may even be a catalyst for higher defence spending (likely in Germany) and further EU integration. In China, we expect larger fiscal measures from the March 2025 National People's Congress and further PBoC rate cuts.

Non-uniform policy responses in EM: Policy responses are likely to be larger for EM countries with weak growth starting points and the most acute hits to net trade and rerouting from tariffs (CE3 and Southeast Asia, we think). Where growth is already running at or above trend (e.g. in Latam), policymakers are probably less inclined to react strongly to tariffs until the impact on growth, inflation and FX performance (through balance-of-payments adjustments) has become clearer.

Jeffrey Schultz, Head of CEEMEA Economics | Niccolo Carrara, Emerging Markets Economist | Duncan Forsyth, Europe Economist | BNP Paribas London Branch

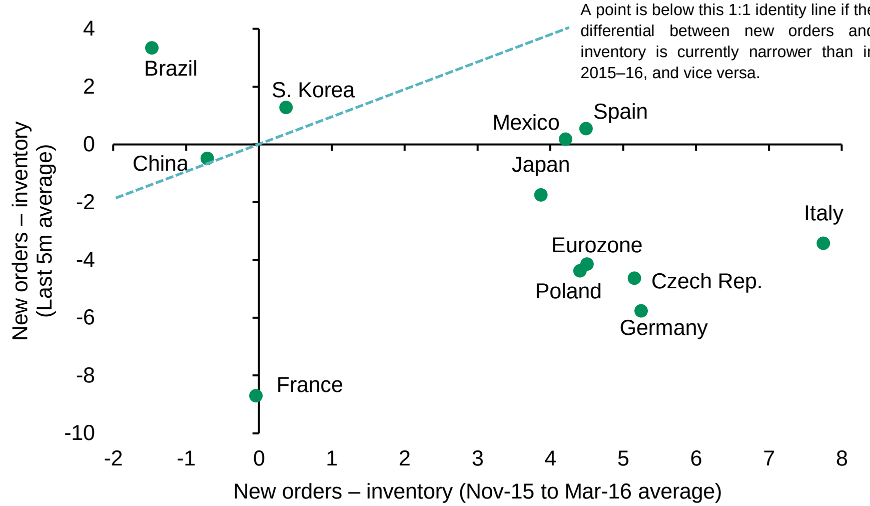
Trump 2.0: Tariff impact on rest of world – Inflation

The model impact of tariffs on the price level is generally positive and large, outside China, with an ambiguous contribution from financial conditions



See [pages 11–12](#) for details on how we calibrate our baseline simulation. The Y-axis is adjusted for visual purposes and does not show the full extent of contributions from global financial conditions and tariffs in Mexico.
Sources: NiGEM, BNP Paribas

Corporate pricing power is weaker than it was during Trump 1.0, apart from a few exceptions



We assess corporate pricing power through the demand–supply disequilibria evident in the differential between new orders and stock of finished goods (i.e. inventory) in manufacturing PMIs.
Sources: S&P Global, BNP Paribas

Tariffs are inflationary, but… While our exercise on NiGEM generally shows tariffs having significantly positive impacts on inflation in 2025–26, we tone down these results before including them in our forecasts, for a couple of reasons.

- Higher tariffs on China could exacerbate its overcapacity issues by increasing the domestic supply of goods amid lower exports (after any short-term front-loading). This would raise China's deflationary impulse to the RoW.
- Companies in countries facing a weak cyclical position (such as the eurozone, CE3 and pockets of EM Asia) may struggle to pass higher input costs along the rest of the price chain, and ultimately on to consumers, thus taking a hit to their margins. For these countries, we moderate our model outputs (see *page 12*).

FX reaction to more protectionism: We assume tariffs have a small inflationary impact in 2025–26, not least because the RoW's FX depreciation (vs the USD) is broad-based and sizeable. Our modelling highlights that FX pass-through to G10 inflation is historically elevated (see *G10 inflation: Growing impact of FX pass-through*, dated 7 October). Sensitive inflation expectations, amongst other factors, are at fault here (see *Emerging markets inflation: Great expectations*, 10 June).

This is not to say, however, that the inflationary FX impulse outweighs the disinflationary one stemming from higher rates. In Mexico, for example, given the spillover from fewer Fed cuts and higher US long-term yields, tighter financial conditions could mitigate an otherwise disproportionate inflation impact from tariffs. All in all, we take more signal from NiGEM's results to obtain an estimate of the final price level impact, rather than from the evolution of the inflation rate.

Jeffrey Schultz, Head of CEEMEA Economics | Niccolo Carrara, Emerging Markets Economist | Duncan Forsyth, Europe Economist | BNP Paribas London Branch

Trump 2.0: Market impact

Higher US inflation, more cautious Fed: With the post-pandemic inflation surge fresh in memories and price levels still elevated, we think investors are attuned to inflationary risks arising from Trump's fiscal, trade and immigration policies. To us this suggests opportunity in being paid US breakevens.

As the Fed is beginning to incorporate higher US inflation into its decision making before tariffs are in place, we expect far fewer rate cuts than the market is pricing.

Widening Fed–ECB differential: As we see the Fed on hold in 2025 but the ECB cutting rates to 2% in 25bp steps, we forecast continued widening in the interest rate differential between the US and the eurozone. We expect the 2y yield differential between the US and Germany to be around 45bp wider than forwards currently imply by the second half of 2025.

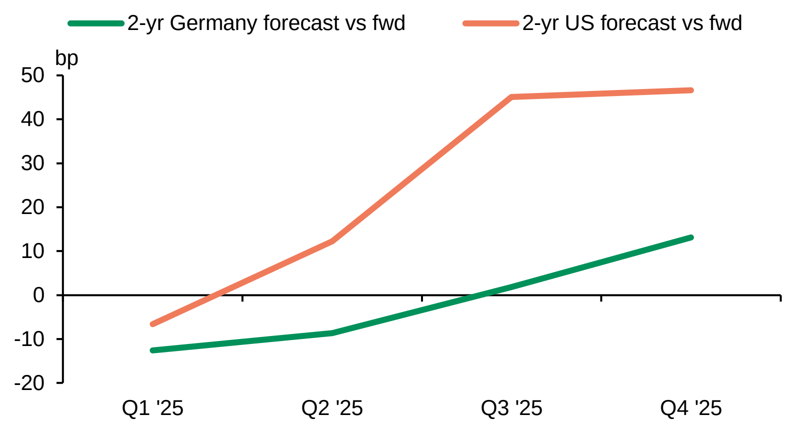
We prefer to express long duration views in the eurozone rather than the US as we see scope for 10y German yields to fall below 2% in Q1.

Given our expectation of widening front-end interest rate spreads, we expect EURUSD to keep falling and to reach parity in 2025.

USDRMB to 7.50: President-elect Trump's tariff plans most aggressively target China. If the US raises tariffs on Chinese imports to 60%, as proposed during the election campaign, this suggests a fair value of 7.70 for USDRMB. However, our assumption of a 25pp increase in the effective tariff on China suggests that the fair value could stabilize at around 7.50, given PBoC counter-cyclical measures.

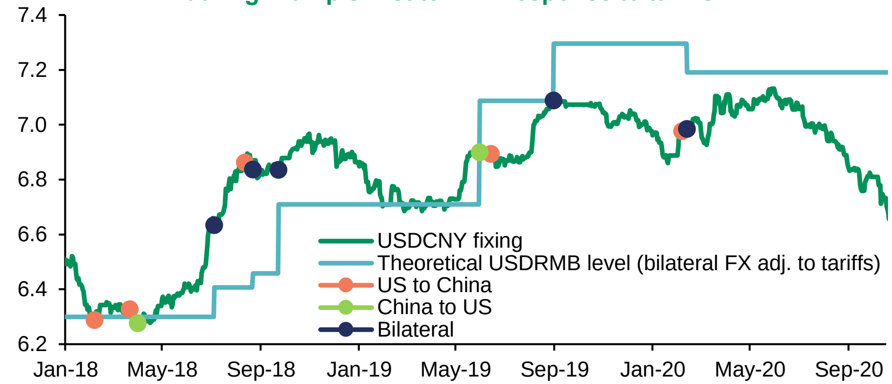
Not so bearish for energy, initially: Even if it opens new acreage on federal lands for pipeline development and reduces regulation, we see limited scope for Trump's administration to increase supply meaningfully. In the near term, sanctions on Iranian exports are likely to support crude prices, but we see bearish pressures developing in the second half of 2025 on weaker global growth after tariffs take effect. Despite talk of a ceasefire in Ukraine, we believe the Russian pipeline volumes through Ukraine will cease on 1 January, with a just few billion cubic metres finding their way into Europe through an alternative route.

We expect the Fed–ECB policy rate differential to widen further



Data show BNP Paribas market rate forecasts versus forwards as at 4 December. Source: BNP Paribas

USDCNY fixings moved higher along with fair value during Trump's first term in response to tariffs



Date points denote tariffs US and China imposed on each other. The theoretical USDRMB level shows BNP Paribas fair-value estimates based on bilateral FX adjustments reflecting changes in effective average tariffs. Sources: USTR, China State Council, PIIE, BNP Paribas

Sam Lynton-Brown CFA, Global Head of Macro Strategy | BNP Paribas London Branch | Ishan Gurnani, G10 FX Strategist | BNP Paribas Securities Corp | Joshua Wilcock, G10 FX Strategist | BNP Paribas London Branch | and Markets 360 Global Macro Strategy team

Trump 2.0: Modelling assumptions

Revisiting our tariff modelling: We model our base case for US tariffs under President Trump using the National Institute Global Econometric Model (NiGEM).

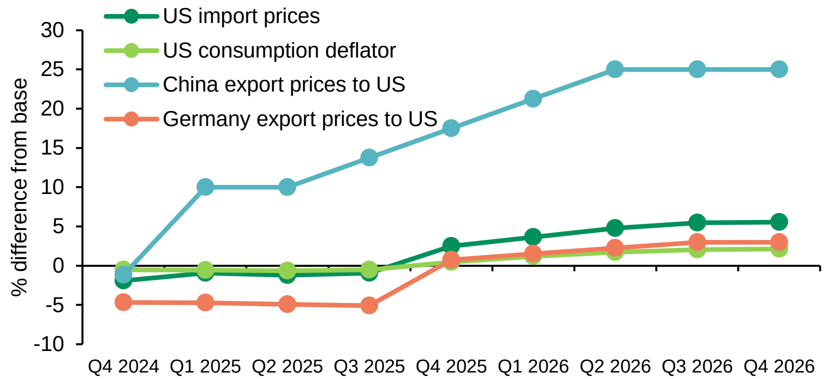
This modelling exercise represents the backbone of our forecast revisions (especially for the US); however, we apply judgement when incorporating these results into our forecasts to account for the framework's limitations.

While the results suggest a stagflationary impact, like it did in our exercise in *BNPP US election tracker: Trade war strikes back* on 4 June, we have made some adjustments to our modelling.

- We run the model with rational expectations. In other words, we assume consumers and firms anticipate the increase in tariffs to come, the consequent inflationary spike and the monetary policy reaction to it (indeed, we allow monetary policy to react within the model).
- We allow the simulation to start immediately (i.e. Q4 2024), before the tariffs are implemented (i.e. Q1 2025 for China and Q4 2025 for others). This allows us to capture the early impacts from FX via interest rate differentials fed by expectations of higher inflation.
- We do not assume tit-for-tat retaliation by US trade partners.

Finally, we assume that the Chinese authorities react to prevent a significant devaluation of the renminbi, which could otherwise undermine financial stability. We proxy this by limiting the depreciation of the RMB against the USD to 2% for the first four years of the simulation.

We proxy the rise in tariffs as a rise in bilateral export prices to the US, which feeds into domestic US inflation



Non-commodity export prices; Germany is a representative example for the rest of the world.
Sources: NiGEM, BNP Paribas

Export prices as tariff proxy: We proxy the tariff increase by shocking bilateral export prices to the US at the level and speed of tariff implementation detailed on *page 5*. We choose this variable as proxy because NiGEM contains a detailed breakdown of country-level export prices by destination, which allows differences to be captured in tariff rates, sequencing and pass-through to US prices.

The chart above shows the model response to the tariff shock that underpins our base case.

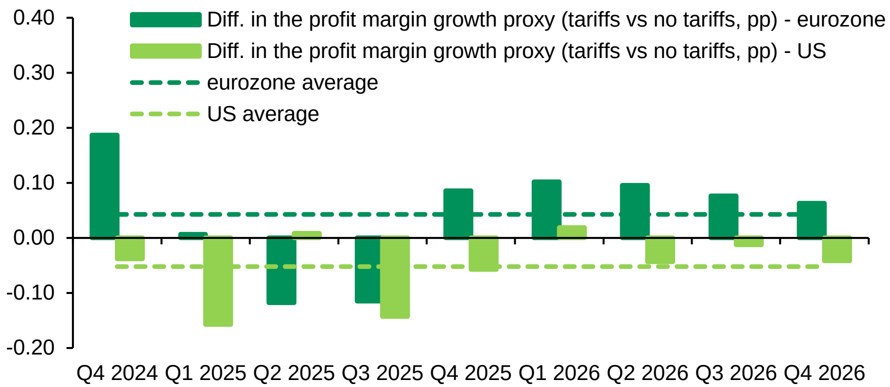
Chinese export prices to the US start to increase as soon as Q1 2025, in line with our assumed tariff implementation timeline.

US import prices first decline, though marginally, on the back of a stronger dollar cheapening imports from countries for which additional tariffs are yet not in place, such as Germany. However, they rise later, especially after tariff increases for all other trade partners kick in. In turn, this feeds into the consumption deflator, based on the past relationship of US consumer prices to US import prices.

Francisco Tiago Carvalho, Europe Economist | BNP Paribas Portugal Branch | Niccolo Carrara, Emerging Markets Economist | Luca Pennarola, Senior Europe Economist I BNP Paribas London Branch

Trump 2.0: Modelling assumptions (continued)

Results suggest only a marginal hit to profit margins in the US, meaning tariffs will likely be passed to consumers



Profit margin proxy is calculated as the difference between the GDP deflator and unit labour costs.
Sources: NiGEM, BNP Paribas

We expect a growth-harming surge in uncertainty, as under the first Trump presidency

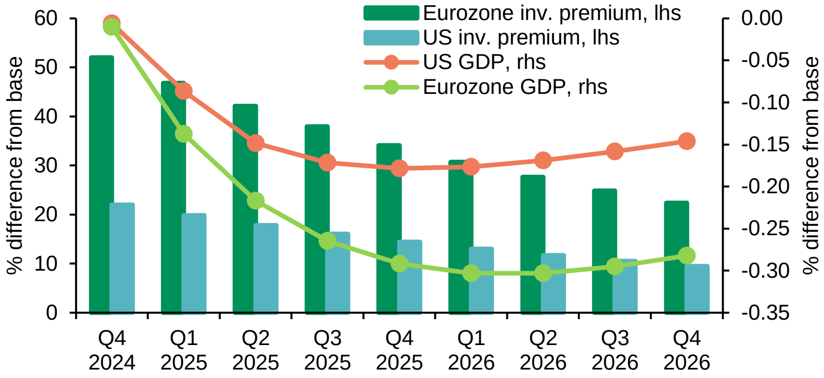


Chart shows impact on level of GDP.
Sources: NiGEM, BNP Paribas

Consumers to pay for tariffs: By construction, our exercise assumes tariffs have a 1:1 impact on bilateral export prices, but our forecasts do not reflect that in full, as exporters might prefer to maintain volumes by absorbing part of the tariffs.

Likewise, domestic firms might take a hit to their margins by absorbing higher input costs. We assess how a proxy for profit margin growth behaves in the model after the shock. The chart above shows that margins take only a small hit in the US and increase marginally in the eurozone, implying that, net of currency moves, consumers pay most of the cost from higher tariffs.

This may be a reasonable result for the US, where the economy is currently strong and producers might be comfortable in passing a cost push shock to consumers. In the eurozone, however, the economy is in a weaker cyclical position.

Here, the small positive impact on margins persists even when we tone down the parameter determining the short-run sensitivity of eurozone consumer prices to import prices. In this sense, we think NiGEM might overestimate the positive impact of tariffs on eurozone inflation (for more, see *page 9*).

Uncertainty another shock: Besides tariffs, we see President Trump's second term adding a new layer of policy uncertainty similar to that in his first term, denting investment and GDP growth (see *IMF's October 2024 WEO*).

To capture it, as shown in the chart above, we shocked NiGEM's investment premium variable. (This proxy of the difference between the cost of funding for firms and long-term interest rates on government bonds tends to rise in times of economic uncertainty.) We calibrate an increase similar to the one around the 2016 election in the US and Europe (incl. the UK) – 22% and 52%, respectively, with a gradual dissipation. Investment premium feeds into agents' investment decisions, via higher user cost of capital, holding back investment and GDP.

Fiscal and immigration policy: For the final layers of our modelling, we assume the fiscal policy scenario we set out under a Republican sweep in *BNPP US election tracker: Let's get fiscal* (dated 3 September) and we shock US labour force growth to reflect lower net migration, as described in *page 6*. These shocks partially offset themselves, with the positive fiscal impulse being softened by labour force constraints.

Francisco Tiago Carvalho, Europe Economist | BNP Paribas Portugal Branch | Niccolo Carrara, Emerging Markets Economist | Luca Pennarola, Senior Europe Economist I BNP Paribas London Branch

Trump 2.0: Risks to our view

Predicting the unpredictable: Forecasting in the current environment is essentially trying to predict the unpredictable: we do not know with precision what policies President Trump will introduce and in what size and sequence. As set out on *page 5*, we see plausible upside and downside risks for trade, immigration, and fiscal policy under the incoming administration.

On the one hand, bolstered by a decisive electoral victory and prior experience in office, Trump might be more aggressive than our baseline expectations and pursue his second-term agenda with greater intensity.

On the other hand, he might opt for a more conservative policy mix than we expect, preferring to protect asset price valuations over implementing tariffs or deciding that the political risks around additional inflation make tariffs and even more restrictive immigration policies not worth the price.

What's more, because these policy shifts – particularly tariffs – are unusual in the recent US experience, they are difficult to model with precision, and so the economic effects could be quite a bit larger or smaller than we estimate.

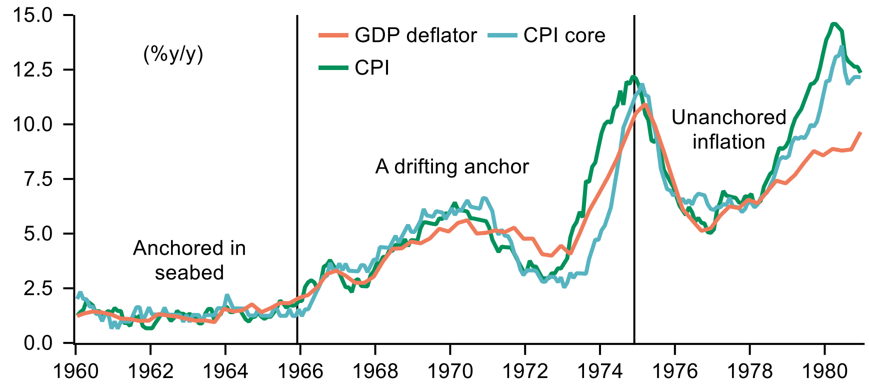
Risks cut both ways: In our view, this wide band of possibilities around the incoming administration's policies means there are considerable risks in both directions for the US economy.

An aggressive trade approach that leads to an uncontrolled tit-for-tat trade war and high inflation could trigger a sharp decline in sentiment, which could be recessionary. Or, if long-term inflation expectations (LTIE) unanchor, as they did in the 1960s-70s following several successive rounds of elevated inflation, the Fed may have to hike rates in response, exacerbating the growth downturn.

In contrast, if Trump ends up using tariffs primarily as bargaining chips, growth could come in considerably higher and inflation lower than our baseline. Deregulation and an associated stirring of animal spirits could also prove a positive surprise.

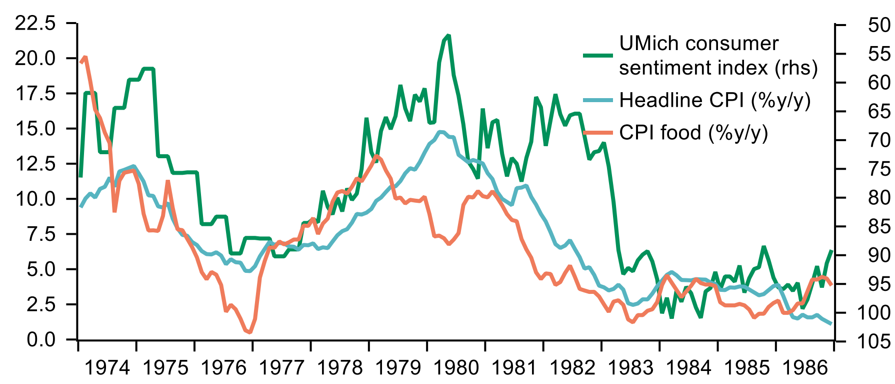
Two-sided risks apply to fiscal policy as well. Trump is considering significant spending cuts that could be growth-negative. Conversely, Trump might pursue further corporate tax cuts, providing more stimulus than in our baseline.

US inflation expectations could be vulnerable in wake of pandemic



Sources: BEA, BLS, Macrobond, BNP Paribas

Political ramifications of another round of high US inflation could act as a restraint on President Trump



Sources: BLS, University of Michigan, Macrobond, BNP Paribas

James Egelhof, Chief US Economist | Andrew Schneider, Senior US Economist | Andrew Husby CFA, Senior US Economist | BNP Paribas Securities Corp

Forecasts: GDP and inflation

Our up-to-date economic forecasts are always available on the Markets 360 website.

BNP Paribas GDP growth forecasts

	Annual avg (% y/y)			Quarterly averages (% q/q)							
				2025				2026			
	2024	2025	2026	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
US	**2.8**	**2.1**	**1.3**	0.5	0.4	0.4	0.4	0.3	0.2	0.3	0.4
Eurozone	**0.8**	**1.0**	**1.0**	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Germany	**-0.1**	**0.4**	**0.6**	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
France	**1.1**	**0.8**	**0.9**	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Italy	**0.5**	**1.0**	**1.0**	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3
Spain	**3.1**	**2.5**	**1.8**	0.7	0.5	0.5	0.5	0.4	0.5	0.5	0.4
China	**4.9**	**4.5**	**4.3**	1.3	0.9	1.2	0.8	0.9	1.0	1.2	1.4
Japan	**-0.3**	**0.6**	**0.2**	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1
UK	**0.9**	**1.4**	**0.9**	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.2
Switzerland(1)	**0.8**	**1.0**	**1.4**	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4
India(2)	**8.2**	**6.0**	**6.7**	2.0	1.7	1.3	1.5	1.6	1.6	1.6	1.6
South Korea	**2.2**	**1.8**	**1.7**	0.6	0.6	0.4	0.3	0.4	0.5	0.5	0.6
Brazil	**3.4**	**2.1**	**1.8**	0.7	0.3	0.2	0.2	0.8	0.5	0.4	0.3
Mexico	**1.7**	**1.2**	**1.1**	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.2
Poland	**2.8**	**3.8**	**3.7**	1.2	1.2	1.0	1.0	0.8	0.8	0.9	0.9
South Africa	**0.7**	**1.6**	**2.0**	0.3	0.2	0.2	0.3	0.7	0.6	0.6	0.7

BNP Paribas CPI inflation forecasts

	Annual avg (% y/y)			Quarterly averages (% y/y)							
				2025				2026			
	2024	2025	2026	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
US	**2.9**	**2.9**	**3.9**	2.4	2.6	3.1	3.4	3.8	4.0	4.0	3.7
Eurozone	**2.4**	**2.1**	**2.0**	2.1	2.0	2.0	2.1	2.0	2.0	2.0	1.9
Germany	**2.5**	**2.4**	**1.8**	2.6	2.5	2.4	2.2	2.0	1.8	1.8	1.8
France	**2.3**	**1.1**	**1.2**	1.3	1.0	1.0	1.2	1.3	1.2	1.1	1.1
Italy	**1.1**	**2.0**	**1.9**	1.8	2.3	2.0	1.9	1.9	1.8	1.8	2.0
Spain	**2.8**	**2.2**	**2.2**	2.2	1.9	2.2	2.3	2.2	2.2	2.2	2.1
China	**0.3**	**0.8**	**1.0**	1.1	0.7	0.5	0.9	0.6	0.9	1.0	1.5
Japan	**2.7**	**2.5**	**2.1**	2.7	2.7	2.4	2.2	2.1	2.1	2.1	2.1
UK	**2.6**	**3.2**	**2.5**	3.2	3.2	3.5	3.0	2.7	2.6	2.5	2.4
Switzerland(1)	**1.1**	**0.6**	**0.8**	0.6	0.5	0.6	0.7	0.9	0.8	0.8	0.8
India(2)	**5.4**	**4.9**	**4.2**	5.0	4.6	4.1	4.0	4.1	4.6	4.5	4.5
South Korea	**2.3**	**1.9**	**2.0**	1.7	1.8	1.9	2.2	2.1	2.0	1.9	2.0
Brazil	**4.4**	**5.1**	**4.0**	4.9	5.1	5.2	4.9	4.7	4.2	3.9	3.7
Mexico	**4.7**	**4.1**	**3.8**	4.3	4.2	3.7	4.0	3.9	3.9	3.8	3.7
Poland	**3.7**	**3.9**	**2.8**	5.1	4.6	3.0	2.9	3.0	2.8	2.7	2.6
South Africa	**4.5**	**4.1**	**4.2**	3.7	3.6	4.4	4.8	4.4	4.3	4.1	4.1

(1) Switzerland's GDP forecasts are adjusted for sporting events; (2) India's annual forecasts are for the fiscal year (April–March).
Source: BNP Paribas forecasts

Markets 360 team

Forecasts: Central bank policy rates

Our up-to-date economic forecasts are always available on the Markets 360 website.

	Cycle peak	As at 2 Dec	BNP Paribas policy-rate forecasts (%)											BNP Paribas estimate of nominal neutral rate
			Year-end forecasts			Quarter-end forecasts								
						2025				2026				
			2024	2025	2026	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
US[1]	5.50	4.75	**4.50**	**4.50**	**4.00**	4.50	4.50	4.50	4.50	4.50	4.50	4.25	4.00	2.40–3.80
Eurozone	4.00	3.25	**3.00**	**2.00**	**2.00**	2.50	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.50–2.50
China	2.55	1.50	**1.50**	**1.10**	**0.80**	1.40	1.40	1.30	1.10	0.90	0.80	0.80	0.80	2.00–3.00
Japan	1.50[2]	0.25	**0.25**	**1.00**	**1.50**	0.50	0.75	0.75	1.00	1.00	1.25	1.25	1.50	1.00–1.50
UK	5.25	4.75	**4.75**	**3.75**	**3.50**	4.50	4.25	4.00	3.75	3.50	3.50	3.50	3.50	2.25–3.25
Switzerland	1.75	1.00	**0.75**	**0.25**	**0.25**	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50–1.50
India	6.50	6.50	**6.50**	**5.75**	**5.75**	6.25	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.00–6.00
South Korea	3.50	3.00	**3.00**	**2.50**	**2.50**	2.75	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.00–3.00
Brazil	13.50[2]	11.25	**12.00**	**13.50**	**12.00**	12.75	13.25	13.50	13.50	12.50	12.00	12.00	12.00	8.00–8.50
Mexico	11.25	10.25	**10.00**	**8.75**	**8.25**	9.50	9.00	8.75	8.75	8.75	8.50	8.25	8.25	6.60–4.80
Poland	6.75	5.75	**5.75**	**4.00**	**3.50**	5.75	5.25	4.75	4.00	3.75	3.50	3.50	3.50	2.75–3.25
South Africa	8.25	7.75	**7.75**	**7.00**	**6.50**	7.25	7.00	7.00	7.00	7.00	7.00	6.75	6.50	6.50–7.00

(1) Upper bound of target range for federal funds rate; (2) BNP Paribas projection of cycle peak (i.e. terminal) policy rate
Sources: National central banks, BNP Paribas forecasts and estimates

Markets 360 team

Forecasts: Rates and FX

Our up-to-date rates and FX forecasts are always available on the Markets 360 website.

BNP Paribas end-period interest-rate forecasts

(%)	Spot (5 Dec)	Q1 2025	Q2 2025	Q3 2025	Q4 2025
US					
Fed funds (upper bound)	4.75	4.50	4.50	4.50	4.50
2-year	4.13	4.10	4.25	4.50	4.55
10-year	4.18	4.10	4.25	4.55	4.65
30-year	4.34	4.25	4.45	4.75	4.80
Eurozone					
Deposit	3.25	2.50	2.00	2.00	2.00
2-year(1)	1.95	1.70	1.65	1.70	1.80
10-year(1)	2.06	1.90	2.00	2.10	2.25
30-year(1)	2.29	2.25	2.40	2.50	2.70
10y spreads to Germany (bp)					
France	78	72.5	80	85	88
Italy	109	105	110	115	115
Spain	65	60	65	65	65
UK					
Bank Rate	4.75	4.50	4.25	4.00	3.75
2-year	4.24	4.10	3.80	3.70	3.60
10-year	4.25	4.15	3.90	4.00	4.00
30-year	4.78	4.60	4.30	4.45	4.45
Japan					
IOER	0.25	0.50	0.75	0.75	1.00
2-year	0.59	0.70	0.90	0.95	1.10
10-year	1.07	1.20	1.40	1.40	1.60
30-year	2.24	2.30	2.40	2.40	2.50

(1) German benchmark
Sources: Bloomberg, BNP Paribas forecasts

BNP Paribas end-period FX forecasts

	Spot (2 Dec)	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q4 2026
EURUSD	1.05	1.03	1.02	1.01	1.00	1.00
EURJPY	157	158	157	157	156	156
GBPUSD	1.27	1.26	1.24	1.23	1.22	1.22
USDJPY	150	153	154	155	156	156
AUDUSD	0.65	0.64	0.63	0.63	0.63	0.63
USDCNY	7.27	7.40	7.40	7.45	7.45	7.50
USDBRL	6.07	6.40	6.50	6.60	6.70	6.90
USDMXN	20.40	21.20	21.50	22.00	22.30	22.50
USDZAR	18.13	18.10	18.00	18.00	18.00	18.00
USDIDR	15,900	16,100	16,150	16,200	16,300	16,400

Sources: Bloomberg, BNP Paribas forecasts

Markets 360 team

Forecasts: Credit and commodities

Our up-to-date commodities forecasts are always available on the Markets 360 website.

BNP Paribas credit forecasts (OAS spread, bp)*	Spot (2 Dec)	End-2025
€ IG: Bloomberg Agg Corp	108	100
€ HY: Bloomberg Pan-European	333	310
$ IG: Bloomberg Agg Corp	78	85
$ HY: Bloomberg US Corp HY	264	290

Sources: Bloomberg, BNP Paribas forecasts
**This Credit section has been prepared by the Credit Strategy team, part of the Credit Trading Desk Analyst team, who work closely with the Sales and Trading function. This is not a research report and has not been prepared by the BNP Paribas Research Department. Please see disclaimer.*

BNP Paribas quarterly average commodity price forecasts*	Spot (5 Dec)	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q4 2026
ICE Brent 1m (USD/bbl)	72	72	75	76	75	68
NYMEX WTI 1m (USD/bbl)	68	68	71	72	71	64
Dubai 1m (USD/bbl)	72	71	74	75	73	66
EU TTF 1m (EUR/MWh)	47	44	40	37	38	26
Asia JKM 1m (USD/MMBtu)	15	14	13	12	13	8
NYMEX Henry Hub 1m (USD/MMBtu)	3.1	3.5	3.8	4.1	4.7	3.9
Power French base 1m (EUR/MWh)	102	109	76	83	96	88
Power German base 1m (EUR/MWh)	114	109	90	96	103	91
Power UK base 1m (GBP/MWh)	99	101	96	93	93	85
Carbon EUA 1m (EUR/t)	68	74	76	79	80	89
Carbon UKA 1m (GBP/t)	36	40	42	45	47	55
Gold COMEX 1m (USD/oz)	2,649	2,830	2,785	2,750	2,735	2,635
Silver COMEX 1m (USD/oz)	31.30	33.30	34.10	33.70	33.20	34.85
Platinum COMEX 1m (USD/oz)	940	945	945	955	960	1,025
Palladium COMEX 1m (USD/oz)	975	995	1,050	1,090	1,070	985
Copper LME 3m (USD/t)	9,083	8,835	8,970	9,100	9,180	9,775
Aluminium LME 3m (USD/t)	2,647	2,725	2,775	2,825	2,900	3,075
Zinc LME 3m (USD/t)	3,099	3,005	2,960	3,080	3,030	2,825
Cobalt CME 1m (USD/lb)	11.08	10.70	10.40	10.10	10.05	9.50
Lithium hydroxide CME (USD/kg)	9.48	8.70	8.50	8.40	8.40	8.90
Nickel LME 3m (USD/t)	16,107	15,800	15,750	15,815	15,955	16,255

Sources: Bloomberg, BNP Paribas forecasts
**Any commodities views have been prepared by the Commodities Desk Strategy team, which works closely with the Sales and Trading function. This is not a research report and has not been prepared by the BNP Paribas Research Department. Please see disclaimer.*

Markets 360 team and Credit 360 team

GLOBAL ECONOMICS

▼ CONTENTS

US: Predicting the unpredictable under Trump

BNP Paribas forecasts

	2024	2025	2026
GDP growth (annual average, % y/y)	2.8	2.1	1.3
CPI inflation (annual average, % y/y)	2.9	2.9	3.9
Policy rate (year end, %)	4.25–4.50	4.25–4.50	3.75–4.00

Growth

The US economy appears to have achieved the elusive soft landing, and for a few quarters we think growth will stabilize around trend. We expect import tariffs to increase starting in early 2025, labor force growth to slow due to immigration changes, and productivity growth to decelerate. As a result, we think growth will slow markedly going into 2026 before gradually rising back towards trend. Fiscal policy is a key downside risk to our growth outlook.

Inflation

We expect inflation to continue to fall towards the Fed's 2% goal until around Q1 2025, supported by a continued post-Covid normalization in residential rent growth. From there, we expect a significant rise in inflation associated with higher tariffs and wage tightness following changes to tariff and immigration policy, combined with second-round effects and momentum. Monetary policy should keep long-term inflation expectations (LTIE) anchored, leading to a peak in inflation in Q2 2026 and a slow normalization to 2% thereafter.

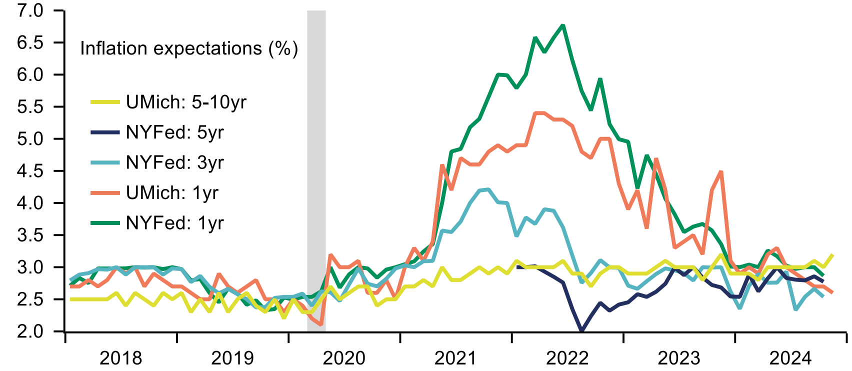
Monetary policy

Even before considering potential policy changes from the new administration, the Fed has not appeared to be in any rush to deliver rate cuts, given the economy's resilience and a gnawing concern that policy may already be close to neutral.

We think the Fed will not be able to simply 'look through' a tariff-driven temporary pickup in inflation. Although tighter Fed policy than would otherwise be the case would further slow the economy, we think concerns about the vulnerability of long-term inflation expectations will dominate.

We now expect the Fed to stay on hold throughout 2025, and to begin easing only in mid-2026 once the peak in inflation has passed and below-potential growth allows it to be more forward-looking.

The main risk of higher import tariffs is higher long-term inflation expectations



Shaded gray area indicates recession as determined by NBER.
Sources: FRB New York, University of Michigan, Macrobond, BNP Paribas

Fiscal policy

We think President Trump will pursue policies that yield a slightly negative fiscal impulse in the short run: an extension of current tax policy with minor changes, paid for by substantial cuts in federal healthcare spending that largely occur late in the decade. This should, for now, keep the fiscal deficit close to its current wide level of about 6.5% of GDP.

A risk to our outlook is the possibility that spending cuts in healthcare entitlements are larger and occur earlier than we expect. We think the fiscal multiplier on healthcare spending tends to be high (and higher than on tax cuts), so such cuts would hurt growth. Given the current size of the fiscal deficit, normalizing it to a sustainable level could result in very slow economic growth for a period of time. Conversely, it is also possible that tax cuts are larger than expected, leaving a more stimulative fiscal stance.

We think there is room for deregulation to drive up business investment and productivity. We have penciled in a modest effects related to streamlined energy and environmental permitting and see upside risk if more reform is implemented.

James Egelhof, Chief US Economist | Andrew Schneider, Senior US Economist | Andrew Husby CFA, Senior US Economist | BNP Paribas Securities Corp

Eurozone: No recession, but limited recovery

BNP Paribas forecasts

	2024	2025	2026
GDP growth (annual average, % y/y)	0.8	1.0	1.0
CPI inflation (annual average, % y/y)	2.4	2.1	2.0
Policy rate (year end, %)	3.00	2.00	2.00

Growth

The bloc is likely to continue eking out growth, supported by rising real incomes, easing credit conditions, underlying strength in the peripheral economies (especially Spain) and an expected increase in fiscal spending.

However, we see these drivers offsetting only part of the increased drag coming from heightened trade policy uncertainty, Germany's slowing potential growth, France's tightening fiscal stance and higher import tariffs. Our new 2025 forecast for eurozone GDP growth is 0.4pp lower than in *Global Outlook Q4 2024*.

Risks to growth are tilted to the downside in the near term, but we see more two-sided risks in 2026, with the second Trump administration increasing chances of a bolder EU policy response to address its structural issues.

Inflation

After some near-term choppiness, we think inflation will resume its downward trajectory in 2025. Indeed, labour market data – for instance, the vacancy rate – are consistent with a rebalancing between supply and demand for labour, which should put downward pressure on wage growth and, in time, inflation.

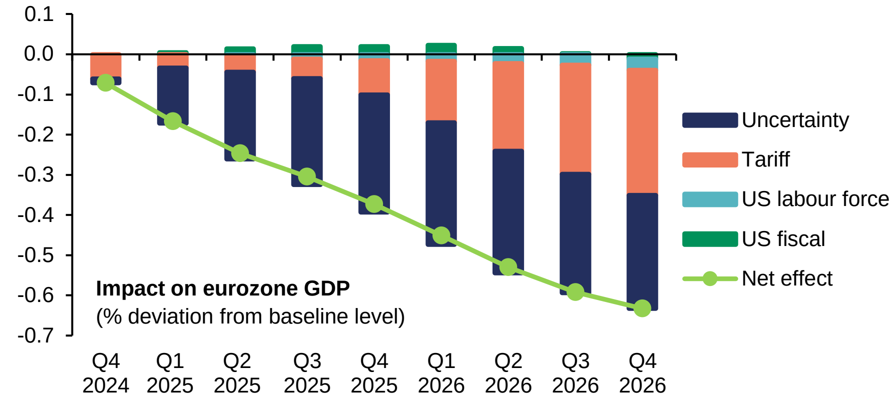
While higher trade tariffs and a weaker euro would, all else equal, be inflationary, we see these impacts being offset by weaker demand.

Monetary policy

We expect the ECB to continue its swift march back to a more neutral policy setting. We assume 25bp cuts at every meeting until the Deposit Facility Rate reaches 2.0%, the middle of our estimated neutral range, in Q2 2025.

The ECB may be forced to go below neutral if the economy weakens more than we expect in response to an escalation in trade tensions or if trade rerouting causes a larger disinflationary impulse.

Headwinds flowing from the next US administration should be a net drag for eurozone growth in 2025–26



Sources: NiGEM, BNP Paribas

Fiscal policy

In aggregate, we expect fiscal policy to keep tightening during 2025–26, providing a small, albeit not insignificant, drag on activity.

That said, we think risks around fiscal policy remain high. The political situation in France is fragile and, along with it, so is budget implementation. In Germany, February's election could pave the way for higher spending on investment and defence – we assume an increase of around 0.7% of German GDP, starting from around mid-2025.

Although not our base case, it is possible that the EU responds to changes in US external policy with more joint borrowing or more flexibility on existing funds (such as EU cohesion funds) to increase the spending hitting the real economy.

More broadly, whether countries adopt elements of the Draghi and Letta reports – including further progress towards a Capital Markets Union – will be key.

Paul Hollingsworth, Head of DM Economics | Luca Pennarola, Senior Europe Economist I BNP Paribas London Branch

Eurozone: South–north divide

Germany

We cut our 2025 GDP growth forecast for Germany by 0.6pp compared with *Global Outlook Q4 2024*, in part due to a lower assessment of its potential output growth. Furthermore, its export-driven economy is among the most exposed to the repercussions of a second Trump presidency, with tariffs and uncertainty weighing on the outlook in 2026.

February's early elections are unlikely to add much uncertainty or a significant drag on economic activity, in our view. Public opinion appears to favour a swift resolution of the current political impasse, which we think will be possible if the Christian Democrats lead a 'grand coalition' with the Social Democrats.

Besides a more stable political outcome, the 2025 elections might also bring the prospect of more fiscal loosening coupled with supply-side reforms. A softening of the constitutional debt brake is possible but may take some time to implement.

Given Germany's combination of structural and cyclical issues, we expect low growth to persist over our forecast horizon. For more, *see* *Germany: Early elections positive, but no panacea*, dated 13 November.

France

We downgrade our 2025 growth forecast by 0.4pp and see GDP growth still below 1% in 2026 due to greater uncertainty about economic policy and trade.

Inflation slowing to around 1% next year and lower interest rates should favour a drop in households' saving rates and a gradual turnaround in housing activity. Also, improving supply chains should support a pickup in activity in the transport sector and some resilience in export growth.

However, ongoing risks of political and fiscal instability are likely to weigh on business investment and job creation. We expect the unemployment rate to rise to 8.4% at the end of 2025 from 7.2% in August. We thus expect muted consumer spending growth of less than 1% y/y over 2025–26.

BNP Paribas forecasts

Country	GDP growth (annual avg % y/y)			CPI inflation (annual avg % y/y)		
	2024	2025	2026	2024	2025	2026
Germany	-0.1	0.4	0.6	2.5	2.4	1.8
France	1.1	0.8	0.9	2.3	1.1	1.2
Italy	0.5	1.0	1.0	1.1	2.0	1.9
Spain	3.1	2.5	1.8	2.8	2.2	2.2

Italy

Our 0.2pp cut to the 2025 growth forecast relative to the previous *Global Outlook* reflects external factors, namely a weaker German economy and trade policy uncertainty. Domestic factors such as NGEU spending and a solid labour market should still be supportive in 2025, though we expect their positive impulse to dwindle in 2026.

While GDP has surprised us to the downside so far in 2024, we think the data might eventually be revised upwards, as has happened a few times since the pandemic began.

The government's fiscal consolidation plan is gradual and achievable, we think, as it rests on relatively cautious assumptions.

Spain

Spain continues on its positive trajectory, and we keep growth for 2025 unchanged, despite some headwinds ahead. In part, this reflects some anticipated catch-up in Q1 2025 from potentially weaker exports in Q4, due to November's floods in the Valencia region.

For 2026, we see output growth falling below potential as external factors bring a more challenging backdrop for investment and exports. Spain should continue, nonetheless, to be a growth outperformer in the eurozone.

While the political situation remains challenging for fiscal consolidation efforts, the government seems committed to comply with the new EU fiscal rules – and the positive growth backdrop should only help.

Paul Hollingsworth, Head of DM Economics | Luca Pennarola, Senior Europe Economist I BNP Paribas London Branch | Frédéric Pretet, Head of Thematic Economics and Chief France Economist | BNP Paribas SA | Francisco Tiago Carvalho, Europe Economist | BNP Paribas Portugal Branch

China: Tackling tariffs

BNP Paribas forecasts

	2024	2025	2026
GDP growth (annual average, % y/y)	4.9	4.5	4.3
CPI inflation (annual average, % y/y)	0.3	0.8	1.0
Policy rate (year end, %)	1.50	1.10	0.80

Growth

China's structural and cyclical slowdown looks set to carry on into 2025–26. We assume the US will raise its tariffs on Chinese imports by 10pp already in January and another 15pp in Q3 2025, to be phased in over four quarters. This is likely to cause some shipments to be frontloaded to H1 in anticipation of higher tariffs. On that basis, we estimate the hit to China's GDP growth will be 0.4pp in 2025 and 0.8pp in 2026, largely offset by more fiscal and monetary easing. In our view, China's authorities will spare no effort to reach their minimum acceptable GDP growth rate of 4.5% in 2025.

Inflation

The headline CPI inflation rate is likely to edge up in 2025–26, mostly driven by food prices. We expect the core rate to stay subdued due to persistent deflationary PPI pass-through, a negative output gap and labour market slack. The sweeping campaign to cut overcapacity that could most effectively tackle deflation is unlikely to materialise, in our view, as the 'new economy' is dominated by private companies that have built relatively advanced capacity in the past few years.

Monetary policy

The PBoC is likely to keep cutting rates to counter deflation and downward pressure on growth, but we expect the pace of cuts to slow once the policy rate reaches 1% – a key psychological level for policymakers.

Fiscal policy

We expect a modest fiscal expansion in the 2025 budget – to be announced in March – to include an increase in government bond issuance by about 2% of GDP. In our base case of an additional 15pp US tariff rise from Q3 2025, we expect another RMB1trn in special CGBs to be issued to counter the growth impact.

Japan: Higher rates, looser fiscal

BNP Paribas forecasts

	2024	2025	2026
GDP growth (annual average, % y/y)	-0.3	0.6	0.2
CPI inflation (annual average, % y/y)	2.7	2.5	2.1
Policy rate (year end, %)	0.25	1.00	1.50

Growth

We expect a rise in household disposable income to fuel Japan's economic recovery in 2025, but with labour shortages restraining the pace of growth. Going into 2026, growth will likely be hit by US trade policy, but we expect a weak yen to limit damage to exporters, and fiscal policy is set to remain supportive.

Inflation

The ex-energy inflation rate will stay above 2% for much of 2025, we expect. With corporate profits remaining elevated and the jobs market still tight, the 2025 spring wage negotiation is likely to result in another solid pay hike. Rising labour costs and persistent yen weakness should continue to exert upward pressure on prices over the course of 2025.

Monetary policy

With above-target inflation and pressure on the yen both likely to persist, we expect the Bank of Japan to keep hiking, albeit gradually due to a highly uncertain growth outlook. Our forecast sees it raising the policy rate by 25bp in January 2025, followed by two more hikes that year and another two in 2026 for a terminal rate of 1.50%. It might hike faster if downward pressure on the yen strengthens.

Fiscal policy

Fiscal policy is set to remain loose: the minority government plans to compile an extra budget worth 2% of GDP and is also likely to implement some of the tax cuts demanded by the main opposition Democratic Party for the People in exchange for its support. Overall, we expect a modest fiscal impulse for 2025 as the impact of the previous fiscal package wanes; but the government could add more if downside risks to growth mount.

Jacqueline Rong, Chief China Economist | BNP Paribas (China) Limited | Ryutaro Kono, Chief Japan Economist | Hiroshi Shiraishi, Senior Japan Economist | BNP Paribas Securities (Japan) Limited

UK: Short-term optimism

BNP Paribas forecasts

	2024	2025	2026
GDP growth (annual average, % y/y)	0.9	1.4	0.9
CPI inflation (annual average, % y/y)	2.6	3.2	2.5
Policy rate (year end, %)	4.75	3.75	3.50

Growth

Our cautiously optimistic view on 2025 UK growth reflects the ongoing cyclical recovery, looser fiscal policy and the clear prospect of further monetary policy easing. Beyond 2025, the medium-term tightening trajectory of fiscal policy and trade uncertainty are likely to weigh on growth as structural challenges stifle potential output.

Inflation

We expect headline inflation to remain above the Bank of England's 2% target throughout 2025–26, with fiscal measures adding to the impact of sticky services inflation. We still see domestically generated inflation being gradually pared back, thanks to reduced near-term inflation expectations and softer wage bargaining, but we think this will happen more slowly than in our previous projections.

Monetary policy

A backdrop combining elevated uncertainty with higher growth and inflation projections supports gradual easing by the BoE but suggests less scope for rate cuts than we previously expected. While we still see quarterly rate cuts, we now forecast a terminal rate of 3.50% in mid-2026 and estimate the nominal neutral rate range at 2.25–3.25%. These represent upward revisions of 50bp and 25bp respectively.

Fiscal policy

The Autumn Budget delivered a meaningful fiscal loosening relative to previous projections, which will boost activity and inflation in the short term. However, fiscal policy is still on a tightening trajectory over the medium term. Moreover, with the government's new fiscal rules leaving limited room for manoeuvre, there is little buffer against new shocks, and any further giveaways would likely require tax offsets to keep the public finances on a sound footing.

Dani Stoilova, Europe Economist | BNP Paribas London Branch

Switzerland: Lowflation

BNP Paribas forecasts

	2024	2025	2026
GDP growth, adjusted (annual avg, % y/y)*	0.8	1.0	1.4
GDP growth, unadjusted (annual avg, % y/y)	1.3	0.7	1.4
CPI inflation (annual average, % y/y)	1.1	0.6	0.8
Policy rate (year end, %)	0.75	0.25	0.25

**Adjusted for major sporting events (see page 41 of Swiss National Bank Quarterly Bulletin 2/2024)*

Growth

Surveys and sentiment indicators suggest Switzerland's economic activity and cyclical recovery retain momentum. Thus far, growth has come primarily from the services sector, but further easing in monetary policy should begin to support manufacturing output. That said, we expect trade uncertainty and lower European growth to weigh on Swiss exports, keeping growth below potential in 2025–26.

Inflation

We continue to expect inflation to remain within the Swiss National Bank's 0.0–2.0% target range in 2025–26 but to be materially lower than in 2024, as CHF appreciation has put downward pressure on inflation and data have surprised to the downside.

We expect services inflation to keep easing gradually as below-trend growth and further cooling in the labour market curb price pressures. We see inflation risks as skewed to the downside.

Monetary policy

Weaker growth, deflation risks and a relatively swift ECB easing cycle justify additional rate cuts from the SNB, in our view. We add two 25bp rate cuts to our profile to revise our forecast for the terminal rate from 0.75% to 0.25%, slightly below the lower bound of our 0.50–1.50% estimated neutral rate range.

While the SNB has not ruled out negative interest rates, we think it will prefer to maintain some policy room relative to its effective lower bound, especially given the low level of Swiss interest rates relative to other advanced economies.

CEEMEA: Policy trade-offs loom

BNP Paribas forecasts

Country	GDP growth (annual avg % y/y)			CPI inflation (annual avg % y/y)			Policy rate (year end %)		
	2024	2025	2026	2024	2025	2026	2024	2025	2026
Czech Republic	1.0	1.6	2.0	2.5	2.5	2.2	4.00	3.00	2.50
Hungary	0.6	1.8	2.2	3.7	3.5	2.9	6.50	5.00	4.50
Poland	2.8	3.8	3.7	3.7	3.9	2.8	5.75	4.00	3.50
South Africa	0.7	1.6	2.0	4.5	4.1	4.2	7.75	7.00	6.50
Türkiye	3.0	3.0	3.5	60.1	30.2	20.7	47.50	25.00	20.00

Czech Republic

Suffering from a weak growth starting point, still cautious Czech policymakers (monetary and fiscal) are likely to prioritise supporting growth in 2025, while moderately 'spending' some FX valuation buffers. As we expect trade protectionism to make for a more challenging global growth backdrop and inflation to slow back towards the Czech National Bank's 2% target from Q2, we see the CNB resuming rate cuts in February after a pause between December and February. We forecast a slightly deeper and longer easing cycle than we did before, with fewer cuts in 2025 and the terminal rate reached only in 2026.

Hungary

The National Bank of Hungary's easing cycle will remain on hold until Q1 2025, we expect, owing to FX vulnerabilities and sensitivity to tighter US financial conditions. At the same time, we think the bar for a hike remains quite high. While parliamentary elections in 2026 raise the risk of fiscal easing, especially in H2 2025, we expect weaker external demand conditions to help disinflation and allow the NBH to make cumulative cuts of 150bp in 2025.

Poland

Relative to its CE3 peers, Poland's economy looks to be slightly better cushioned from a tariff-related souring in external demand conditions (though it is far from immune). EU fund inflow should continue to support domestic demand. We expect the National Bank of Poland to resume easing in Q2 after its lengthy pause in 2024 and make cumulative rate cuts of 175bp in 2025, though its focus on fiscal policy and energy inflation could restrain the cutting cycle.

South Africa

South Africa stands out as a positive idiosyncratic story in CEEMEA, helped by its stronger institutions and political economy after this year's general election. As the economy is relatively open to the US, China and Europe, however, we expect its net export position and currency to be more vulnerable from H2 2025. That said, rising consumer and business confidence should sustain growth via higher consumption and fixed investment. Inflation looks likely to be comfortably below the midpoint of the central bank's 3–6% target range in 2025, supporting cumulative rate cuts of 75bp in 2025 and a lower terminal rate reached in 2026.

Türkiye

Local fundamentals are likely to largely override external uncertainties for Türkiye's real economy in 2025. Though inflation inertia remains high and there are risks around minimum wage policy, we expect disinflation to be kept on track by a moderate pay deal in late December (based on ex-ante inflation expectations) and the commitment of the Central Bank of the Republic of Türkiye to ensure real effective currency appreciation through its macroprudential toolkit.

We expect the CBRT to begin an easing cycle cautiously on 26 December with a 250bp cut as it looks to balance negative sequential growth performance with growing evidence that service price momentum is softening. Maintaining local appetite for de-dollarisation should allow the central bank to cut rates by a cumulative 22.50pp during 2025, while we forecast December headline inflation to slow to 26.0% in 2025 from 45.0% by end 2024.

Jeffrey Schultz, Head of CEEMEA Economics | BNP Paribas London Branch | Wojciech Stepien CFA, Senior Central and Eastern Europe Economist | BNP Paribas Bank Polska | Hakan Aklar, Chief Türkiye Economist | Türk Ekonomi Bankasi A.S.

Latam: Limited room for easing

BNP Paribas forecasts

Country	GDP growth (annual avg % y/y)			CPI inflation (annual avg % y/y)			Policy rate (year end %)		
	2024	2025	2026	2024	2025	2026	2024	2025	2026
Argentina	-3.0	4.5	3.0	235.3	42.4	19.2	32.00	30.00	18.00
Brazil	3.4	2.1	1.8	4.4	5.1	4.0	12.00	13.50	12.00
Chile	2.3	2.0	2.0	4.0	4.7	3.2	5.00	4.75	4.25
Colombia	1.7	2.0	2.5	6.6	4.2	3.6	9.25	7.25	6.00
Mexico	1.7	1.2	1.1	4.7	4.1	3.8	10.00	8.75	8.25

Argentina

Our view is that Argentina will lift capital controls in Q1 and shift to a managed FX regime, requiring it to keep real interest rates positive in 2025.* If the removal of capital controls is postponed until after the October midterm elections, as markets expect, the gap between the blue-chip swap and the official exchange rate might widen from Q2, because the exchange rate would keep appreciating in real terms and markets might anticipate a larger devaluation after the elections.

Brazil

Brazil will stay in tightening mode in 2025. Interest rates are set to continue rising, and we no longer expect any cuts in 2025. The new guidelines on fiscal policy should slow growth in public expenditure, but debt/GDP dynamics remain challenging in an environment of high interest rates and primary deficits. We see GDP growth decelerating to levels around potential in 2025 but inflation will remain sticky, especially in the services sectors, on the back of a hot labor market. We raise our end-2025 y/y CPI inflation forecast by 0.6pp to 4.6%, a very small decrease relative to 2024 and well above the inflation target.

Chile

We revise up our December 2025 inflation forecast by 0.5pp to 4.0% y/y, reflecting a weaker currency and more persistent core inflation. We also raise our end-2025 monetary policy call by 25bp to 4.75%, consistent with a prolonged pause in the Fed's easing cycle. We expect the Central Bank of Chile to revise its forward guidance on 17 December to signal that its policy rate will fall to its neutral level of 4% in 2026 instead of mid-2025 but to maintain a dovish bias due to downside risks for economic growth.

Colombia

We anticipate continued fiscal deterioration and a high likelihood of the government breaching its fiscal rule. We raise our end-2025 policy rate forecast by 75bp, reflecting our revised Fed outlook. Our base case assumes BanRep will not accelerate its easing cycle due to fiscal constraints and tighter global financial conditions. The likely shift to a more dovish board composition in 2025 might mean larger rate cuts than we now expect; however, if markets perceive that as a policy mistake and put pressure on the exchange rate, the terminal rate might end up being higher than in our forecast.

Mexico

Uncertainty over US policy implies unusually high uncertainty over the Mexican economy in 2025 in three key respects: remittances, which might be hit by stricter migration policies; industrial cycles, with Mexico's role in US–China trade tensions and the regionalization of supply chains in question; and the exchange rate, which has been depreciating also on the back of the country's institutional changes. As a result, we raise our end-2025 policy rate forecast by 75bp, as we see Banxico proceeding more carefully with its easing cycle if, as we expect, the Fed stays on hold in 2025 and inflation proves to be more sticky due in part to a weaker exchange rate.

*Our 2025 average inflation forecast of 42.4% implies a December rate of 25%.

Fernanda Guardado, Head of Latam Economics | Laiz Carvalho, Brazil Economist | Banco BNP Paribas Brasil S.A. | Florencia Blanc, Latam Economist | BNP Paribas Sucursal Buenos Aires | Felipe Klein, Argentina, Chile and Colombia Economist | BNP Paribas Securities Corp | Pamela Díaz Loubet, Mexico Economist | Debora Lunacorte, Mexico Economist | BNP Paribas Mexico S.A.

EM Asia: Policy normalisation amid global uncertainty

BNP Paribas forecasts

Country	GDP growth (annual avg % y/y)			CPI inflation (annual avg % y/y)			Policy rate (year end %)		
	2024	2025	2026	2024	2025	2026	2024	2025	2026
India*	8.2	6.0	6.7	5.4	4.9	4.2	6.50	5.75	5.75
Indonesia	5.0	5.0	5.0	2.4	2.3	2.5	5.75	5.25	5.00
Malaysia	5.5	4.5	4.0	1.9	2.2	2.4	3.00	3.00	2.75
Singapore**	4.0	2.9	1.6	2.8	1.7	2.0	1.50	1.00	1.00
South Korea	2.2	1.8	1.7	2.3	1.9	2.0	3.00	2.50	2.50
Thailand	2.8	2.8	2.2	0.4	1.3	1.7	2.25	2.00	1.75

**India's GDP and CPI forecasts are for the fiscal year, while the policy rate forecasts are for the calendar year. **Singapore's CPI forecasts are for core CPI and the policy rate refers to the SGD NEER slope.*

India

A series of upside inflation surprises has delayed the start of the Reserve Bank of India's rate cut cycle to February 2025, in our view, and we expect two further cuts in April and June to bring the policy rate to 5.75%. India's Q3 GDP growth surprised to the downside, requiring looser monetary policy. That said, India's economic outlook remains positive, and we expect it to remain one of the world's fastest-growing economies. Despite global trade uncertainties, India is poised for sustained growth, thanks to its domestically driven nature.

Indonesia

Bank Indonesia has displayed a strong easing bias in the face of a widening negative output gap. While we see room for further rate cuts, BI is constrained by external developments, notably the Fed's rate path and USDIDR levels. Monthly MPC meetings give BI considerable flexibility, and we see it tactically using the opportunity to cut rates whenever conditions such as FX and bond yields allow. Overall, we expect a shallow BI easing cycle to a terminal policy rate of 5.00%.

Malaysia

We anticipate growth to return to trend in 2025. Inflation may experience a moderate increase in 2025 with the removal of fuel subsidies, limited by a government commitment to retain subsidies for most households. Despite these factors suggesting a rate cut could be beneficial, we think the weak MYR will keep Bank Negara Malaysia on an extended pause until 2026.

South Korea

We think Bank of Korea's policy priorities have changed to growth, FX, household debt and inflation, in that order. With still restrictive policy rates, we think the BoK will prefer to ease rates further to neutral territory against elevated downside risks to growth amid stable inflation. That said, we think financial stability risks from a strong USD environment may limit the room for rate cuts. We expect the BoK to cut rates twice in 2025, in February and May, to neutral levels (2.50%), with risks that it extends its rate-cutting cycle due to domestic growth concerns.

Thailand

We expect inflation to pick up pace, with a notable spike largely due to low base effects from 2024. However, this masks underlying weakness in domestic demand, which is likely to remain subdued. The impact of restrictive monetary policy is lingering, weighing heavily on household balance sheets and credit quality. We forecast two more rate cuts, one in February 2025 and the other in 2026, which should help alleviate pressure on households and support the economy.

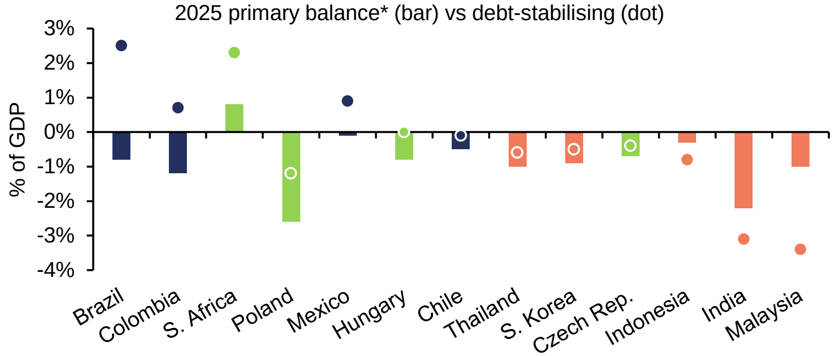
Singapore

Singapore's core inflation is poised to slow down significantly to a rate in line with historical averages, and we forecast core inflation to dip below the 2% mark in Q1. We expect inflation data to provide the Monetary Authority of Singapore with enough confidence of disinflation taking hold to reduce the SGD NEER slope from an estimated 1.50% to 1.00% in the April review.

Chris Poh, APAC Economist | BNP Paribas Singapore Branch | Jeeho Yoon, Senior South Korea Economist | BNP Paribas SA Seoul Branch

EM fiscal: Driving idiosyncratic stories

We expect most EM to run wide gaps to debt-stabilising primary balances



** BNP Paribas estimates*
Sources: BNP Paribas

BNP Paribas fiscal vulnerability heatmap highlights Brazil and Hungary as most vulnerable

	Gross financing need(1)	Average term to maturity(2)	R–G(3)	Overall fiscal balance(4)	Debt service(5)	Public debt(6)	External debt(6)	Reserves (excl. gold)(7)	BNPP fiscal vulnerability index(8)
Brazil	17.4	5.5	3.1	-4.7	37.1	61.8	34.4	76.9	0.70
Hungary	15.2	5.0	-0.5	-4.5	8.5	67.5	124.5	20.4	0.63
South Africa	14.6	10.7	1.6	-4.4	16.5	76.7	41.5	36.2	0.55
Mexico	14.6	6.9	2.3	-4.4	15.3	47.3	32.2	28.6	0.51
Poland	12.6	5.6	-1.8	-5.5	14.9	35.9	48.7	38.3	0.47
Czech Rep.	6.5	2.9	-0.3	-2.4	8.7	42.4	63.9	58.5	0.45
Colombia	7.8	11.1	1.2	-5.7	15.7	59.5	49.3	58.6	0.43
Malaysia	3.5	9.4	-2.0	-3.9	5.1	64.4	66.6	36.8	0.39
Thailand	10.6	8.1	-1.9	-4.4	6.2	55.8	39.4	53.2	0.38
Indonesia	5.7	7.5	-1.6	-2.5	20.5	43.3	29.5	44.1	0.34
India	13.8	11.9	-3.2	-4.5	8.9	58.5	22.3	63.8	0.28
Chile	3.6	8.1	-2.8	-1.5	16.4	41.6	73.0	38.0	0.23
South Korea	1.3	9.9	-2.4	-2.8	10.9	49.7	38.3	51.0	0.22
Sources	IMF	IMF	IMF	BNPP	IIF	IIF	IIF	IIF	BNPP

Fiscal a binding constraint for monetary policy in Latam: Fundamentals and imbalances point to unsustainable paths for some countries' debt in the absence of significant fiscal adjustments. Brazil and Colombia are standout risks.

- **Brazil fiscal driving markets:** High interest rates, persistent primary deficits and high net debt/GDP are impacting asset prices and inflation expectations in Brazil, partially justifying the BCB's tightening policy. In our view, active measures to cap expenditure growth are underwhelming and insufficient to generate the necessary surpluses to stabilise debt.
- **Market too complacent on Colombian fiscal risks:** We see risks from a deteriorating primary balance, declining potential growth, reforms of revenue transfers between central and local governments, and further FX depreciation. Potential political shifts in 2026 and a perceived robust system of checks and balances in public administration are reassuring markets for now
- **Mexico's institutional question marks:** Fiscal risks related to domestic institutional reforms could come to the fore, particularly as we think the primary deficit of 0.1% of GDP that we forecast for 2025 will be insufficient to stabilise debt in the short term.

Hungary most fiscally vulnerable in CE3: We forecast a deficit of 4.5% of GDP for 2025 and 2026. Parliamentary elections scheduled for early 2026 imply a risk of looser fiscal policy, which could exacerbate longer-term debt sustainability concerns, potentially adding to the NBH's currency woes.

South Africa's standout surplus: Structural growth impediments will keep fiscal vulnerabilities elevated. In the short term, however, the fiscal policy outlook has been brightened by a better growth outlook, and our expectation is for South Africa to be a standout in EM in maintaining a primary surplus in 2025.

EM Asia least fiscally vulnerable: In this region, we see real growth rates continuing to outstrip those of real funding (R<G).

(1) IMF projected overall balance and maturing government debt in 2024 (% of GDP); (2) 2024 data, referring to government securities and expressed in years; (3) IMF projected interest rate minus growth (%, 2024–29); (4) BNPP 2025 forecast (% of GDP); (5) 2024 data, 2025 IIF forecast where available (% of exports); (6) 2024 data, 2025 IIF forecast where available (% of GDP); (7) 2024 data, 2025 IIF forecast where available (% of imports); (8) Each of the seven selected structural fiscal indicators is z-scored and standardised from 0 to 1, where 0 indicates the lowest vulnerability and 1 represent the highest vulnerability relative to other EM countries we cover. The average term to maturity, overall fiscal balance and reserves (excl. gold) are reverse-standardised (i.e. higher values indicate lower vulnerability). Each indicator is equally weighted.
Sources: IMF fiscal monitor, IIF, BNP Paribas

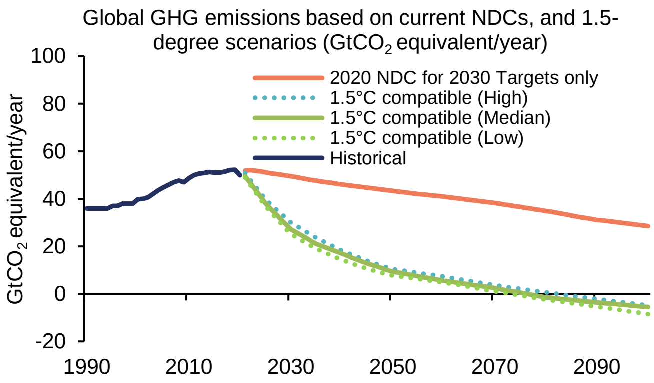
Fernanda Guardado, Head of Latam Economics | Banco BNP Paribas Brasil S.A. | Jeffrey Schultz, Head of CEEMEA Economics | BNP Paribas London Branch | Felipe Klein, Argentina, Chile and Colombia Economist | BNP Paribas Securities Corp | Niccolo Carrara, Emerging Markets Economist | BNP Paribas London Branch

SUSTAINABILITY

▼ CONTENTS

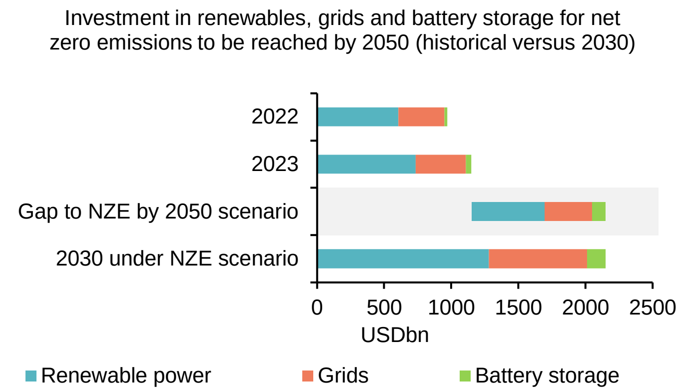
Climate policy: On the road to COP30

Countries are asked to raise their nationally determined contributions before the next round of commitments in February 2025



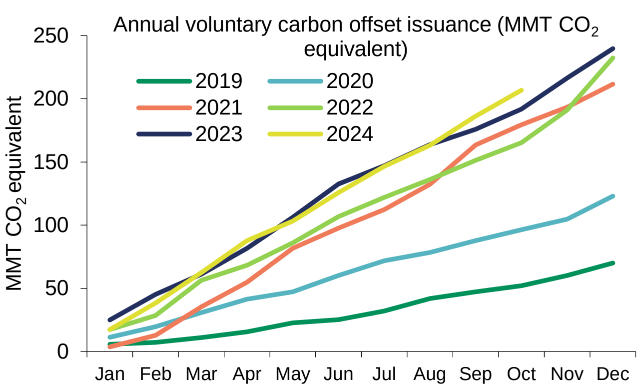
Sources: Climate Action Tracker, BNP Paribas

COP29 pledges would install 1.5TW energy storage capacity and add or refurbish 25 million kilometres of grid globally by 2030



Sources: IEA World Energy Investment 2024, BNP Paribas

We think the adoption of Article 6, creating an official global carbon market, will help regulate the voluntary market and boost credit issuance from 2025



1 offset equals 1 metric ton of CO2 equivalent.

Source: BloombergNEF, Verra, Gold Standard, American Carbon Registry, Climate Action Reserve, BNP Paribas

Trump 2.0: We think a US withdrawal from its climate commitments for a second time could be a significant setback for the global climate agenda. We see a potential boost to the BRICS countries' influence over COP30, while China might move further towards its own climate and infrastructure programmes.

Next-generation NDCs: New nationally determined contributions (NDCs) in 2025 present the final opportunity to strengthen global climate pledges. Without them, overshooting 1.5°C could be inevitable by COP30, triggering an overhaul of national and sectoral policies, as well as new climate benchmarks based on higher levels of global warming, in our view.

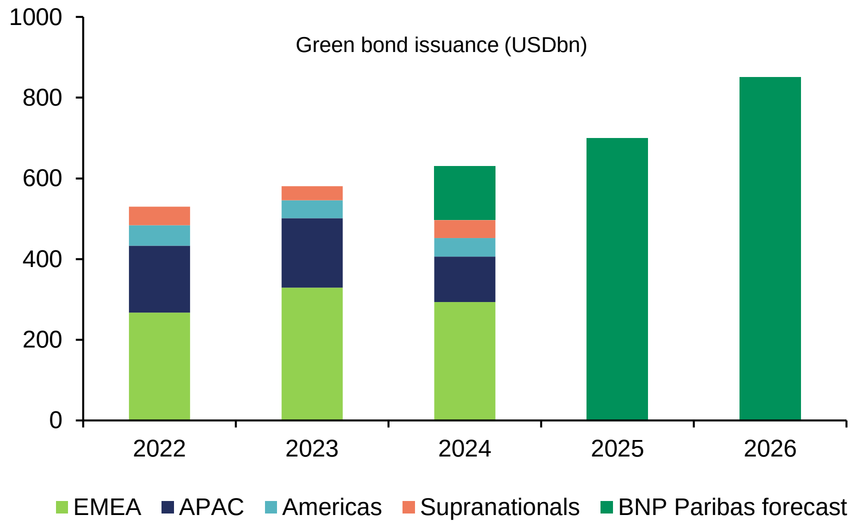
Grid and energy storage target: Building on the COP29 pledge, we expect China, US, UK and Australia to introduce policies to develop more grid and energy storage in 2025 to cover growing renewables penetration and energy demand.

Carbon markets: The adoption of Article 6 setting up an official global carbon market will enable governments to trade allowances with the private sector. We think it will also drive demand from companies seeking UN-approved allowances to meet their net-zero targets.

Trevor Allen, Head of Sustainability Research | Jinyi Yue, Sustainability Research Analyst | BNP Paribas London Branch

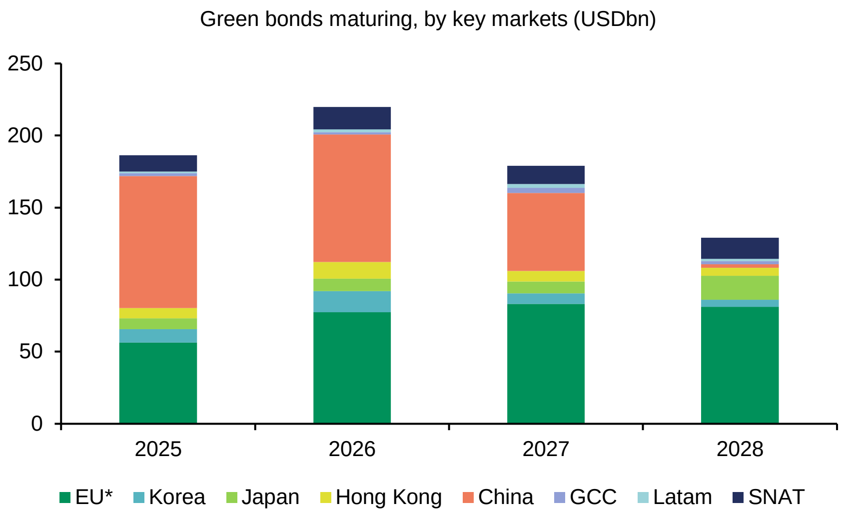
Green bonds: Defying gravity in 2025 and beyond

We forecast green bond issuance to remain strong, with USD700bn in 2025 and USD850bn in 2026



Sources: Bloomberg, BNP Paribas

We see China leading green debt maturities in 2025 and 2026, with Germany a distant second



**EU includes Germany, France, Netherlands and Sweden.*
Sources: Bloomberg, BNP Paribas

Maturity wall to boost issuance: We reaffirm our forecasts for 2025 and 2026 at USD700bn and USD850bn, respectively. We see the maturity wall for green bonds growing into 2026, with more than USD580bn of the debt maturing in 2026 and 2027. Notably, the amount equates to total green bonds that were issued in 2023. See *Green bonds: Defying gravity in 2024 and beyond*, dated 30 October.

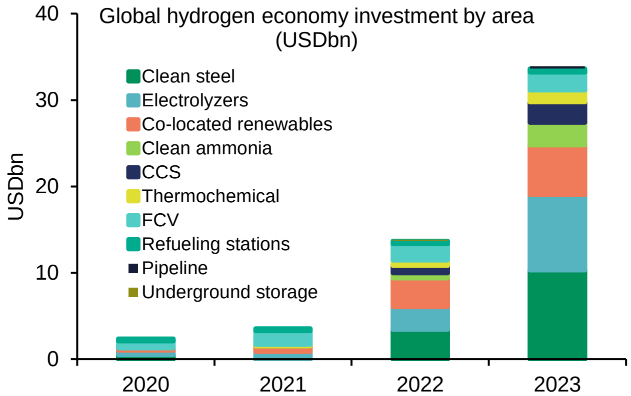
Europe set for a record year: Europe typically issues around half of all green bonds issued each year. This holds true for 2024 and, in our view, is likely to continue for the rest of the decade.

New triggers for US growth: We expect green bond issuance in the US to gain momentum going into 2025, with utilities green bond issuance rising to 50% in 2025, up about USD5bn. This forecast is based on two drivers. First, US tech companies are increasingly adopting power purchase agreements (PPA) to secure electricity for AI data processing and storage, which is likely to drive up electricity development and capital needs. Second, solar energy in the US is reaching parity with power generated by natural gas on a utility-scale level. We think American utilities will continue to invest in both gas-generated and solar resources, building a portfolio which allows them to consume the cheapest molecule to generate electricity, at a given time.

Trevor Allen, Head of Sustainability Research | Sumati Semavoine-Jain, Sustainability Research Analyst | BNP Paribas London Branch

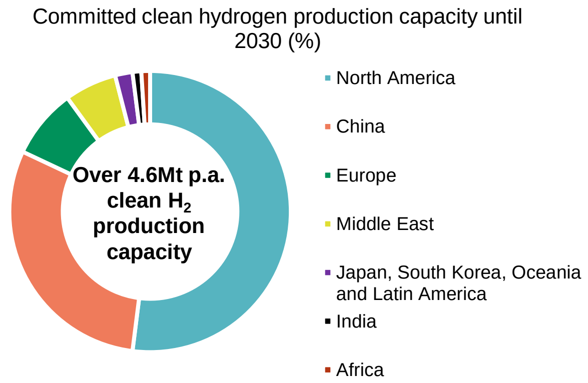
Clean hydrogen: Primed for growth

Investment in the global clean hydrogen (H_2) economy surged 145% y/y in 2023, with most going into clean steel and electrolysers



FCV stands for fuel cell electric vehicles. CCS stands for carbon capture and storage.
Sources: BloombergNEF, BNP Paribas

Globally, the US is most committed in the development of clean H_2 capacity by 2030, followed by China and Europe



Sources: Hydrogen Council, BNP Paribas

A global stocktake at COP28 underlined for the first time that low-carbon hydrogen production should be accelerated, alongside other clean technology types. With progress on national strategies and regulatory frameworks, we think clean hydrogen production is poised for significant growth.

Despite the momentum, a substantial gap exists between government production and demand targets globally, with funding heavily skewed to supply-side support. We expect a shift in policy focus towards demand in 2025 to address this imbalance.

The US leads in committed clean hydrogen capacity under development by 2030. Given bipartisan support, hydrogen is likely to face lower political risks under the Trump administration, in our view.

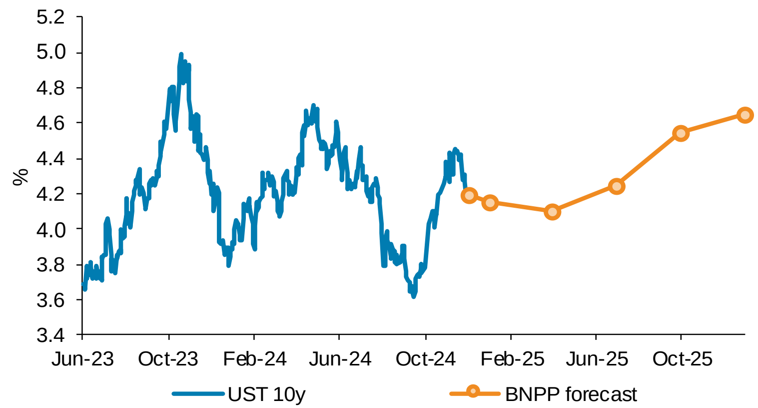
Trevor Allen, Head of Sustainability Research | Jinyi Yue, Sustainability Research Analyst | BNP Paribas London Branch

GLOBAL MACRO STRATEGY

▼ CONTENTS

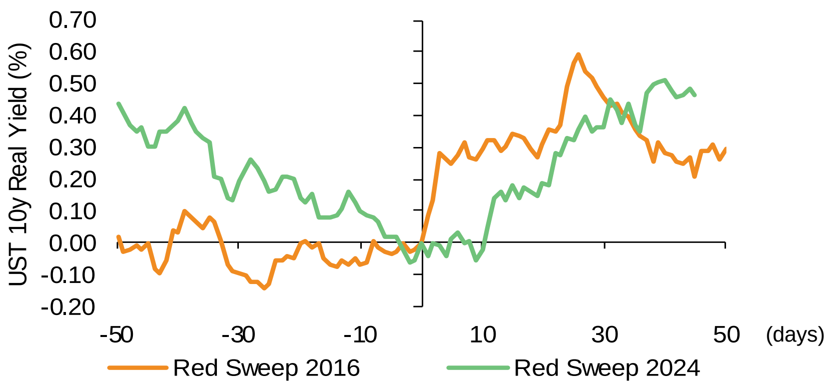
USD rates: The growth–inflation tussle

Our 10y yield forecast sees a steady climb back after Q1



Sources: Bloomberg, BNP Paribas

Markets price a boost to growth – much more than in the 2016 Red Sweep



Pre-2024 election price action captured from September FOMC (18 September 2024).
Sources: Bloomberg, BNP Paribas

Our forecasts see Treasury yields rising after Q1

	Current (5 Dec)	31 Dec 2024	31 Mar 2025	30 Jun 2025	30 Sep 2025	31 Dec 2025
2y	4.13	4.15	4.10	4.25	4.50	4.55
5y	4.07	4.00	4.00	4.15	4.50	4.60
10y	4.18	4.15	4.10	4.25	4.55	4.65
30y	4.34	4.30	4.25	4.45	4.75	4.80

Source: BNP Paribas

We see Treasury yields heading lower in early 2025, before eventually moving higher in the second half. We see 10y yields ending Q1 at around 4.10% and rising to 4.65% by the end of the year (top right table).

Repricing the Red Sweep: Our projection sees Treasury yields reprice to a cooler growth path in early 2025 as investors seek to price in the combination of hawkish tariff and immigration policies and a potential modest fiscal impulse from tax cuts – reversing the higher growth expectations built around the Red Sweep outcome in Q4 2024 (bottom left chart). Inflation expectations should also start to rise, which we think could create favourable conditions to own TIPS in Q1.

Higher yields with a Fed on hold: In the second half of 2025, the imposition of significant tariffs by the Trump administration will likely raise inflation expectations – for investors and for the Fed. We think these conditions will mean the Fed keeps rates on hold, not only in the first six months, but through to the end of the second half. Additionally, we see rising Treasury coupon issuance in August driving term premium expansion – sending yields higher through the second half.

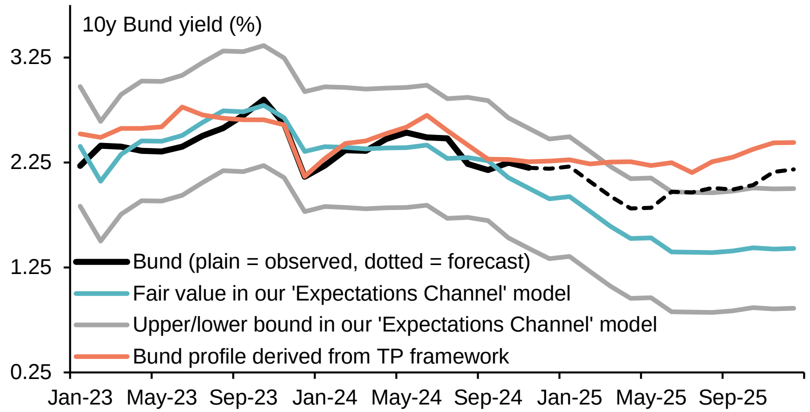
Breakevens should widen through 2025, while real yields move lower or sideways – caught between a cooling growth path and a hawkish Fed.

We see risks skewed towards lower yields than in our base case. The Fed could continue to cut if potential downside growth effects from tariffs and immigration policy dominate, driving yields lower.

Guneet Dhingra, Head of US Rates Strategy | Timothy High, Senior US Rates Strategist | Sebastian Mauleon, US Rates Strategist | BNP Paribas Securities Corp

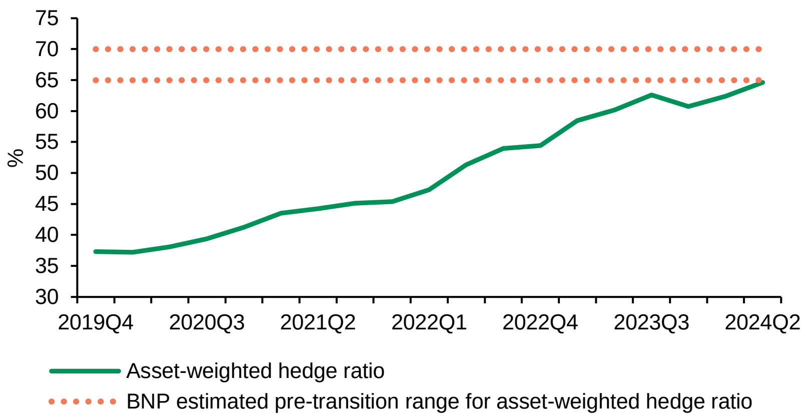
EUR rates: Positioning for a stronger rates rally

The fundamental picture supports a stronger rally than previously forecast



Sources: Bloomberg, BNP Paribas

Dutch pension fund hedge ratios to take a final leg higher



Sources: DNB, BNP Paribas

Rally to extend: The eurozone economic recovery has been more modest than foreseen and as we see tariff threats weighing further on growth, we have cut our GDP forecasts for 2025. We are also looking for a faster return to inflation targets than in our last outlook, justifying a faster rate-cutting cycle, and a lower terminal rate. As such, we now expect a stronger rates rally and think Q1 could see a low in the 10y German yield of 1.90%.

Term premium seen better priced in: The term premium (TP) will remain sticky, on the back of elevated bond supply and a difficult political landscape, we think. However, deficit concerns in the UK, US, France and more recently Germany, have seen a global repricing of TP to what we see as fairer levels. Any rise in the German TP in H1 is thus likely to be contained and insufficient alone to push 10y yields higher as the rates expectations component simultaneously declines.

The TP may build momentum again in the summer, we think, should the US increase coupon supply at the August refinancing window. If this combines with the ECB reaching its terminal rate, and Germany raising its issuance forecast amid a new governing coalition, we think yields could bounce back from their lows.

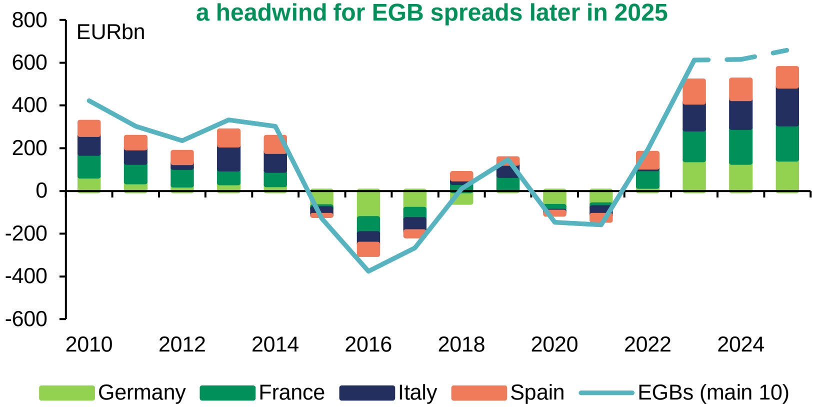
Transformative year: We think 2025 could be an event-filled period for the Dutch pension fund sector as the first few funds transition to collective defined contribution (CDC) in January 2025. Almost half the industry's assets are due to switch in January 2026. Given the industry's prominent role in European fixed income markets, developments here could have a sizeable effect on yields, particularly at the long end of the EUR swap curve, so we hold onto a EUR10s30s steepener. A few key dynamics to watch are listed below:

- **Hedge ratios to peak:** We expect pension funds' hedge ratio to peak at around 70% by the end of Q1 2025 providing a boost for curve steepeners and long-dated basis wideners once pension fund receiving moderates.
- **Risk-off fuelled receiving:** A risk to our view on hedge ratios is the potential for significant declines in equities and yields to drive funding ratios to worrying levels which could precipitate panicked swap receiving by some funds.
- **Transition delays:** If funds in the January 2026 cohort push back transition dates this could bias hedge ratios higher and delay potential curve steepening.

Camille de Courcel, Head of DM Rates Strategy and Economics, Europe | Steven Montgomery, Europe Rates Strategist | BNP Paribas London Branch

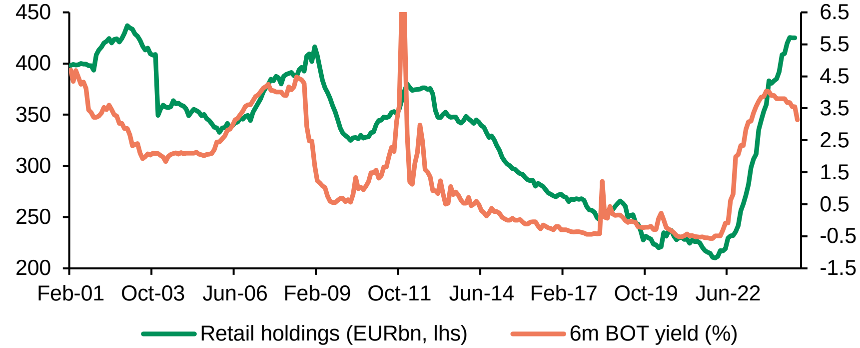
EGB spreads: A year of two halves

Heavy net supply net of QT a headwind for EGB spreads later in 2025



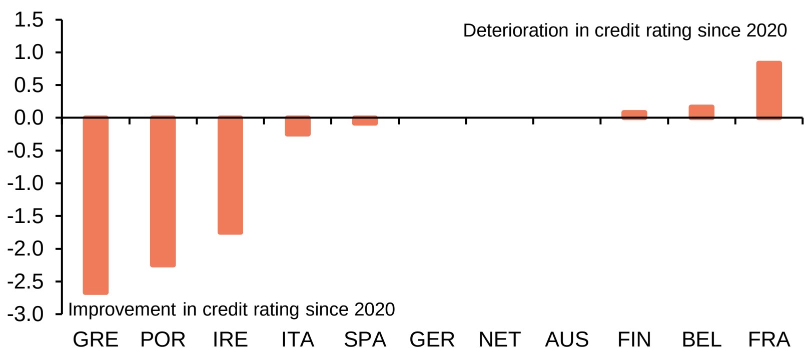
Shaded bars denote BNP Paribas forecasts.
Sources: National Treasuries, ECB, Bloomberg, BNP Paribas

Retail investor support to BTPs could fade as rates head lower



Retail holdings data are lagged to end-August 2024.
Sources: Bank of Italy, Macrobond, BNP Paribas

Credit ratings in the periphery have improved vs a deterioration in semi-core regions; we think an upgrade in Spain could spur outperformance of SPGBs



Each rating notch from S&P/Moody's/Fitch is worth 1 point. Positive/negative outlooks = −/+0.25.
Sources: Rating agencies, BNP Paribas

Benign H1: Q1 2025 may see a narrowing in spreads, we think, as the initial wave of supply could be well absorbed at a time when rates are rallying on ECB rate cuts. Q2 onwards may well be more challenging with a higher risk of supply indigestion and an end to a rally in rates as the ECB reaches its terminal rate.

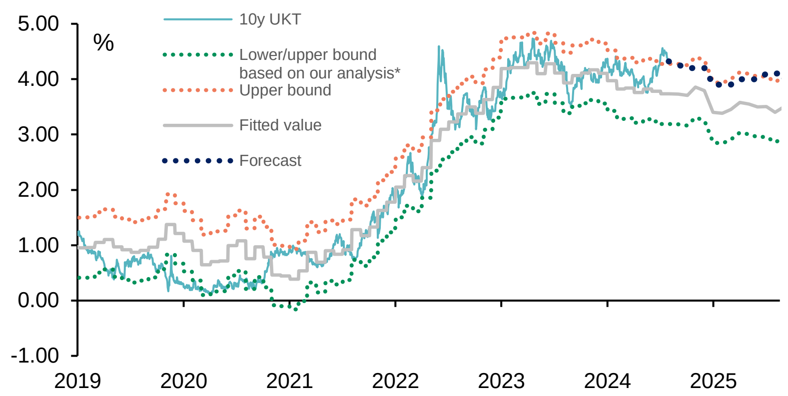
Risk events accumulate in H2: We expect EGB spreads to slowly trend wider later in 2025, while market conditions are likely to remain challenging. We expect another year of heavy net supply net of QT and note the approach of potential negative risk events, including possible snap elections in France and the impact on eurozone growth from any trade war or geopolitical escalation. We think France is particularly vulnerable in H2 due to political risks (snap elections and potential for the market to price the risks of a Macron resignation) and possible rating downgrades.

Fundamental peripheral strength: The widening we forecast is relatively small, given that the eurozone periphery is now seen as more politically stable. We assume Spain's credit rating will be upgraded by Moody's next year, supporting SPGBs relative to peers. In Italy, we do not assume upgrades, but positive outlooks from Fitch and DBRS tilt risk to the upside.

Camille de Courcel, Head of DM Rates Strategy and Economics, Europe | Anubhav Lamichhane, Europe Rates Strategist | BNP Paribas London Branch

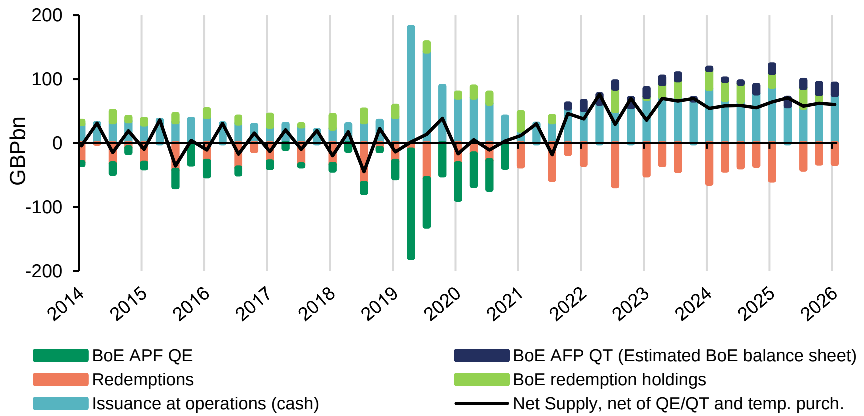
GBP rates: Cheap valuations to support a rally into Q2

Gilt yields have room to rally from cheap valuations



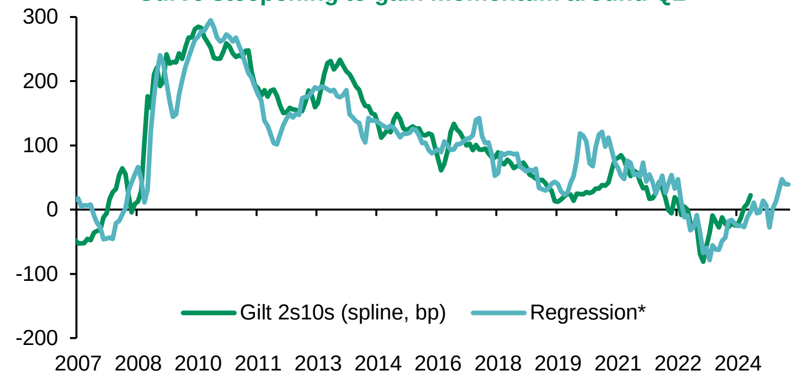
*Regression based on Bank Rate, core CPI, liquidity and gilt supply.
Sources: BNP Paribas, Bloomberg

Net gilt supply net of QE/QT will remain elevated through 2025



Sources: Debt Management Office, Bank of England, BNP Paribas

Curve steepening to gain momentum around Q2



**Regression based on Bank Rate, core CPI, liquidity and gilt supply.*
Sources: Bloomberg, BNP Paribas

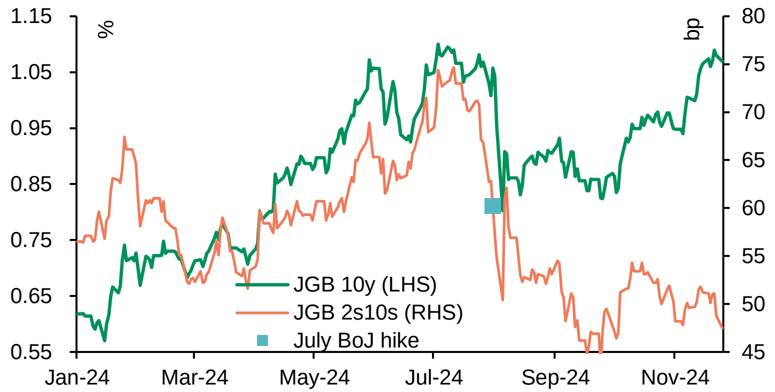
Rally into H1: 10y gilt yields recently surpassed the upper bound of our fair-value model range following the October budget, but it seems unlikely to sell off much further – we think yields could well fall back within our fair-value range. However, as we expect UK core CPI to rise further in Q1 (above 4%), in part from the effects of policies set out in the budget, we expect gilts to initially underperform eurozone peers. That said, we think core inflation may ease again into Q2 on an annual basis, giving gilts more room to rally, particularly in the shorter-end such as the 2y, barring any upside surprises. As net supply net of QE/QT should stay elevated through 2025, we see the curve steepening further in 2025, mostly from Q2 on.

We are watching the incoming Trump administration closely given Q4 has seen UK rates showing higher beta to US rates than have EUR rates. However, we highlight that the UK is relatively less exposed to US tariffs, which suggests to us that if the Labour government shows better delivery of its proposed policies, it could quickly paint a more positive picture of the UK economy. We reflect this in our yield forecasts with a steady cutting trajectory for the BoE and 2y yields falling, further supporting our view of a 2s10s steepening in 2025. We may finally see 10y yields above Bank Rate. We expect 10s30s to steepen slightly due to increased long-end supply set out in a recent DMO remit.

Camille de Courcel, Head of DM Rates Strategy and Economics, Europe | Katherine Yoon, Europe Rates Strategist | BNP Paribas London Branch

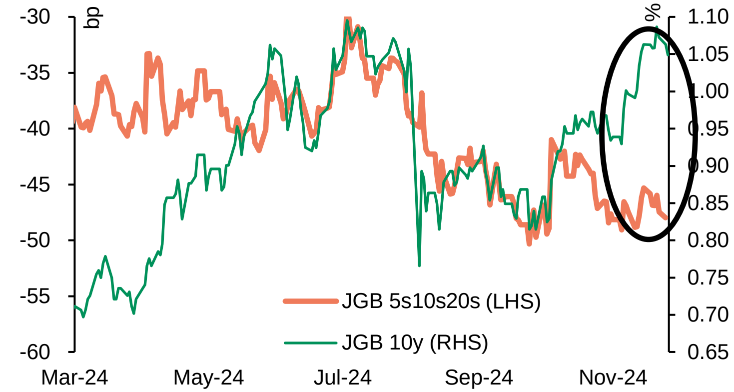
JPY rates: Caution on price-as-you-go approach to BoJ terminal rate

JGB 2s10s bear flattened only for a short period after the BoJ's July hike



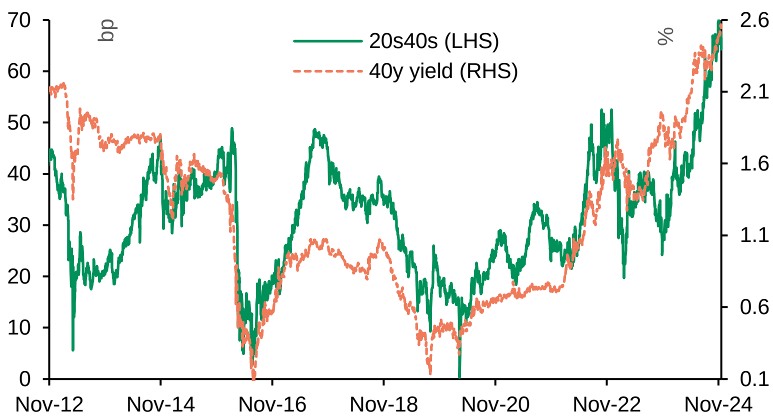
Sources: Bloomberg, BNP Paribas

We see the 10y's richness on the curve as related to the modest BoJ pricing



Sources: Bloomberg, BNP Paribas

JGB 20s40s steepening has extended, likely sufficiently



Sources: Bloomberg, BNP Paribas

Curve behaviour: We think the JGB curve appears to price in Bank of Japan rate hikes only as they are delivered. We would expect the JGB 10y yield to reach 2.0% when the policy rate ultimately hits 1.5% in 2026.

In 2024, the JGB curve (2s10s) bear flattened only after the July BoJ hike (top left chart) as the 2y re-priced. The OIS curve prices in over 60% of a December hike, but 2s10s has not flattened further since Q3. This slow pricing dynamic means we think 2y JGBs could be attractive on occasions in 2025 if they cheapen sharply.

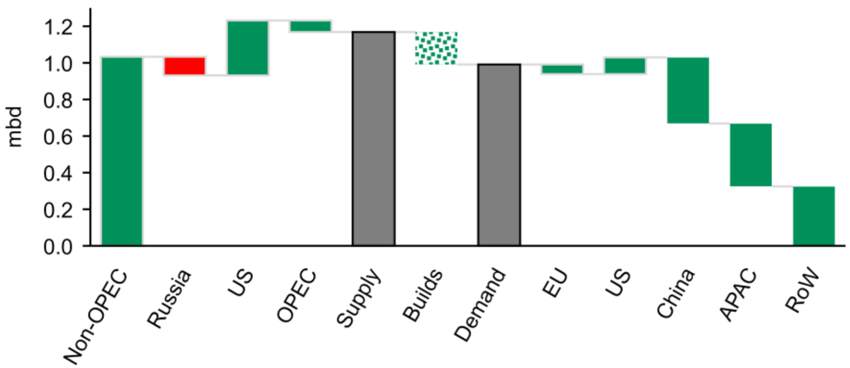
We think 'shy' BoJ pricing may also help explain the rich 10y (top right chart). With BoJ hikes likely limited to 3-4 month intervals, we don't think 5s10s will bear flatten much below 30bp (31bp on 2 Dec), which could help 5s10s20s to cheapen.

Super long game: The 2024 super-long supply-demand balance has been the loosest since 40y JGB supply began in 2008. We expect the finance ministry to cut super-long supply in FY2025 and the JGB 30y10y forward yield to fall from its historically high level above 4%. We think the market is likely to position in advance (see *Early Dec looks sensitive to future JGB supply*, 21 November).

Reiko Tokukatsu, Head of G10 Rates Strategy, Japan and APAC | Yusuke Ikawa, Markets Strategist | BNP Paribas Securities (Japan) Limited

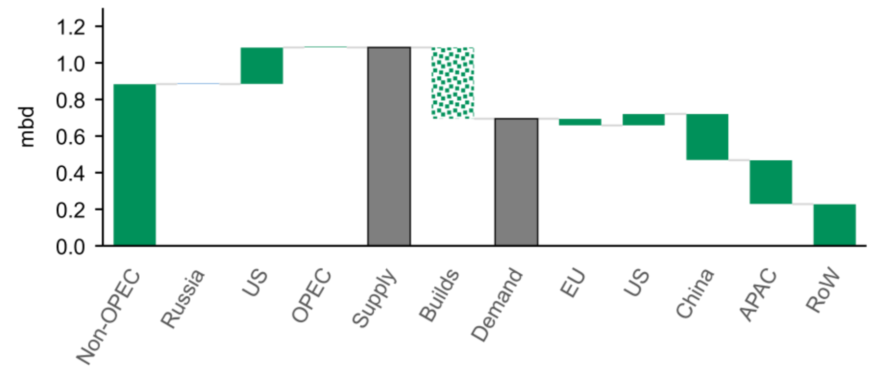
Oil: Iran curbs may drive rebound as OPEC+ holds fire, tariffs loom

2025 projected liquids market growth signals limited room for OPEC+ barrels



Sources: SPGCI, BNP Paribas

2026 projected liquids market growth signals increasing length as tariffs impact demand



Sources: SPGCI, BNP Paribas

Base case forecasts for key crude benchmarks

Average USD/bbl	ICE Brent 1m	NYMEX WTI 1m	Dubai 1m
Spot*	72	68	72
Q1 2025	72	68	71
Q2 2025	75	71	74
Q3 2025	76	72	75
Q4 2025	75	71	73
2025	**74**	**70**	**73**
Q1 2026	73	69	72
Q2 2026	70	67	69
Q3 2026	71	66	70
Q4 2026	68	64	66
2026	**71**	**66**	**69**

**Spot as at 5 December*

Sources: Bloomberg, BNP Paribas

Near-term upside: After a rangebound Q4, we see room for crude prices to fall in Q1 2025, as seasonal refinery maintenance reduces demand, cushioned by OPEC+ retaining cuts until at least April 2025 (we think more rollovers will be required). We predict a rebound in Q2, however, driven by the likely curtailing of Iranian oil exports by the Trump administration – and our expectation that OPEC+ will not fill the gap (see *OPEC+ supply increase: More delays expected*, 4 November).

Tariff time: Towards the end of 2025 we expect to see the impact of US tariffs (on China and other countries) having a bearish impact on crude prices through reduced GDP growth forecasts, higher inflation and a stronger dollar.

The macro impact of higher tariffs should outweigh any impact of expected higher production from the US, in our view. We see limited upside from the opening of new acreage, a lower regulatory burden and easier pipeline development, but we are less convinced of a strong near-term increase in domestic supply for two key reasons. First, price incentives will drive supply, not the White House; second, lower-tier acreage, increased payouts to shareholders and declining rates in existing production are structural headwinds no administration can change quickly.

Aldo Spanjer, Senior Commodities Desk Strategist | BNP Paribas London Branch | Any commodities views have been prepared by the Commodities Desk Strategy team, which works closely with the Sales and Trading function. This is not a research report and has not been prepared by the BNP Paribas Research Department. Please see disclaimer.

Oil scenarios: Risks from possible OPEC+ split, Hormuz constraints

Brent cheaper in 2025; floor from low stocks and less Iran supply. OPEC+ floods market in the low case, while Hormuz constraints drive the high case

BNP Paribas crude price scenarios, as of December 2024 ICE Brent 1m (average)			
USD/bbl	**Low**	**Base**	**High**
Q1 2025	41	72	137
Q2 2025	50	75	120
Q3 2025	60	76	120
Q4 2025	60	75	120
2025	**53**	**74**	**124**
Q1 2026	60	73	120
Q2 2026	60	70	120
Q3 2026	60	71	120
Q4 2026	60	68	120
2026	**60**	**71**	**120**

Source: BNP Paribas

Dubai remains strong with limited OPEC+ barrels returning. Stronger in the high case as Hormuz constraints severely limit Middle East flows

BNP Paribas crude price scenarios, as of December 2024 Dubai 1m (average)			
USD/bbl	**Low**	**Base**	**High**
Q1 2025	38	71	136
Q2 2025	46	74	120
Q3 2025	56	75	120
Q4 2025	57	73	119
2025	**49**	**73**	**124**
Q1 2026	57	72	120
Q2 2026	56	69	120
Q3 2026	56	70	120
Q4 2026	57	66	119
2026	**57**	**69**	**120**

Source: BNP Paribas

WTI strong in 2024. Discount to Brent rises in the low case and narrows in the high case, due to constrained flows

BNP Paribas crude price scenarios, as of December 2024 WTI 1m (average)			
USD/bbl	**Low**	**Base**	**High**
Q1 2025	35	68	134
Q2 2025	45	71	118
Q3 2025	54	72	117
Q4 2025	54	71	117
2025	**47**	**70**	**122**
Q1 2026	54	69	117
Q2 2026	55	67	118
Q3 2026	54	66	117
Q4 2026	54	64	117
2026	**54**	**66**	**117**

Source: BNP Paribas

Base case for 2025: Crude stays too cheap to justify significant OPEC+ supplies returning to the market. Low stocks and reduced Iranian exports support crude prices, despite a long market where non-OPEC+ supply grows enough to satisfy global demand growth. Tariffs then bring headwinds as year-end nears.

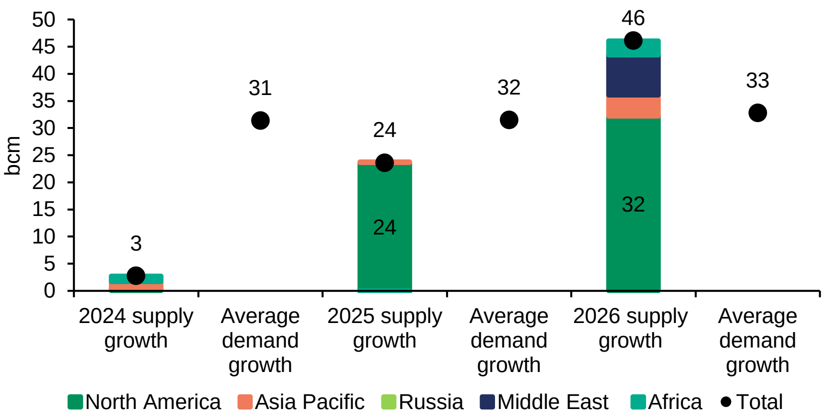
Low case for 2025: Chinese growth continues to disappoint as high and early tariffs sap demand, while OPEC+ unity dissolves as some members are 'free-riding', effectively flooding the market. Brent falls to about USD40/bbl to reduce non-OPEC+ supply sufficiently to balance. As these price levels would drive significant demand, and global balance requires prices that incentivise US crude, Brent prices then eventually settle at USD60/bbl in Q4 2025.

High case for 2025: Escalating tensions in the Middle East constrain flows through the Strait of Hormuz, which effectively shuts in Middle Eastern exports as well as OPEC+ spare capacity This pushes Brent to as much as USD140/bbl before demand destruction moderates the peak to USD120/bbl.

Aldo Spanjer, Senior Commodities Desk Strategist | BNP Paribas London Branch | Any commodities views have been prepared by the Commodities Desk Strategy team, which works closely with the Sales and Trading function. This is not a research report and has not been prepared by the BNP Paribas Research Department. Please see disclaimer.

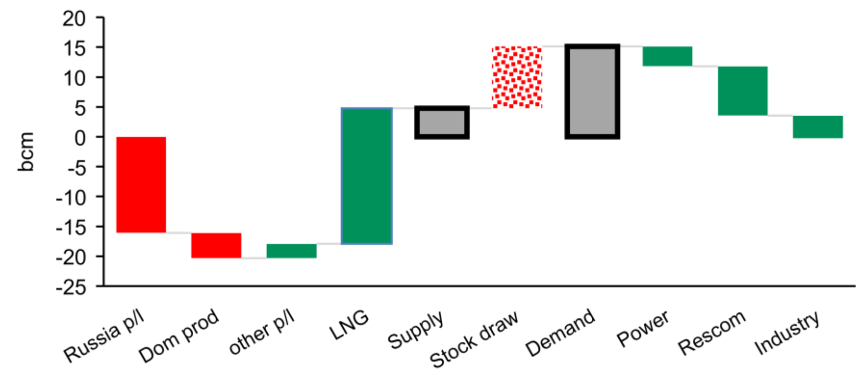
EU gas: LNG – from curse to blessing

LNG supply growth will normalize EU gas prices eventually



Sources: SPGCI, BNP Paribas forecasts

EU gas market growth 2025: We think lower Russian gas will be compensated for by more LNG and stock draws



Sources: SPGCI, BNP Paribas forecasts

Global gas price forecasts

Average	EU TTF 1m (EUR/MWh)	Asia JKM 1m (USD/MMBtu)	NYMEX Henry Hub 1m (USD/MMBtu)
Spot*	47	15	3.1
Q1 2025	44	14	3.5
Q2 2025	40	13	3.8
Q3 2025	37	12	4.1
Q4 2025	38	13	4.7
2025	**40**	**13**	**4.0**
Q1 2026	37	12	5.7
Q2 2026	30	10	5.5
Q3 2026	23	7	4.4
Q4 2026	26	8	3.9
2026	**29**	**9**	**4.9**

**Spot as at 5 December*

Sources: Bloomberg, BNP Paribas

LNG: We see tight winter balances as APAC LNG demand predates US LNG supply increases while Russian pipeline flows via Ukraine should cease in 2025. We expect new liquefaction capacity to ramp up in 2025 and lengthen 2026 (see *LNG towards length in 2026*, dated 4 December).

EU gas: The prospect of tight global LNG balances, normalized (colder) weather, risks to Russian flows and geopolitical risks are creating price upside this winter, even if we think the market currently overestimates this risk (see *EU gas: Our stock forecasts suggest current fears may be overdone*, 14 November).

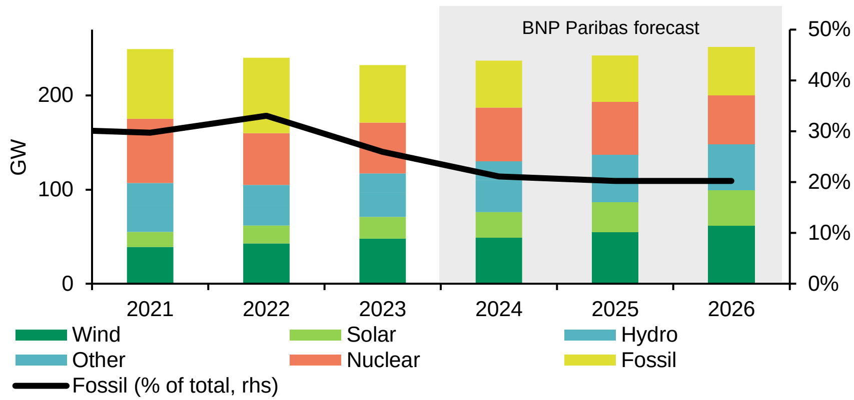
US gas: We see Henry Hub (HH) at levels that incentivize dry gas production (USD3+/MMBtu) in Q4 2024/Q1 2025. It should then go close to USD5/MMBtu during 2025 and peak at USD6/MMBtu during 2026 as demand outpaces supply.

Relative to the market, we are bearish on TTF and bullish on HH in 2025 and 2026; hence, we see the TTF premium over HH narrowing much faster than the market does. We think this should help reduce some of the competitive pressures on EU industrial users.

Aldo Spanjer, Senior Commodities Desk Strategist | BNP Paribas London Branch | Any commodities views have been prepared by the Commodities Desk Strategy team, which works closely with the Sales and Trading function. This is not a research report and has not been prepared by the BNP Paribas Research Department. Please see disclaimer.

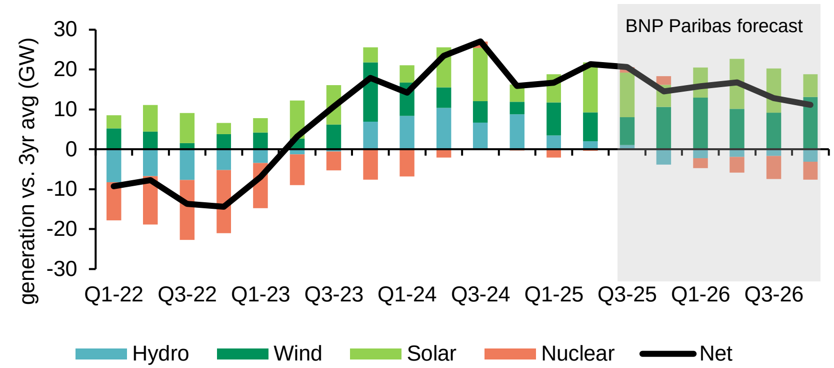
Power: Demand recovery catching up to renewables growth

2025 looks well balanced for power, but 2026 sees a demand recovery outpacing renewable capacity growth



Data cover UK, France, Germany, Italy, Spain, Portugal, Netherlands, Belgium, Austria and Switzerland.
Sources: SPGCI, BNP Paribas forecasts

Renewable generation, particularly from wind and solar, is expected to remain high over the next two years



Data cover UK, France, Germany, Italy, Spain, Portugal, Netherlands, Belgium, Austria and Switzerland.
Sources: SPGCI, BNP Paribas forecast

Normalizing winter weather poses upside risks to Q1 2025 power prices

Average	French base 1m (EUR/MWh)	German base 1m (EUR/MWh)	UK base 1m (GBP/MWh)
Spot*	102	114	99
Q1 2025	109	109	101
Q2 2025	76	90	96
Q3 2025	83	96	93
Q4 2025	96	103	93
2025	**91**	**99**	**96**
Q1 2026	101	101	100
Q2 2026	78	82	81
Q3 2026	75	78	72
Q4 2026	88	91	85
2026	**86**	**88**	**82**

**Spot as at 5 December*
Sources: Bloomberg, BNP Paribas

Upside price risks extend to Q1 2025: A normalizing winter period with a shift to La Niña weather patterns could spell drier, less windy conditions, hampering renewable generation and spurring fossil fuel demand, in our view. Concerns over the gas balance and geopolitical risks offer further upside risks to power prices and could allow coal into the mix for one final winter.

French disconnection in 2025: We see French power prices as particularly exposed to negative pricing given nuclear and renewable generation leaves little room for fossil fuels. This would widen the DE-FR spread in 2025, but we expect accelerating renewable capacity growth in Germany and easing export constraints in France to see this spread narrow in 2026.

2026 demand recovery to tighten balances: European fossil fuel generation will hit a low in 2025, we think, but an electrification-driven demand pickup in 2026 alongside coal capacity closures should offset renewable capacity growth and tighten balances, increasing gas generation by 16% y/y. However, weaker gas prices driven by increasing supply will still see power prices incrementally lower.

Jason Ying, Commodities Desk Strategist | BNP Paribas London Branch | Any commodities views have been prepared by the Commodities Desk Strategy team, which works closely with the Sales and Trading function.

Gas and power scenarios: Normalization in 2026

TTF gas price scenarios

BNP Paribas gas price scenarios, as of December 2024 EU TTF (average)			
EUR/MWh	**Low**	**Base**	**High**
Q1 2025	16	44	112
Q2 2025	17	40	95
Q3 2025	18	37	77
Q4 2025	20	38	67
2025	**18**	**40**	**88**
Q1 2026	17	37	65
Q2 2026	11	30	58
Q3 2026	11	23	51
Q4 2026	11	26	54
2026	**12**	**29**	**57**

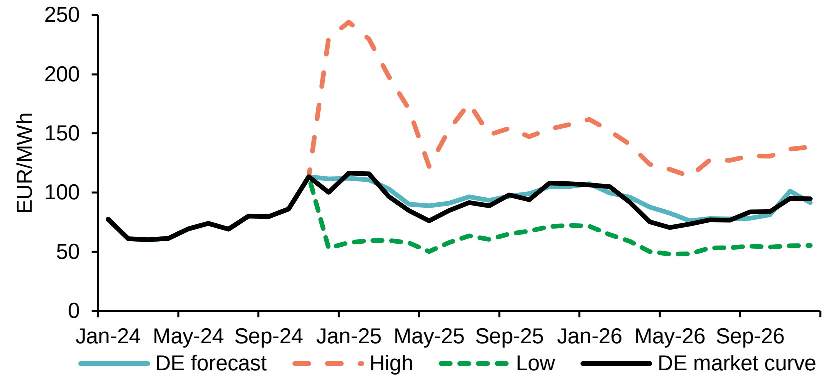
Source: BNP Paribas

JKM gas price scenarios

BNP Paribas gas price scenarios, as of December 2024 Asia JKM (average)			
USD/MMBtu	**Low**	**Base**	**High**
Q1 2025	5	14	36
Q2 2025	5	13	31
Q3 2025	6	12	26
Q4 2025	7	13	23
2025	**6**	**13**	**29**
Q1 2026	6	12	22
Q2 2026	4	10	19
Q3 2026	3	7	17
Q4 2026	3	8	18
2026	**4**	**9**	**19**

Source: BNP Paribas

Power scenarios: Renewables growth in Europe caps upside price risks in power beyond Q1 2025



DE = German base
Sources: Bloomberg, BNP Paribas

Base case for 2025: EU industrial demand recovers slowly, while normal weather supports higher heating demand this winter. End-Q1 2025 gas stocks rest at a healthy level even if below Q1 2024 (*EU gas: Our stock forecasts suggest current fears may be overdone*, dated 14 November). 2025 is tight with limited new LNG and a fall in Russia imports, before new LNG supply balances the market in 2026.

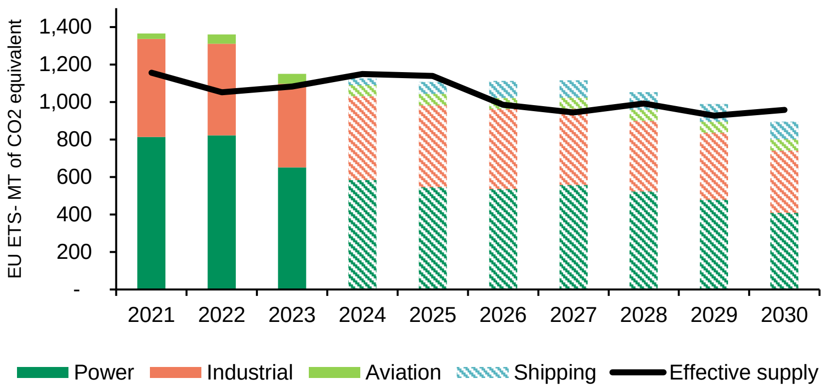
Low case for 2025: The industrial recovery continues to disappoint, and warmer temperatures linger into winter. Europe ends up with sufficient stocks to negate most demand concerns and TTF prices fall below the EU coal- and lignite-switching range, even testing US shut-in levels. Low HH prices and LNG tank rates reduce the low-case trough to EUR10/MWh.

High case for 2025: Fundamentals tighten due to structural demand growth globally, while constrained flows through the Strait of Hormuz shut in Middle Eastern LNG exports, sharply increasing competition for cargoes. Despite this, gas and power demand remains fragile, and demand destruction caps TTF at around EUR100/MWh (though temporary higher peaks are likely).

Aldo Spanjer, Senior Commodities Desk Strategist | Jason Ying, Commodities Desk Strategist | BNP Paribas London Branch | Any commodities views have been prepared by the Commodities Desk Strategy team, which works closely with the Sales and Trading function. This is not a research report and has not been prepared by the BNP Paribas Research Department. Please see disclaimer.

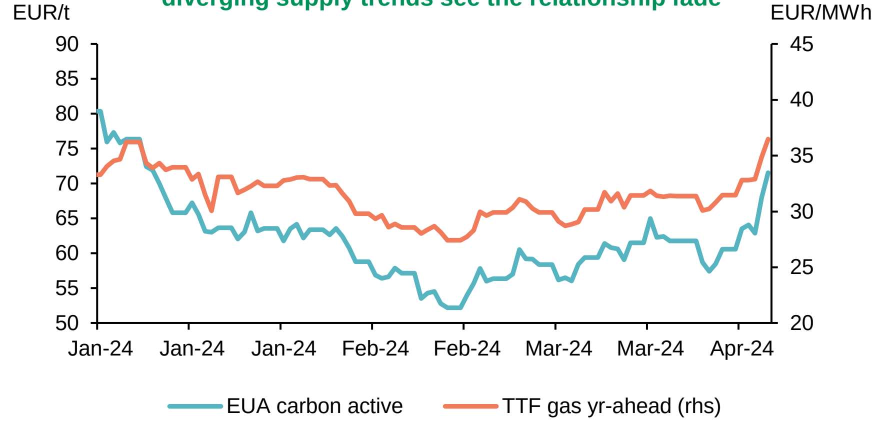
Carbon: Prices set to be well supported as balances start to tighten

Decreasing supply and widening EU ETS scope could see EUA balances tighten significantly in 2026–27



Sources: EU Commission, Energy Aspects, BNP Paribas forecasts

Gas–carbon correlation may peak in Q1 2025 as diverging supply trends see the relationship fade



Sources: Bloomberg, BNP Paribas

EUA prices set to reach EUR80/t by the end of 2025

Average	Carbon EUA 1m (EUR/t)	Carbon UKA 1m (GBP/t)
Spot*	68	36
Q1 2025	74	40
Q2 2025	76	42
Q3 2025	79	45
Q4 2025	80	47
2025	**77**	**44**
Q1 2026	82	49
Q2 2026	84	51
Q3 2026	87	53
Q4 2026	89	55
2026	**85**	**52**

**Spot as at 5 December*

Sources: Bloomberg BNP Paribas forecasts

EUA balance tightens: We cut our EUA forecasts after a looser-than-expected 2024 but remain bullish as we expect a widening scope to see fundamentals start to strengthen in 2025 before a drop-off in supply significantly tightens 2026-2027.

Moving towards independence: Winter risks in Q1 2025 should see the gas-carbon correlation show a period of strength, but we see carbon's sensitivity to gas prices fading going into 2026.

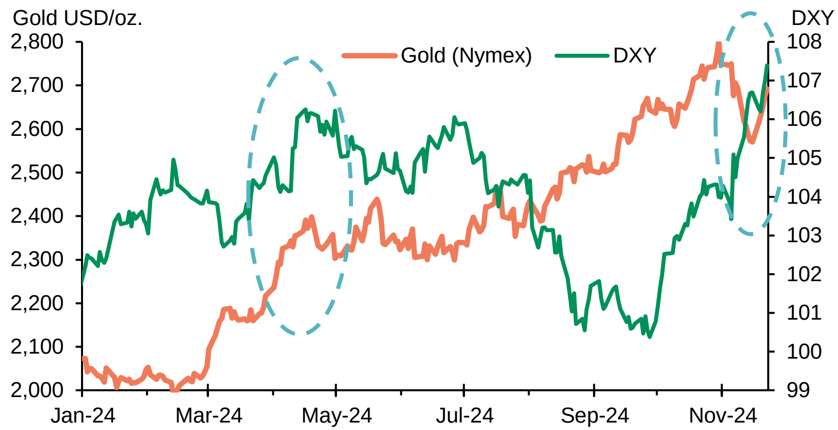
Diverging supply trends, a widening EUA scope (maritime inclusion and phasing out of aviation-free allocations) as well as higher renewable generation could see the power sector, and gas generation in particular, account for a smaller proportion of overall emissions in 2025, we think. This should keep EUA prices supported as lower fossil fuel prices incentivise higher-emitting industrial activity.

EUA premium to remain: We see UKA market tightness in 2027 rather than 2026, assuming free allocations are extended to align with the UK's Carbon Border Adjustment Mechanism in 2027. We therefore see the EUA-UKA spread remaining positive through 2026.

Jason Ying, Commodities Desk Strategist | BNP Paribas London Branch | Any commodities views have been prepared by the Commodities Desk Strategy team, which works closely with the Sales and Trading function.

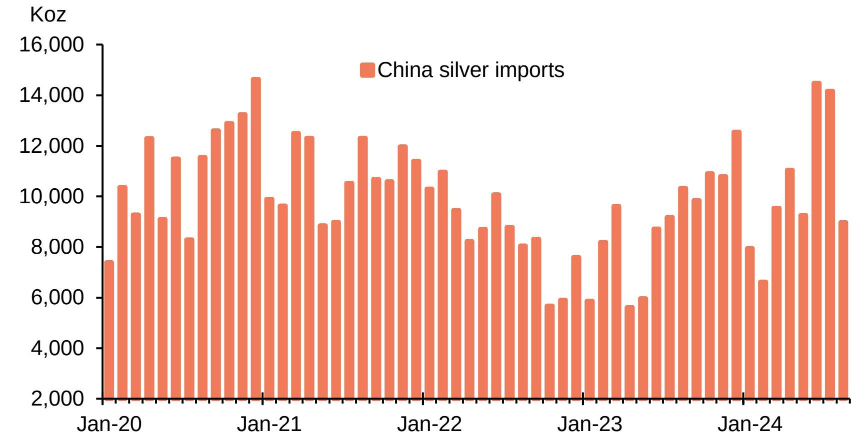
Precious metals: Strong USD set to stall gold from Q2, silver may shine

Gold has rallied despite USD strength, as it did in Q2 2024. However, we expect the gold-USD inverse relationship to return from Q2 2025



Sources: Bloomberg, BNP Paribas

China silver imports have surged in 2024, likely driven by industrial demand from solar and EV sectors



Sources: GACC, BNP Paribas

Our calls are for silver to continue outperforming gold through 2025 and 2026, while palladium outperforms platinum until mid-2026

COMEX 1m (USD/oz)	Gold		Silver		Platinum		Palladium	
Spot*	2,649		31.30		940		975	
	Avg	End	Avg	End	Avg	End	Avg	End
Q1 2025	2,830	2,820	33.30	34.25	945	940	995	1,000
Q2 2025	2,785	2,755	34.10	33.90	945	950	1,050	1,100
Q3 2025	2,750	2,745	33.70	33.50	955	960	1,090	1,080
Q4 2025	2,735	2,725	33.20	32.95	960	965	1,070	1,060
2025	**2,775**		**33.60**		**950**		**1,050**	
Q1 2026	2,723	2,720	32.60	32.35	975	980	1,050	1,040
Q2 2026	2,707	2,700	33.45	34.55	985	990	1,025	1,010
Q3 2026	2,683	2,665	34.70	34.80	1,000	1,010	1,000	990
Q4 2026	2,635	2,605	34.85	34.90	1,025	1,040	985	980
2026	**2,685**		**33.90**		**995**		**1,015**	

**Spot as at 5 December*

Sources: Bloomberg, BNP Paribas

Gold: We keep our short-term bullish stance. With sustained geopolitical tensions and fears of renewed US inflationary pressures from proposed tariffs on all US imports, we expect gold to hit new highs early in 2025. However, our base case of no US Fed rate cuts and a stronger USD would weigh on prices from Q2 onwards.

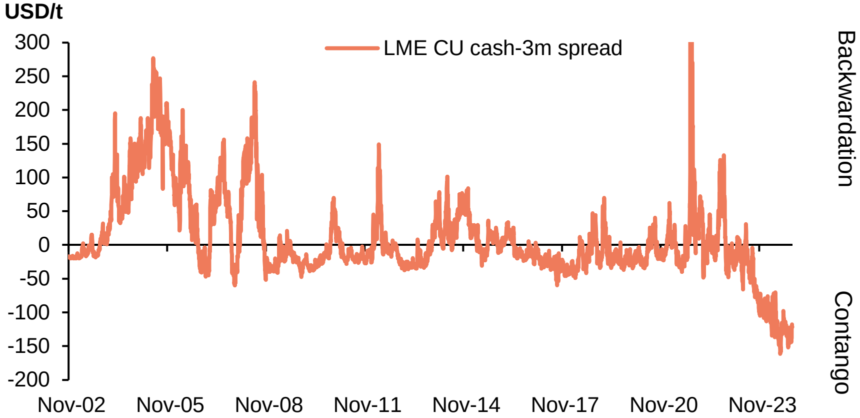
Silver: We expect 2024 outperformance in relation to gold to continue through 2025 and 2026. This would be driven by strengthening industrial demand, notably from the solar, electronics and EV sectors, combined with constrained mine supply. We expect the gold-silver ratio to tighten to less than 75 by end-2026.

Platinum/palladium: Consistent mediocrity best describes platinum's recent price performance. Despite significantly constrained South African supply, platinum has struggled for positive price momentum. Platinum-for-palladium substitution pressure has all but ended as the two catalyst metals have approached price parity. Stronger-than-expected sales for gasoline PHEVs and combustion engine autos are currently favouring palladium, an outperformance trend we expect to continue until mid-2026.

David Wilson, Senior Commodities Desk Strategist | BNP Paribas London Branch | Any commodities views have been prepared by the Commodities Desk Strategy team, which works closely with the Sales and Trading function. This is not a research report and has not been prepared by the BNP Paribas Research Department. Please see disclaimer.

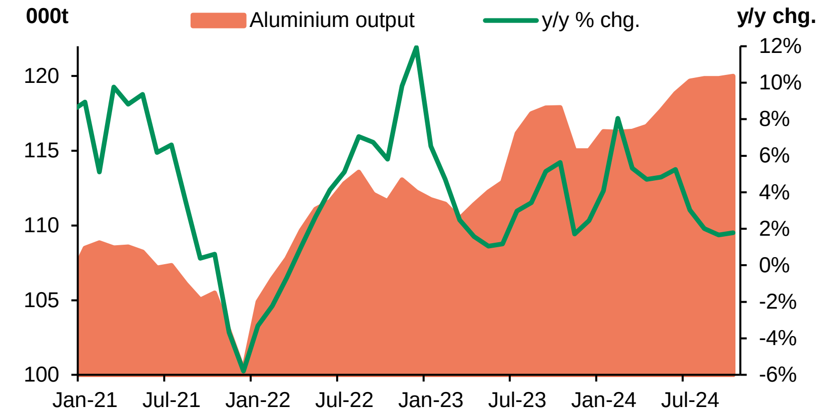
Base metals: Stronger USD, weak ex-US growth prompt downgrades

The refined copper market is becoming increasingly oversupplied, a trend set to continue. We project a close to 500 kt surplus in 2025



Sources: Bloomberg, BNP Paribas

Chinese aluminium smelter production growth has slowed sharply in H2 2024, as production rates near the mandated 45 million tonnes/year cap



Sources: NBS, BNP Paribas

We cut our copper price forecasts on stronger USD expectations, but we see positive fundamentals providing support for aluminium

LME 3m (USD/t)	Copper		Aluminium		Zinc	
Spot*	9,083		2,647		3,099	
	Avg	End	Avg	End	Avg	End
Q1 2025	8,835	8,850	2,725	2,700	3,005	2,960
Q2 2025	8,970	9,050	2,775	2,750	2,960	2,930
Q3 2025	9,100	9,150	2,825	2,850	3,080	3,050
Q4 2025	9,180	9,200	2,900	2,950	3,030	3,025
2025	**9,020**		**2,805**		**3,010**	
Q1 2026	9,300	9,400	2,955	2,970	3,025	3,020
Q2 2026	9,555	9,610	2,985	3,000	2,985	2,950
Q3 2026	9,605	9,600	3,025	3,050	2,900	2,850
Q4 2026	9,775	9,900	3,075	3,100	2,825	2,800
2026	**9,545**		**3,010**		**2,935**	

**Spot as at 5 December*

Sources: Bloomberg, BNP Paribas

Copper: We further downgrade our price projections for 2025 on expectations of USD strength through 2025. We now expect copper prices to average USD9,020/t, a 5% cut versus our previous forecast. We see a significant oversupply in 2025, at 491 kt, the largest surplus since 2020, making copper much more vulnerable to USD strength than other industrial metals. For 2026, we expect a slower rate of smelter capacity additions, plus a return to sluggish mine supply growth, to provide some modest fundamental price support.

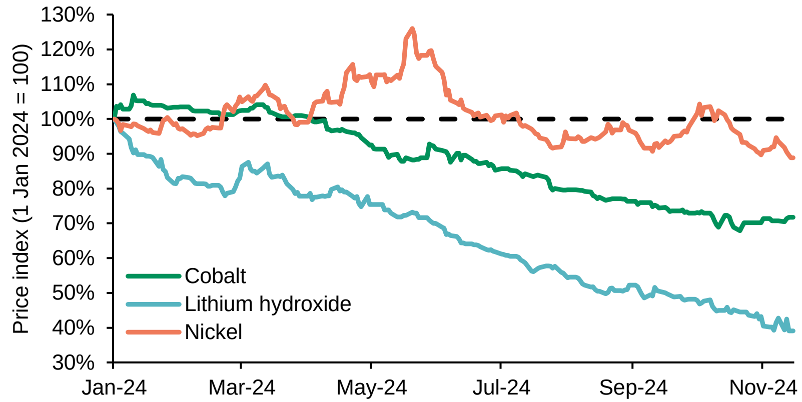
Aluminium: We think the market will be pushed into deficit in 2025, even with slowing demand. This would reflect China's 45 million tonne-per-year primary aluminium production cap, the removal of VAT rebates on Chinese aluminium semis exports, Rusal's planned 250 kt production cut, and a general lack of sufficient smelter capacity additions. We see the shortfall deepening in 2026, cushioning aluminium against the usually negative impact of a strong USD.

Zinc: We expect current tightness in the zinc market to ease through 2025 and 2026 as mine supply improves, most notably in Latin America.

David Wilson, Senior Commodities Desk Strategist | BNP Paribas London Branch | Any commodities views have been prepared by the Commodities Desk Strategy team, which works closely with the Sales and Trading function. This is not a research report and has not been prepared by the BNP Paribas Research Department. Please see disclaimer.

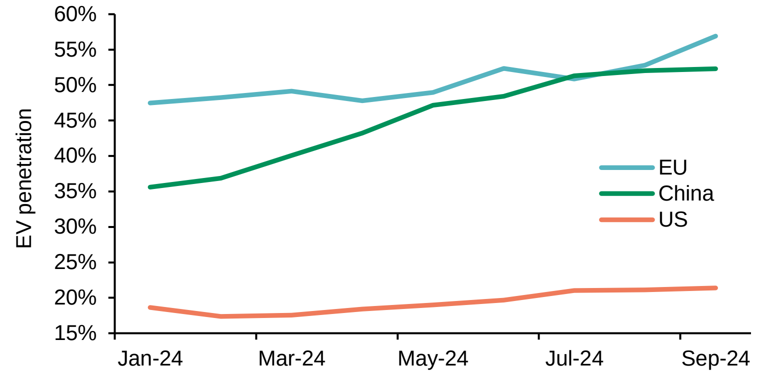
Battery metals: Hybrid EV demand strength to keep prices depressed

Lithium is the big underperformer in a struggling battery metal sector where oversupplied markets have been weighing on prices



Sources: Bloomberg, BNP Paribas

Gradual EV penetration growth in the West, with Chinese EV sales significantly outpacing the auto industry



Sources: ACEA, Argonne Laboratory, Bloomberg, BNP Paribas

Battery metals continue to struggle under the weight of supply

	Cobalt CME 1m (USD/lb)		Lithium hydroxide CME (USD/kg)		Nickel LME 3m (USD/t)	
Spot*	11.08		9.48		16,107	
	Avg	End	Avg	End	Avg	End
Q1 2025	10.70	10.60	8.70	8.65	15,800	15,700
Q2 2025	10.40	10.20	8.50	8.45	15,750	15,800
Q3 2025	10.10	10.05	8.40	8.35	15,815	15,825
Q4 2025	10.05	10.05	8.40	8.50	15,955	16,000
2025	**10.30**		**8.65**		**15,830**	
Q1 2026	9.95	9.90	8.45	8.35	16,050	16,100
Q2 2026	9.70	9.45	8.40	8.45	16,050	16,000
Q3 2026	9.50	9.55	8.60	8.70	16,077	16,150
Q4 2026	9.50	9.45	8.90	9.05	16,255	16,275
2026	**9.65**		**8.60**		**16,110**	

**Spot as at 5 December*

Sources: Bloomberg, BNP Paribas

Growing surplus putting pressure on battery metals: We revise down our lithium, cobalt and nickel price forecasts as market surpluses are expected to continue weighing on prices through 2025, with little upside risk.

EV sales outperformance has been mainly driven by hybrids (conventional hybrids in the West and plug-in hybrids in China), with battery electric vehicles (BEVs) showing muted growth. This has been a headwind for lithium and cobalt demand, and we expect this trend to extend through 2025 as a lack of charging infrastructure acts as a disincentive to convert to fully electric.

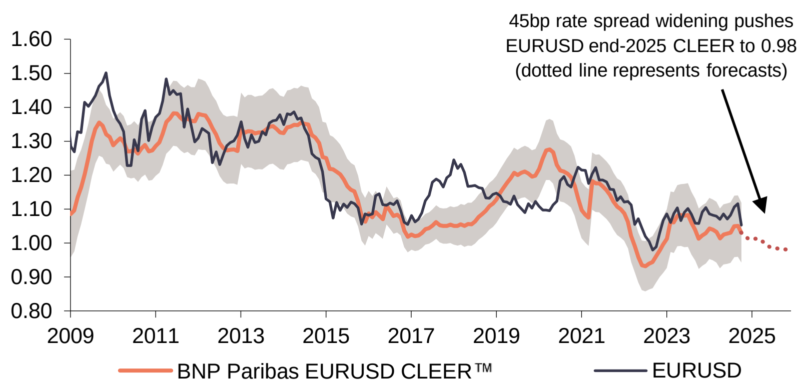
We expect lithium iron phosphate (LFP) batteries to start gaining market share in Western markets over the next two years, sparking a brighter future for lithium and slowing the price declines in 2026. However, LFP growth would likely weaken nickel-manganese-cobalt (NMC) oxide batteries' market share and keep cobalt prices depressed.

Combined Chinese and Indonesian Class 1 full-plate cathode supply growth, and resulting deliveries into the LME, will in our view continue to cap nickel prices

David Wilson, Senior Commodities Desk Strategist | Jason Ying, Commodities Desk Strategist | BNP Paribas London Branch |

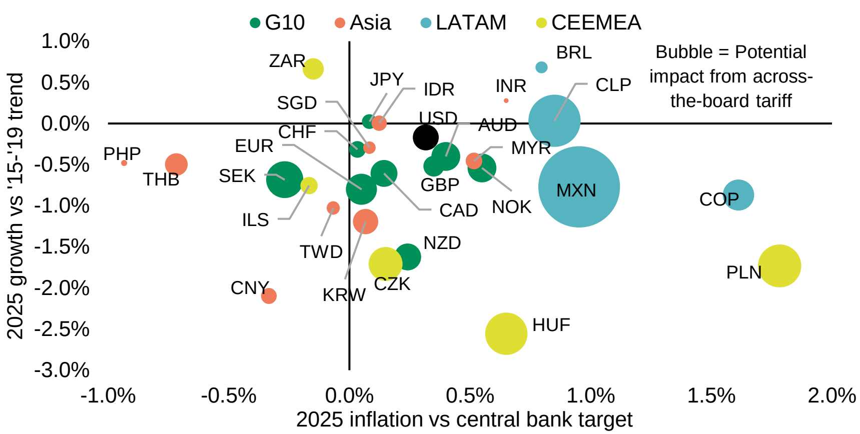
USD: Further upside in 2025

EURUSD CLEER™ points to parity on rate spread widening



The shaded area is a 1 std. deviation band around fair value. BNP Paribas CLEER™ is our measure of a currency's medium-term fair value.
Sources: BNP Paribas, Bloomberg

Backdrop for the EUR, SEK, CNH, THB is weak on top of the risk from tariffs



The best currencies to own have high inflation vs target and good growth vs trend (top right quadrant) as well as a small bubble meaning the tariff impact is less. For more details on how we calculate the tariff impact see FX: Quantifying potential impact of US tariffs. Sources: Bloomberg, BNP Paribas

Dollar strength: We see room for further broad-based USD appreciation in 2025 and forecast EURUSD at 1.00, USDCNY at 7.45 and USDJPY at 156 by year end.

We expect the majority of this USD appreciation to come as a result of widening US rate spreads versus the rest of the world as the Fed keeps rates on hold in 2025. Notably a 45bp widening of the US–EUR 2y rate differential has room to push EURUSD around 2.25% lower, according to our BNP Paribas CLEER™ model (see top chart).

Our forecasting assumption is that the Trump administration imposes a 3pp rise in the effective tariff rate on the eurozone (for a total of about 5%). However, before ultimately settling on 3pp, it could threaten a higher tariff, which would put even further upward pressure on the USD. Our forecasts assume that USD appreciation comes predominately through the rate-spread-widening channel, rather than the terms-of-trade channel.

Carry on: Additionally, we see a number of factors that could support the USD through the sentiment channel in 2025. For example, the USD could become a popular carry trade again, which would see a premium embedded in the USD above that suggested by rate spreads. US equities could continue to see stronger inflows than European equities and there is a risk of the EU's fiscal response to tariffs being delayed.

We expect USD strength to be most pronounced against currencies with central banks that are willing to tolerate currency weakness to stimulate growth (EUR, SEK, CEE3) and currencies most impacted by tariffs (MXN, CAD, CNY). However, we see the USD rising versus almost all currencies in our profile.

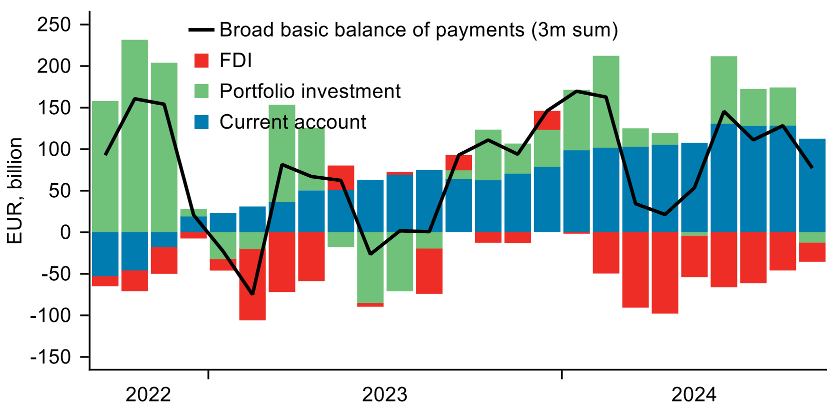
Currencies with more cautious central banks or those less impacted by Trump's tariff policies (AUD, NOK, GBP, BRL, ZAR) could do well on the crosses, but we still expect these to depreciate versus the USD in 2025 (see bottom chart).

In the case of USDCNY and USDJPY, we expect the Chinese and Japanese authorities to push back against currency weakness, which could prevent sustained breaks above 7.50 and 160, respectively, in our view.

Alex Jekov, Head of G10 FX Strategy, Europe | Joshua Wilcock, FX Strategist, G10 | BNP Paribas London Branch | Markets 360 FX Strategy team

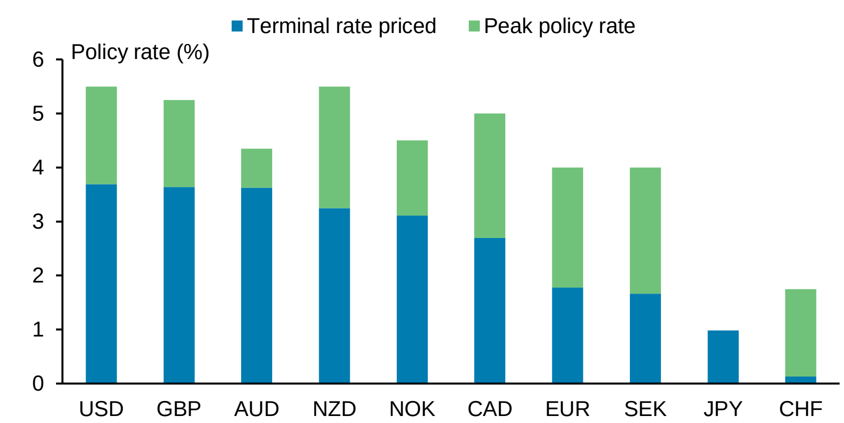
Global FX: EUR, JPY, GBP

EUR flow dynamics could prevent sustained break of parity in EURUSD



Sources: BNP Paribas, Macrobond

GBP to remain the high yielder



Sources: BNP Paribas, Bloomberg

Bearish EURUSD but break of parity less likely: We think the bearish EURUSD narrative on further US growth outperformance and tariffs will continue through 2025. However, we see three factors preventing a sustained break below parity.

First, the eurozone still runs a historically-wide current account surplus, providing structural support to the EUR. Second, we think Trump and elections in Germany increase the chance of more defence spending. This would likely prove growth supportive for the EUR and could help prevent weakness even if US growth continues to outperform, in our view. Third, a resolution to the Ukraine-Russia war is not in our base case, but would affect the EUR through the sentiment channel, as well as through lower energy prices and potentially better growth prospects.

Cross-JPY to underperform: We expect USDJPY to largely remain a function of yield differentials and see room for the pair to rise to 156 by end-2025 in tandem with our bearish US rates forecasts. Around 160, the risk of onshore pushback against JPY weakness rises, in our view, and so we do not expect a sustained break above this level. However, we think the JPY will do well on the crosses.

This reflects our expectation that BoJ tightening will raise the policy rate to 1.0% by end-2025 and 1.5% by end-2026, resulting in a material rate spread compression versus the EUR. The JPY is also more insulated from tariffs than funders such as the EUR and CNH, which could see EURJPY and CNHJPY depreciate in 2025.

Staying positive on the GBP: We expect the GBP to be relatively insulated from tariffs. This is largely because services (which do not fall under the remit of tariffs) represent such a considerable share of UK exports and because we think it may be easier for the UK to secure exemptions than for the EU (which needs 27 countries to agree terms). Perhaps more importantly for the GBP we also expect the BoE to continue to proceed cautiously with rate cuts, cutting at a quarterly pace with an end-2025 rate of 3.75% given ongoing sticky services inflation.

This would all mean the GBP could remain the high yielder in G10. As such, we revise down our end-2025 EURGBP forecast slightly to 0.82 from 0.83 previously. That said, we expect GBPUSD to depreciate as the aforementioned USD-positive factors will outweigh UK-specific considerations, in our view.

Alex Jekov, Head of G10 FX Strategy, Europe | Joshua Wilcock, FX Strategist, G10 | BNP Paribas London Branch | Markets 360 FX Strategy team

EM: Alpha dominates over beta

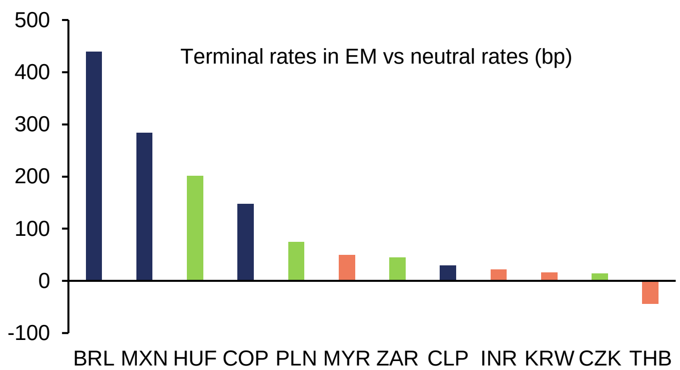
Our EM local debt return estimate is revised down for 2025

Year	Total return	FX return	Carry	Duration	other
2011	-4.9%	-5.0%	1.1%	-0.7%	-0.3%
2012	16.6%	3.2%	6.0%	6.3%	0.3%
2013	-8.2%	-8.8%	5.7%	-5.2%	0.4%
2014	-4.1%	-11.5%	6.2%	0.6%	1.4%
2015	-14.0%	-16.7%	6.3%	-3.4%	0.6%
2016	8.2%	-0.5%	6.1%	1.7%	0.7%
2017	15.4%	6.3%	6.0%	2.2%	0.1%
2018	-5.3%	-8.0%	6.4%	-4.3%	1.1%
2019	15.4%	1.5%	5.8%	7.1%	0.4%
2020	3.8%	-4.7%	4.6%	4.7%	-0.5%
2021	-10.4%	-6.9%	5.3%	-10.1%	1.7%
2022	-11.5%	-5.4%	7.3%	-9.2%	-4.1%
2023	12.5%	2.2%	7.1%	1.8%	1.0%
2024 so far	-0.3%	-6.7%	6.5%	-0.4%	0.7%
2025	2.3%	-4.4%	7.0%	1.2%	0.0%
2026	5.8%	-1.7%	6.6%	0.9%	0.0%

Total return is calculated for a target portfolio of country bond indices with market cap weights capped at 10% (CNY, IDR, MYR, PHP, THB, CZK, HUF, PLN, TRY, BRL, MXN, CLP, COP, PEN).

Sources: Bloomberg, BNP Paribas forecasts, as at 2 December

Terminal rates are priced above neutral in EM



Sources: BNP Paribas

EM rates are priced above our forecasts and above neutrals

	Market pricing, %*		BNPP forecast, %		Difference, bp	
	2025	**2026**	**2025**	**2026**	**2025**	**2026**
Poland	4.19	3.88	4.00	3.50	-19	-38
Czech Rep	3.20	3.25	3.00	2.50	-20	-75
Hungary	5.78	5.82	5.00	4.50	-78	-132
South Africa	7.07	7.16	7.00	6.50	-7	-66
Türkiye	29.50	25.90	25.00	20.00	-450	-590
CEEMEA**					**-31**	**-78**
Brazil	14.60	13.79	13.50	12.00	-110	-179
Mexico	9.02	8.73	8.75	8.25	-27	-48
Colombia	7.71	7.99	7.25	6.00	-46	-199
Chile	4.84	4.92	4.75	4.25	-9	-67
Latam					**-48**	**-123**
Thailand	1.69	1.71	2.00	1.75	31	4
South Korea	2.43	2.45	2.50	2.50	7	5
India	5.78	5.80	5.75	5.75	-3	-5
Malaysia	3.34	3.36	3.00	2.75	-34	-61
Asia					**0**	**-14**

**Calculated as the forward rate without any swap spread over policy rate; **Excluding Türkiye*

Source: BNP Paribas, as at 2 December

Macro risks: We think the impact of the Trump administration's policy agenda could be growth negative for the rest of the world, particularly for open economies in EM. Additionally, 'higher for longer' (flat curves) and a stronger dollar could provide a bearish combination for EM local debt portfolios.

Our current FX and rates forecasts for EM suggest only a 2.3% total return from EM local currency sovereign debt portfolios in 2025, revised down from 11.6% in our *Global Outlook Q4 2024*, dated 6 September.

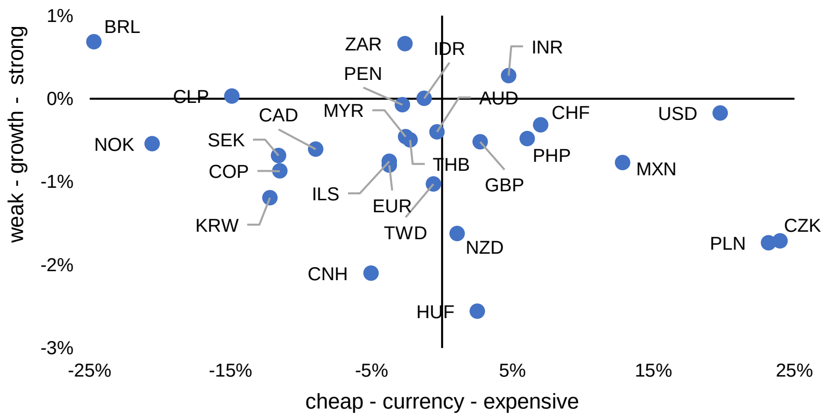
Market pricing for front-end rates appears conservative in EM compared with our forecasts, and terminal rates are broadly above central banks' estimates of their neutral levels. But risks from US policy uncertainty and a stronger dollar serve to undermine the value in EM rates.

Alpha focus: We think it may be difficult for directional EM long positions to post strong returns in this environment. But we do expect EM policymaker reactions to diverge, notably in terms of growth prospects and FX valuations. This divergence could create opportunities for relative value and active strategies to deliver alpha.

Burak Baskurt CFA, Chief Emerging Markets Strategist | BNP Paribas London Branch | Markets 360 EM Strategy team

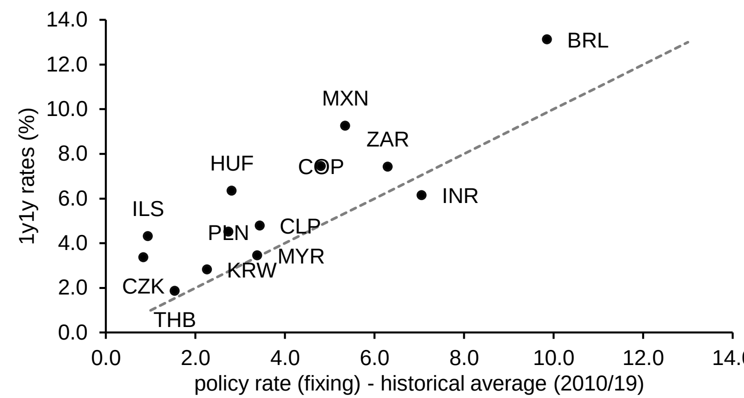
EM: Trade-off between growth and FX defines asset performance

Growth vs FX trade-off



Sources: Bloomberg, BNP Paribas

EM is not priced to go back to historical policy rates



Sources: Bloomberg, BNP Paribas

Reaction function of policy defines better rates and better FX trades in EM

	Currency too weak (cheap)	Currency too rich (expensive)
Resilient growth	1 *RV outperformance, tactical opportunities* Brazil, Chile, Japan, Australia, Norway, UK, South Africa, Indonesia	4 *Secular macro strength* South Africa, Indonesia, India
Weak growth	2 *Sensitive to external shocks, low vol-adjusted returns* Colombia, Hungary, South Korea	3 *Compression vs US rates, FX weakness* Poland, Czech Republic, Mexico, Europe, Canada, New Zealand, Sweden, Switzerland

The arrow indicates our view that in South Africa and Indonesia the currency is not particularly cheap, but rates and FX returns may remain resilient.
Source: BNP Paribas

Categories: We split global FX in three core groups based on: resilient growth but weak FX; weak growth and FX, or; weak growth but large FX valuation buffers. Each offers opportunities and risks. The first group includes Japan, Australia, Norway and the UK in G10 while in EM it includes Brazil (despite idiosyncratic risks), Chile – and perhaps South Africa and Indonesia (though the ZAR and IDR are not very cheap). We think cautious central banks, cheap valuations and, in some cases high real rates, may help the currencies outpace EM and G10 peers.

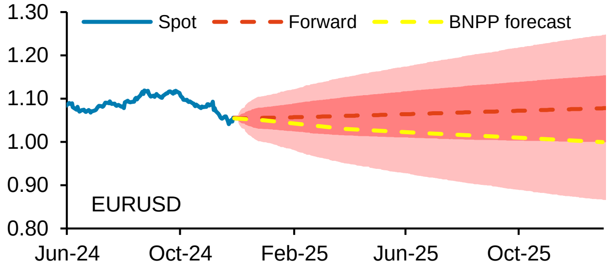
In the second group, policy priorities are unclear and vol-adjusted returns are low. We think Colombia, Hungary and South Korea likely sit here and will show high rates/FX correlation, which may make them suitable funders for the first group. G10 central banks tend not to prioritise FX stability the way their EM peers do.

Europe, Sweden, Switzerland, Canada and New Zealand sit in the third group alongside the Czech Republic, Poland, Thailand and Mexico. Here our bias will remain with receivers as we expect policymakers to prioritize dealing with the negative impact on growth even if it results in weaker currencies. These currencies can also be used as funders, similar to the second group.

Burak Baskurt CFA, Chief Emerging Markets Strategist | BNP Paribas London Branch | Markets 360 EM Strategy team

FX vol: What's priced in

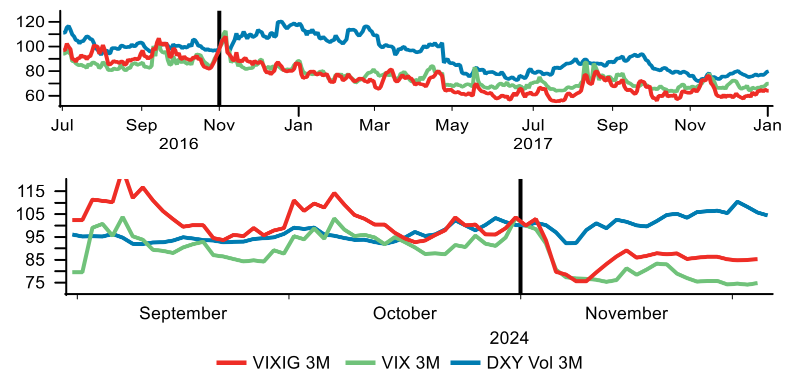
We expect EURUSD and USDJPY to move by more than currently discounted by 1y vol



	Forecast Δ	1y straddle b/e
EURUSD	-7.0%	5.9%
USDJPY	+8.0%	7.8%
USDCNH	+4.5%	5.5%

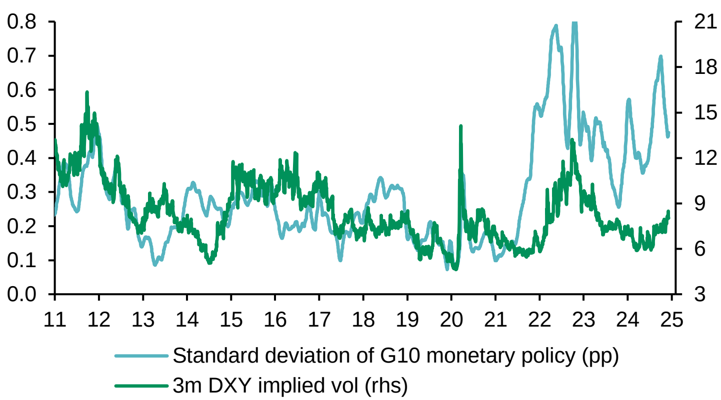
Shaded areas indicate implied future distribution of EURUSD based on vol smiles; dark area indicates one-standard-deviation range and light area indicates two-standard-deviation range.
Source: BNP Paribas

Elevated FX vol relative to other asset classes suggests a high risk premium may already be baked into FX vol



Rebased to 100 as at 01/11/2016 (top) and 01/11/2024 (bottom), both indicated by vertical bars.
Sources: Bloomberg, Macrobond, BNP Paribas

Wider monetary policy divergence could support higher FX vol



Blue line shows cross-sectional standard deviation of 2y swap minus current policy rate for G10 central banks.
Sources: Bloomberg, BNP Paribas

Vol tailwinds: Our forecast for USD appreciation over the next 12 months implies gains greater than current 1y implied vol pricing. Furthermore, the prospect of fewer Fed rate cuts and a BoJ rate hike cycle means our measure of monetary policy divergence has increased. Both factors could be a tailwind for FX vol.

Since the US election FX vol has stayed elevated relative to other asset class vols, a similar dynamic to that seen in 2016. This likely reflects a preference to express Trump risks through FX options, but we note that in 2016 implied vols peaked in December. FX vol then started to reconverge with other asset class vols. Supportive conditions for risk elsewhere may be a headwind for FX vol.

USD moves may be priced in: In addition, elevated skew in some pairs means that although the 1y straddle breakeven underprices our forecast in EURUSD, the risk of large moves in USD spot may already be priced in through elevated convexity and rich USD-call skew (illustrated by the extended downside skew in the top-left distribution fan chart). FX vol may already be discounting material USD appreciation, lending a further headwind to FX vol at current levels.

Oliver Brennan, FX Volatility Strategist | BNP Paribas London Branch | Markets 360 FX Strategy team

CREDIT AND CONVERTIBLE BONDS

▼ CONTENTS

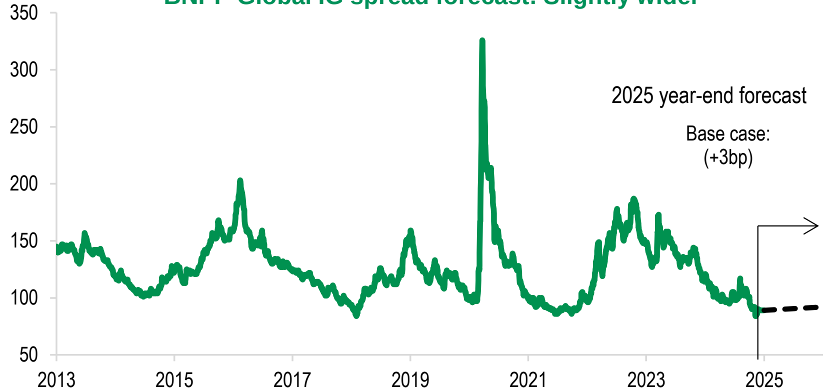
Credit: Keep calm, carry on

BNP Paribas end-2025 forecasts

	EUR			USD		
	IG	HY	LL	IG	HY	LL
Current spreads (bp)*	108	333	468	78	264	423
BNP Paribas spread forecast (bp)	100	310	455	85	290	425
Spread change forecast (bp)	-8	-23	-13	7	26	2
Annual roll down (bp)	3	5	-15	5	7	-20
Duration	4.6	3.1	2.8	7.1	3.0	2.8
12m excess return Dec 2024–Dec 2025	**1.6%**	**4.2%**	**4.7%**	**0.6%**	**2.1%**	**3.7%**
Default/downgrade rate	0.5%	1.5%	2.5%	1.5%	2.4%	4.0%
Recovery rate	80%	30%	55%	80%	30%	50%
Avg price before default	90%	65%	80%	90%	65%	80%
Loss rate	0.1%	0.5%	0.6%	0.2%	0.8%	1.2%
12m excess return Dec 2024–Dec 2025	**1.6%**	**3.7%**	**4.1%**	**0.5%**	**1.3%**	**2.5%**

**Spreads as of 2 December; **For loans, we use a 3Y average life. Assumes interest rates forecasts per BNPP rates strategy team.*
Sources: Bloomberg, Pitchbook LCD, BNP Paribas

BNPP Global IG spread forecast: Slightly wider



Sources: Bloomberg (LGCPOAS Index), BNP Paribas

Credit outlook: We are staying invested. Spreads are tight but corporate bonds offer record yields and total returns. A less dovish Fed means elevated yields should still attract critical yield flows from foreign buyers and pension funds, we think. Higher yields should also constrain supply as corporates stay disciplined in the face of high funding costs. We expect demand to absorb supply. Credit is showing mid-cycle traits, with few imbalances: it could have years to run or could all change. We expect the Trump government to boost confidence, possibly inflation, and perhaps wider credit spreads, but do not position for that now.

Europe could outperform: Growth is weak, the region is vulnerable to trade shocks and sovereign risks linger in the background. For now, however, spreads are considerably wider, the ECB is dovish and the mid-cycle sluggish-but-dovish regime has benefited returns in the past.

Risks: The main risk is the US overheating – resurgent inflation, hawkish central banks. If too much stimulus is added to an already robust growth regime, the Fed could shift hawkish after a substantial rise in animal spirits, supply and leverage.

Viktor Hjort, Global Head of Credit and Equity & Derivatives Strategy | Josh Farber, Head of European Credit Strategy | BNP Paribas London Branch | Meghan Robson, Head of US Credit Strategy | BNP Paribas Securities Corp | Joao Torres, Credit Strategist, Europe | BNP Paribas Portugal Branch.

Credit: Top 10 themes to trade

Overview: We expect H1 2025 to be a broadly range-bound market with shallow dips and carry opportunities. Globally, we see room for Europe to outperform, supported by wider valuations and a more mid-cycle sluggish-but-dovish regime. In Europe our highest conviction views are in steepeners across IG and HY, single-A / BBB decompression, long REITS and leveraged loans. In the US, we like long-end IG given supportive technicals, and like adding to mid-rated leveraged loans for a carry pickup. In the securitized space, we like buying CLO equity with reset potential, given our view that reset upside is not fully priced in.

	New top themes and trades
1	**New:** EU RV: Long IHYG/CDX HY – capture an excessive dislocation
2	**New:** US RV: CDX HY/CDX IG decompression – CDX HY is too tight and vulnerable to policy disappointment
3	**New:** EU Derivatives: Buy iTraxx Main S42 3-100% tranche: an attractive carry/roll-down trade, which benefits from historically attractive RV
4	**New:** ESG: Long gas networks/short electricity networks: a defensive trade that could benefit from heavy Utilities supply
5	**New:** Global: Buy € IG vs $ IG. Sluggish but dovish will work for € credit

	New top themes and trades
6	**New:** € IG: IG cash steepeners – sell duration, clip coupon
7	**New:** € Lev Fin: long leveraged loans: high carry, low fundamental risk, floating rates, CLO demand
8	**New:** $ IG: Buy 10Y+ IG: Potential for strong 2025 technical amid recent underperformance
9	**New:** $ Lev Fin: US B loans: Buy mid-quality loans, as "no Fed cuts" implies elevated carry for 2025
10	**New:** Global CLOs: Buy seasoned CLO equity with reset potential – attractive carry, resilient fundamentals and reset upside not fully priced in

The product(s) and markets described in this document may involve a high degree of complexity and may not be suitable for all professional investors. You should ensure you understand the risks involved and seek independent advice if appropriate.
Source: BNP Paribas

Viktor Hjort, Global Head of Credit and Equity & Derivatives Strategy | MAR | Josh Farber, Head of European Credit Strategy | MAR | BNP Paribas London Branch | Meghan Robson, Head of US Credit Strategy | MAR | BNP Paribas Securities Corp | Joao Torres, Credit Strategist, Europe | MAR | BNP Paribas Portugal Branch | David Nochimowski, Head of Global CLO & ABS Strategy BNP Paribas Representative Office – Israel | MAR | Pierre-Yves Bretonniere, Global Head of RV Strategy | MAR | BNP Paribas London Branch.

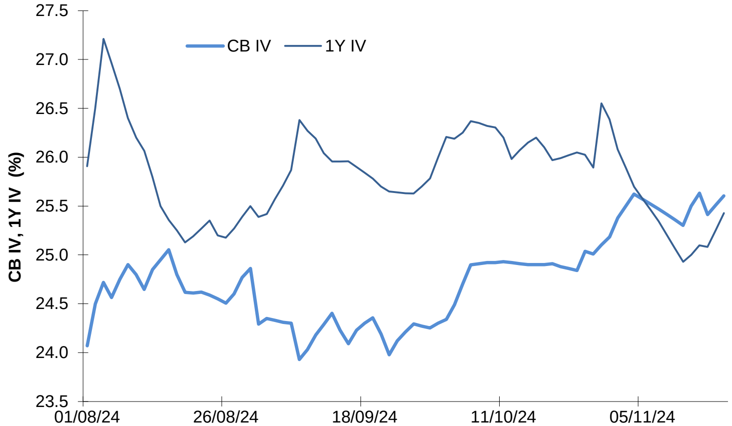
European convertible bonds: Outperforming equities

Looking ahead to European CBs in 2025:
We think one-year risk/reward is still attractive

CREDIT	delta + gamma	carry	credit	valuation	FINAL PERF	PERF + Rates -50 bp
	Shares: 10% (RI) FALL over 1 year					
widening of 10%	-2.5%	2.6%	-0.4%	-0.2%	**-0.6%**	**0.4%**
widening of 30%	-2.5%	2.6%	-1.2%	-0.4%	**-1.5%**	**-0.5%**
	Shares: 10% (RI) RISE over 1 year					
	delta + gamma	carry	credit	valuation	FINAL PERF	PERF + Rates -50 bp
tightening of 10%	2.6%	2.6%	0.4%	0.6%	**6.2%**	**7.3%**
tightening of 30%	2.6%	2.6%	1.2%	0.7%	**7.1%**	**8.2%**
	Shares: 20% (RI) FALL over 1 year					
	delta + gamma	carry	credit	valuation	FINAL PERF	PERF + Rates -50 bp
widening of 30%	-4.6%	2.6%	-1.2%	-0.4%	**-3.6%**	**-2.6%**
widening of 50%	-4.6%	2.6%	-2.0%	-0.5%	**-4.5%**	**-3.5%**
	Shares: 20% (RI) RISE over 1 year					
	delta + gamma	carry	credit	valuation	FINAL PERF	PERF + Rates -50 bp
tightening of 30%	5.7%	2.6%	1.2%	0.7%	**10.2%**	**11.3%**
tightening of 50%	5.7%	2.6%	2.0%	0.8%	**11.1%**	**12.2%**

Data as at 20 November 2024; RI = returns invested
Sources: Bloomberg, BNP Paribas

CB IV valuations:
Patience has been rewarded since 1 August 2024



Sources: Bloomberg, BNP Paribas

Strong carry return: The Refinitiv Europe benchmark is the convertible bond asset class's biggest attraction: a strong 1-year carry return of 2.6%.

This, coupled with a 50bp drop in interest rates over one year, gives it excellent one-year convexity, in our view, especially during a moderate fluctuation in equity markets: +7.3/+0.4% for a +/−10% change in underlying equity prices and average credit risk.

In theory, therefore, we believe the asset class will not suffer any capital loss if equity prices and spreads see a (moderate) correction in 2025.

We think convertible bonds can hope for sectors to catch up after a difficult 2024:

- Three sectors, posting double-digit year-to-date gains (Financial Services, Media, Retail), are absent from the CB asset class;
- Two of the sectors most represented in the CB asset class (Technology, Property) have performed negatively year-to-date.

Outperforming equity benchmarks: One of our main arguments in favour of the CB asset class remains its illogical valuation discount, namely, a lower CB IV (for an average 4y call option) than that of the 1y listed options. After a long negative period, the differential has normalised since 23 September, with a sharp rise in CB IV, taking it back above the one-year IV.

This technical movement, coupled with a decline in interest rates since end-June (EUR 5-year swaps down 65bp), has allowed CB benchmarks to hold their own:

- The Refinitiv Europe index has outperformed the Stoxx 600 EUR (returns invested) year to date at +8.3% versus +8.0%;
- The Refinitiv Europe IG index has outperformed the Bloomberg IG credit index year to date at +9.8% versus +2.2%;
- This double outperformance has occurred despite weak (+9.1% YTD) results in the underlying stocks in the CB Refinitiv Europe benchmark index.

Stéphane Renaud, Head of Convertible Bond Strategy | BNP Paribas SA

CROSS-ASSET AND MACRO QUANTITATIVE STRATEGY

▼ CONTENTS

Tactical asset allocation views: Q1 2025

	Chg*	UW/N/OW	Comment
Equities			
US		0	The market has strong momentum but there are signs of weakening trends in fundamentals, with expectations for next year looking hard to meet. Positioning and value are clear negatives, but we wait for momentum to turn. Look for cheap hedges.
Europe		0	Growth and fundamentals are weak, but this may be largely in the price. As the changing macro picture lessens our conviction on pure value trades, we favour low vol strategies.
Japan		0	We see limited upside for the NKY in the near term due to local and global uncertainties. In addition, the BoJ is likely to continue to hike rates.
EM		0	Our China Capital Market Reform Tracker saw most metrics stay healthy in October amid market volatility, showing the positive effects of the ongoing policy implementation. The growing ETF market and improvement in index investment could promote participation by long-term funds, we think.
Rates			
US	-2	−1	A Republican sweep points to higher term premia and stickier long-end yields. There are questions regarding the Fed's response function, but front-end longs could be disappointed by an absence of Fed rate cuts in 2025 despite a tariff-induced growth slowdown.
Europe	+1	+1	Yields are falling in our central scenario for Q1. We continue to expect the ECB to deliver consecutive 25bp rate cuts at each meeting until the DFR is cut to 2.00% in 2025. Downside risks to eurozone growth could support a steeper decline in yields.
Japan	+1	0	We forecast the 10y JGB yield to rise further above its previous 1% ceiling to 1.20% in Q1 and favour shorting the 10y in 5s10s20s. The long end (30-40y) of the Japanese yield curve looks more attractive due to carry and the potential for a cut in supply in ultra-long bonds in FY2025.
EM local		+1	A calmer market after the US election makes Mexico's 5y TIIE attractive to receive, in our view, as we think risks look skewed towards a downward correction.
Credit			
US IG		0	Valuations are a headwind, but strong corporate fundamentals remain a positive. We expect limited spread widening.
Europe IG	+1	+1	EU IG is structurally cheap relative to US IG credit. We see a high probability that Europe will slightly outperform US credit over the next 12 months.
US high yield	+1	−1	Carry could continue to deliver in the short term, but we are wary of decompression potential in the medium term with a potential stagflationary policy shock.
Europe high yield		0	Leading indicators continue to point to disinflation, while growth remains weak, pointing to a continuation of the ECB's rate-cutting cycle. For credit, this means lower liquidity risk (policy driven) and higher fundamental risk (growth driven). We anticipate limited room for spread compression, but carry is likely to deliver.
Leveraged loans	+1	0	Carry is likely to pay off, with only marginal spread de-compression in the US and potential for modest tightening in Europe.
Commodities			
Energy		0	The prospect of a likely curtailment of Iranian oil exports by the Trump administration is mildly bullish for energy in the short term, we think, but the demand picture remains weak. We are bullish on gas this winter given tight global LNG balances, the prospect of colder weather, risks to Russian flows and geopolitical risk.
Industrial metals		0	Trump's proposed trade-tariff policies are likely to keep metals depressed, we think. China's stimulus offers some support, but the overall trend remains sluggish at best.
Precious metals		0	Gold faces headwinds from a stronger USD and potential hawkish Fed turn. But the 'return-of-inflation' narrative, elevated geopolitical uncertainty, and the structural de-globalization trend remain supportive. We expect gold's 2024 momentum to stall but the metal is likely to remain supported.
Funding/FX			
USD	+2	+1	We see the USD as a strong winner from the Republican sweep. We expect tariffs to be a driver of a stronger USD. In addition, the US's potential fiscal and immigration policies pose upside risks to inflation, and we expect the Fed to keep rates on hold in 2025.
EUR	-1	−1	The EUR is among the currencies most negatively impacted by potential US trade tariffs. The US election outcome reinforces our base case for further ECB rate cuts.
JPY	-2	−1	Higher US yields could widen US–Japan rate differentials which poses upside risks to USDJPY. However, the BoJ's continued policy normalisation could cap USDJPY appreciation.
Emerging markets	-1	0	Short positions have broadly extended in Asia. However, for the THB, while long positions have been cut, positioning is neutral, suggesting scope for shorts to build, we think.

**Change from Global Tactical Asset Allocation Chartbook, dated 18 September 2024*

Asset allocation key									
−2	Underweight	−1	Moderate underweight	0	Neutral	+1	Moderate overweight	+2	Overweight

Vincent Berthelemy, Head of QIS and Asset Allocation Strategy I Nancy Zeng, Cross-Asset and Macro Quantitative Analyst I BNP Paribas London Branch

Tactical asset allocation views: Q1 2025

A difficult time for large overweights: We continue to stay close to neutral across directional views due to the mixed global economic outlook and high levels of policy uncertainty. We think we can afford to wait for a shift in risk-on momentum to turn more defensive.

Regime Navigator – short-term market momentum versus medium-term economic headwinds: Our new framework incorporates regimes according to the economic cycle, the pace of economic data, the path of monetary policy, investor sentiment and the volatility backdrop.

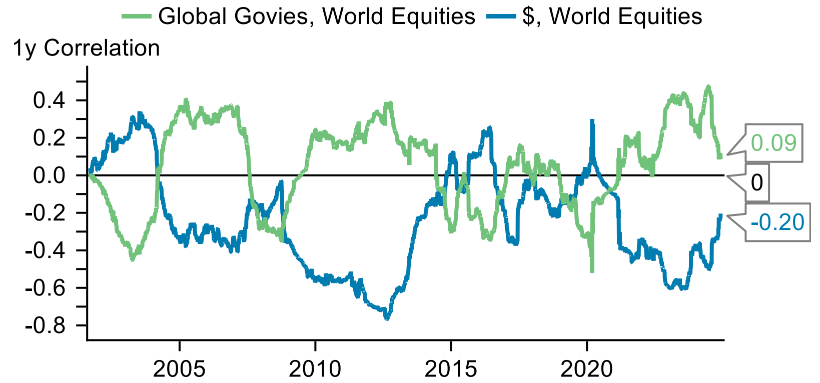
The framework's one- to two-month outlook is positive for risk assets, particularly based on the faster-moving market components. The market has re-entered a low volatility regime and there is scope for risk sentiment to improve further. In the near term, this provides a supportive backdrop for risk assets such as equities, credit and commodities.

Further out, however, the framework points to caution, with rising risks of a further economic slowdown. This is in part due to the softer data, higher volatility and market uncertainty that was seen ahead of the US election. In addition, our BERT framework – which captures the US monetary policy regime – has recently returned to the 'recession' regime. This suggests a more balanced outlook for risk assets heading into 2025 (see top chart). For details of our framework, see *Regime navigator: A framework for cross-asset and liquid alternatives*, dated 5 December.

Hedge US equity-bond correlation risk: We like hybrid equity options (conditioned on higher rates) to protect against a re-correlation of equities and bonds – implied correlation remains cheap, in our view. Long-dated volatility trades in rates could also help protect the defensive long duration bias against a surprise sell-off in long-dated rates as a result of higher inflation risk premia.

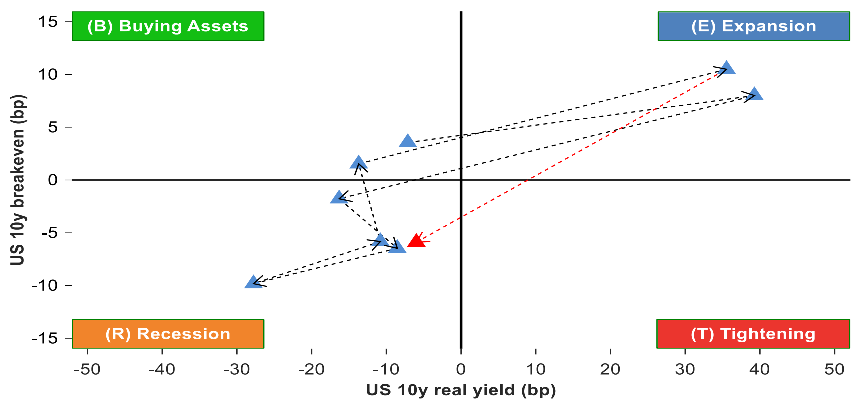
USD is king: A long-USD position could provide valuable diversification benefits, in our view, and attractive carry in multi-asset portfolios. We also favour the USD to cheapen the downside protection of European equities using hybrids (see *Hybrid: Cheapening European equity protection*, dated 15 November) .

The USD could continue to help protect equity portfolios, but we are less confident on the diversification benefits of government bonds



Sources: Bloomberg, Macrobond, BNP Paribas. Past performance is not indicative of future performance

BERT Monetary Policy Regime has recently moved from 'expansion' to 'recession'

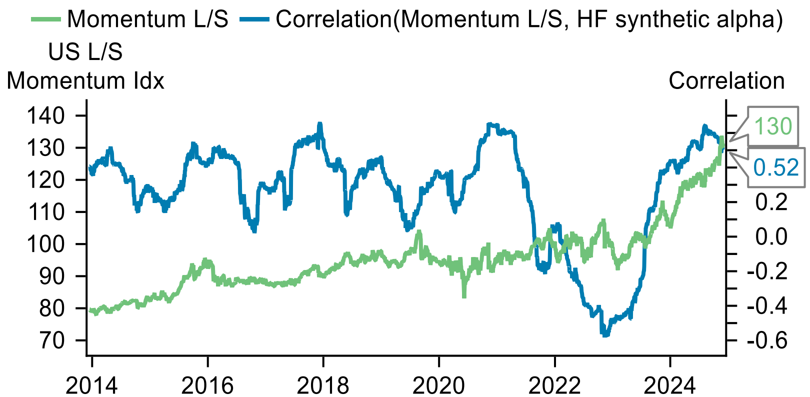


Sources: Bloomberg, Macrobond, BNP Paribas

Vincent Berthelemy, Head of QIS and Asset Allocation Strategy I Michael Sneyd CFA, Head of Cross-Asset and Macro Quantitative Strategy I BNP Paribas London Branch

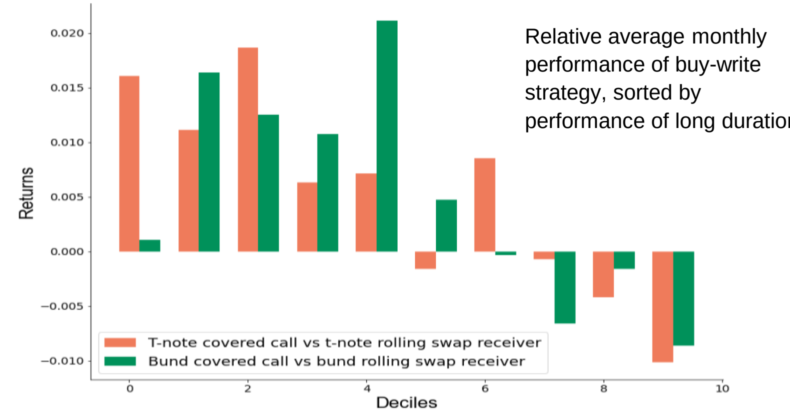
Liquid alternative strategies: Living in a world of fatter tails

The crowded equity momentum trade suggests prudence; we like to own volatility in expensive, hyper-momentum single names



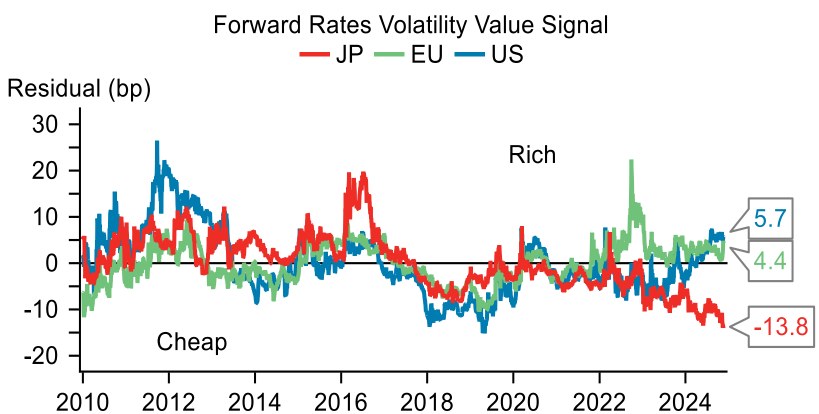
Sources: Bloomberg, Macrobond, BNP Paribas. Past performance is not indicative of future performance

Buy-write strategies in fixed income can bring incremental carry and outperform traditional duration in a world of higher net bond supply



Sources: Bloomberg, Macrobond, BNP Paribas. Past performance is not indicative of future performance

Cheap long-dated rates implied volatility in Japan could offer an attractive right-tail hedge, or protect carry in long-dated JPY receivers



Sources: Bloomberg, Macrobond, BNP Paribas. Past performance is not indicative of future performance

Protecting against uncertainty: We favour a reallocation to systematic strategies that can protect portfolios against both left- and right-tail macro risks. The combination of a potential resurgence of inflation, elevated bond supply and downside risks to growth also requires an adjustment to duration management.

Volatility and repo opportunities: To protect against risks of a sharper slowdown in growth, we like to own volatility in what we see as expensive, crowded, hyper-momentum single-name equities. Low implied-to-realized volatility ratios suggest limited carry bleed for a convex payoff. We also think equity repo strategies could benefit from a rise to normal levels in equity repo rates. Trend systems could offer convexity against both left- and right-tail events.

Equity alternatives to duration management: Low-volatility equity strategies are less crowded, carry better and should benefit in a more benign duration outlook. Buy-write strategies can also improve the carry over owning duration outright and systematic call selling can be attractive in a higher net supply environment. We think forward rates volatility strategies also remain attractive defensive positions.

Vincent Berthelemy, Head of QIS and Asset Allocation Strategy I BNP Paribas London Branch

Coverage	Name	Legal entity
Global Head of Markets 360 and Chief Economist	**Luigi Speranza**	**BNP Paribas London Branch**
Global Economics		
Head of CEEMEA Economics	Jeffrey Schultz	BNP Paribas London Branch
Head of DM Economics	Paul Hollingsworth	BNP Paribas London Branch
Head of Latam Economics	Fernanda Guardado	Banco BNP Paribas Brasil S.A.
Chief China Economist	Jacqueline Rong	BNP Paribas (China) Limited
Chief Japan Economist	Ryutaro Kono	BNP Paribas Securities (Japan) Limited
Chief Türkiye Economist	Hakan Aklar	Türk Ekonomi Bankasi A.S.
Chief US Economist	James Egelhof	BNP Paribas Securities Corp
Head of Thematic Economics and Chief France Economist	Frédéric Pretet	BNP Paribas SA
Economist, APAC	Chris Poh	BNP Paribas Singapore Branch
Economist, Argentina, Chile and Colombia	Felipe Klein	BNP Paribas Securities Corp
Economist, Brazil	Laiz Carvalho	Banco BNP Paribas Brasil S.A.
Economist, Central and Eastern Europe (Senior)	Wojciech Stepien, CFA	BNP Paribas Bank Polska
Economist, China	Shan He, CFA	BNP Paribas (China) Limited
Economist, Emerging Markets	Niccolo Carrara	BNP Paribas London Branch
Economist, Europe	Dani Stoilova	BNP Paribas London Branch
Economist, Europe	Duncan Forsyth	BNP Paribas London Branch
Economist, Europe	Francisco Tiago Carvalho	BNP Paribas Portugal Branch
Economist, Europe	Joao Vieira Pinto	BNP Paribas Portugal Branch
Economist, Europe (Senior)	Luca Pennarola	BNP Paribas London Branch
Economist, Japan (Senior)	Azusa Kato	BNP Paribas Securities (Japan) Limited
Economist, Japan (Senior)	Hiroshi Shiraishi	BNP Paribas Securities (Japan) Limited
Economist, Latam	Florencia Blanc	BNP Paribas Sucursal Buenos Aires
Economist, Mexico	Debora Lunacorte	BNP Paribas Mexico S.A.
Economist, Mexico	Pamela Díaz Loubet	BNP Paribas Mexico S.A.
Economist, South Korea (Senior)	Jeeho Yoon	BNP Paribas SA Seoul Branch
Economist, Türkiye (Senior)	Okan Ertem	Türk Ekonomi Bankasi A.S.
Economist, Türkiye	Yasemin Basyigit	Türk Ekonomi Bankasi A.S.
Economist, US (Senior)	Andrew Husby, CFA	BNP Paribas Securities Corp
Economist, US (Senior)	Andy Schneider	BNP Paribas Securities Corp
Economist, US	Britney Jackson	BNP Paribas Securities Corp
Politics Analyst, South Africa	Nic Borain	BNP Paribas South Africa Branch
Cross-Asset and Macro Quantitative Strategy		
Head of Cross-Asset and Macro Quantitative Strategy	Michael Sneyd, CFA	BNP Paribas London Branch
Head of QIS and Asset Allocation Strategy	Vincent Berthelemy	BNP Paribas London Branch
Head of Markets 360 Portugal and Macro Quantitative Strategist	Joana Carvalho Oliveira	BNPP Portugal Branch
Macro Quantitative Strategist	Oleksandr Tsymbalov	BNP Paribas London Branch
EQD Quantitative Strategist	Nuno Deus Silvestre	BNPP Portugal Branch
Cross-Asset Quant Volatility Strategist	Ruoxi Sun	BNP Paribas London Branch
Macro Quantitative Analyst	Davide Altieri	BNPP Portugal Branch
Macro Quantitative Analyst	Enrico Stanga	BNPP Portugal Branch
Cross-Asset and Macro Quantitative Analyst	Nancy Zeng	BNP Paribas London Branch
Macro Quantitative Analyst	Marcelo Alcantara	BNPP Portugal Branch
Macro Quant Processes Specialist	Catia Andrade Moreira	BNPP Portugal Branch

COO	Franck Bergonzo | Linh Dang | BNP Paribas London Branch
Client Development	Antonietta Rigamonti | BNP Paribas London Branch
Editorial and Production	Amanda Sjödin | Danielle Catananzi | Elina Talvitie | Joel Dimmock | BNP Paribas London Branch Daniel Weeks | BNP Paribas Securities Corp Jason D'Sa | Rahul Satija | Sonam Dubey | BNP Paribas India Solutions Pvt. Ltd

Coverage	Name	Legal entity
Global Macro Strategy		
Global Head of Macro Strategy	Sam Lynton-Brown, CFA	BNP Paribas London Branch
Chief Emerging Markets Strategist	Burak Baskurt, CFA	BNP Paribas London Branch
Head of Americas Macro Strategy and US Economics	Calvin Tse	BNP Paribas Securities Corp
Head of DM Rates Strategy and Economics, Europe	Camille de Courcel	BNP Paribas London Branch
Head of East Asia Strategy and APAC Coordinator	Jason S. Lui, CFA	BNP Paribas Hong Kong Branch
Head of G10 FX Strategy, Europe	Alex Jekov	BNP Paribas London Branch
Head of G10 Rates Strategy, Japan and APAC	Reiko Tokukatsu	BNP Paribas Securities (Japan) Limited
Head of Greater China FX & Rates Strategy	Ju Wang	BNP Paribas Hong Kong Branch
Head of US Rates Strategy	Guneet Dhingra	BNP Paribas Securities Corp
Commodities Desk Strategist (Senior)	Aldo Spanjer	BNP Paribas London Branch
Commodities Desk Strategist (Senior)	David Wilson	BNP Paribas London Branch
Commodities Desk Strategist	Jason Ying	BNP Paribas London Branch
FX and Rates Strategist, EM	Chandresh Jain	BNP Paribas Singapore Branch
FX and Rates Strategist, EM	Jedrzej Glownia, CFA	BNP Paribas London Branch
FX and Rates Strategist, EM	Parisha Saimbi	BNP Paribas Singapore Branch
FX and Rates Strategist, Latam (Senior)	Mario Castro Martinez	BNP Paribas Securities Corp
FX and Rates Strategist, Latam	Guanchen Xie	BNP Paribas Securities Corp
FX Strategist, G10	Ishan Gurnani	BNP Paribas Securities Corp
FX Strategist, G10	Joshua Wilcock	BNP Paribas London Branch
FX Volatility Strategist	Oliver Brennan	BNP Paribas London Branch
FX Volatility and Macro Quantitative Analyst	Alessandro Pitzolu	BNP Paribas London Branch
Markets Analyst, APAC	Joey Li	BNP Paribas Singapore Branch
Markets Strategist, APAC	Ann Jiang	BNP Paribas Hong Kong Branch
Markets Strategist, Japan	Yusuke Ikawa	BNP Paribas Securities (Japan) Limited
Rates Strategist, Europe	Anubhav Lamichhane	BNP Paribas London Branch
Rates Strategist, Europe	Jean-Christophe Machado	BNP Paribas London Branch
Rates Strategist, Europe	Katherine Yoon	BNP Paribas London Branch
Rates Strategist, Europe	Steven Montgomery	BNP Paribas London Branch
Rates Strategist, US (Senior)	Timothy High	BNP Paribas Securities Corp
Rates Strategist, US	Sebastian Mauleon	BNP Paribas Securities Corp
Sustainability		
Head of Sustainability Research	Trevor Allen	BNP Paribas London Branch
Sustainability Research Analyst	Alexander Slaughter	BNP Paribas London Branch
Sustainability Research Analyst	Jinyi Yue	BNP Paribas London Branch
Sustainability Research Analyst	Sumati Semavoine-Jain	BNP Paribas London Branch
Global Credit and Equity & Derivatives Strategy		
Global Head of Credit and Equity & Derivatives Strategy	Viktor Hjort	BNP Paribas London Branch
Head of APAC EQD Strategy and APAC Coordinator	Jason S. Lui, CFA	BNP Paribas Hong Kong Branch
Head of Convertible Bond Strategy	Stéphane Renaud	BNP Paribas SA
Head of Equity & Derivatives Strategy, US	Greg Boutle	BNP Paribas Securities Corp
Head of European Equity & Derivatives Strategy	Georges Debbas	BNP Paribas London Branch
Convertible Bond Strategist	Margaux Ducourtioux	BNP Paribas SA
Convertible Bond Strategist	Trâm-Anh Tran	BNP Paribas SA
Equity & Derivatives Strategist, Asia	Scarlett Liu, CFA	BNP Paribas Hong Kong Branch
Equity & Derivatives Strategist, Europe	Aurelie Dubost	BNP Paribas London Branch
Equity & Derivatives Strategist, Europe	Benedicte Lowe, CFA	BNP Paribas London Branch
Equity & Derivatives Strategist, Europe	Khalil El-Adi	BNP Paribas London Branch
Equity & Derivatives Strategist, Europe	Rafael Bilbao Lopez	BNP Paribas London Branch
Equity & Derivatives Strategist, US	Evan Bybee	BNP Paribas Securities Corp
Equity & Derivatives Strategist, US	Rose Wang	BNP Paribas Securities Corp
Markets Strategist, Japan	Yusuke Ikawa	BNP Paribas Securities (Japan) Limited

STRATEGY	COVERAGE	LEGAL ENTITY
Viktor Hjort	Global Head of Credit Strategy and Desk Analysts	BNP Paribas London Branch
Pierre-Yves Bretonniere	Global Head of Credit Relative Value and Derivatives Strategy	BNP Paribas London Branch
Paola Lamedica	Global Head of Credit Derivatives and ESG Strategy	BNP Paribas London Branch
David Nochimowski	Head of Global CLO & ABS Strategy	BNP Paribas Representative Office – Israel
Josh Farber	Head of European Credit Strategy	BNP Paribas London Branch
Meghan Robson	Head of US Credit Strategy	BNP Paribas Securities Corp
Kevin Bonkoski	Relative Value Strategy	BNP Paribas Securities Corp
Rachel Bu	Relative Value Strategy	BNP Paribas London Branch
Joao Torres	Credit Strategy	BNP Paribas Portugal Branch
Bella Nazarova	Credit Strategy	BNP Paribas London Branch
Tiago Rabaca	Credit Strategy	BNP Paribas Portugal Branch
Jonathan Marshak	EM Credit Strategy	BNP Paribas London Branch
Mario Lupoli	CLO & ABS Strategy	BNP Paribas London Branch
Benjamin Cannon	Credit Strategy	BNP Paribas Securities Corp
Imran Hasan	Credit Strategy	BNP Paribas Securities Corp
CREDIT SECTORS		
James Sparrow	Head of Europe IG – Utilities / Energy / Infrastructure / TMT	BNP Paribas London Branch
Michael Chakardjian	Europe IG – Real Estate	BNP Paribas London Branch
Konrad Boszko	Europe IG – Autos, Consumers, Industrials	BNP Paribas London Branch
Nicolas Bonis	Head of European Financials	BNP Paribas London Branch
Olivier Doukhan	Europe Financials	BNP Paribas London Branch
Alexis Panton	Latam & CEEMA	BNP Paribas London Branch
Alwahaz Bora	Head of Europe HY	BNP Paribas London Branch
Bryan Johnson	Europe High Yield / Leveraged Finance – TMT, Healthcare	BNP Paribas London Branch
Paul Simenauer	Europe High Yield / Leveraged Finance – Travel, Leisure, Transportation, Real Estate	BNP Paribas London Branch
Filippo Tomasi	Europe High Yield / Leveraged Finance – Distressed and Special Situations	BNP Paribas London Branch
James Harvey	Europe High Yield / Leveraged Finance	BNP Paribas London Branch
Fredrik Lilliecreutz	Europe High Yield / Leveraged Finance	BNP Paribas London Branch
Filipe Castro Lopes	Europe High Yield / Leveraged Finance	BNP Paribas Portugal Branch
Arun Seshadri	Head of Credit Trading Desk Analysts Americas – HY TMT	BNP Paribas Securities Corp
Tony McCutcheon	Head of US IG Credit Trading Desk Analysts – IG TMT	BNP Paribas Securities Corp
David Schivell	US IG Healthcare, Metals & Mining	BNP Paribas Securities Corp
Tomas Lapointe	US IG	BNP Paribas Securities Corp
Betty Kim	US IG	BNP Paribas Securities Corp
Peter Dalena	US HY Basics / Builders	BNP Paribas Securities Corp
Tyler Pierce	US HY – Gaming, Leisure, Consumer	BNP Paribas Securities Corp
Charles Sharett	Co-Head of US Leveraged Finance Credit Trading Desk Analysts – HY Healthcare, Power	BNP Paribas Securities Corp
Hal Steiner	US HY – Financials, Media, REITs	BNP Paribas Securities Corp
Caroline Atkinson	US HY	BNP Paribas Securities Corp
Caitlyn Vesey	US HY	BNP Paribas Securities Corp
Evan O'Mara	US HY	BNP Paribas Securities Corp
Christopher B Li	Head of Asia Credit Desk Analysts – Mainland China Corporates, Asia Financials	BNP Paribas Hong Kong Branch
Guixin Lin	ASEAN and India corporates	BNP Paribas Hong Kong Branch
Dean Xiao	Hong Kong, Macau, Taiwan and Korea Corporates	BNP Paribas Hong Kong Branch

BNP PARIBAS

The bank for a changing world

BNP PARIBAS GLOBAL MARKETS APP

MARKETS 360™ STRATEGY & ECONOMICS

STAY UP-TO-DATE WITH THE LATEST MARKETS ANALYSIS AND VIEWS FROM BNP PARIBAS' MARKETS 360™ STRATEGY AND ECONOMICS TEAM AND SALES/TRADING DESKS – ANYTIME, ANYWHERE

GET CONTENT THAT MATTERS TO YOU

Curated Live Feed & Notifications

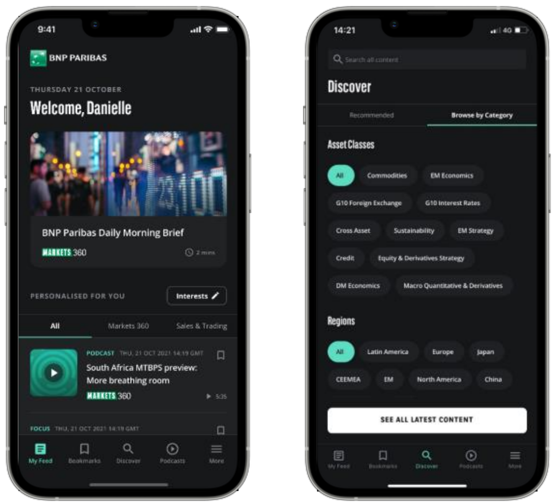
PREPARE FOR THE DAY AHEAD

Customised Morning Brief

Available on

Download on the App Store

GET IT ON Google Play



DISCOVER WHAT'S RELEVANT TO YOU

Trending Reads, Content Recommendations & Advanced Search Functionality

BE ON THE MOVE

Audio Podcasts, Bookmarks and Offline Mode

Scan the QR code to download the App

LEGAL NOTICE

This document or where relevant the document/communication to which this notice relates (all references in this notice to a document or communication herein (or similar expressions) shall be construed as referring to this document or such document/communication related to this notice, as appropriate) has been prepared by one or any combination of the following research teams: (i) Credit Trading Desk Analysts who work closely with the Sales and Trading function; (ii) Desk Strategists who work closely with the Sales and Trading Function; and/or (iii) Strategists and Economist teams, within the BNP Paribas group of companies (collectively "BNPP"). This document has been produced for, and is directed at, (a) Professional Clients and Eligible Counterparties as defined by the Markets in Financial Instruments Directive (2014/65/EU) (MiFID II), and (b) where relevant, persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005; and (c) at other persons to whom it may lawfully be communicated ((a) – (c) together "Relevant Persons"). Any investment or investment activity to which this document relates is available only to and will be engaged in only with Relevant Persons. Any person who is not a Relevant Person should not act or rely on this document or its content. This does not purport to be an exhaustive analysis, and may be subject to conflicts of interest resulting from the relevant research teams' interaction with sales and trading which could affect the objectivity of this document. This document is non-independent research for purposes of the UK Financial Conduct Authority rules and for the purposes of MiFID II this document is non-independent research which constitutes a marketing communication. This document is not independent investment research for the purposes of MiFID II (i.e. under Article 36, Commission Delegated Regulation (EU) 2017/565). It has not been prepared in accordance with legal requirements designed to provide the independence of investment research, and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

The content in this document/communication may contain "Research" as defined under the MiFID II unbundling rules. If the document/communication contains Research, it is intended for those firms who are either in scope of the MiFID II unbundling rules and have signed up to one of the BNP Paribas Global Markets Research packages, or firms that are out of scope of the MiFID II unbundling rules and therefore not required to pay for Research under MiFID II. Please note that it is your firm's responsibility to ensure that you do not view or use the Research content in this document if your firm has not signed up to one of the BNP Paribas Global Markets Research packages, except where your firm is out of scope of the MiFID II unbundling rules.

Please note any reference to EU legislation or requirements herein should be read as a reference to the relevant EU legislation or requirement and/or its UK equivalent legislation or requirement, as appropriate, where applicable, and as the context requires and as amended or repealed and replaced from time to time.

STEER™ and MARKETS 360 are trade marks of BNP Paribas

This document should not be considered objective or unbiased. BNPP may engage in transactions in a manner inconsistent with the views expressed in this material. The author of this document may know the nature of BNPP trading positions and strategies. Sales and Trading personnel are indirectly compensated based on the size and volume of their transactions. This material is based upon information that BNPP considers reliable as of the date hereof, but BNPP does not represent that it is accurate or complete. Any reference to past performance is not indicative of future performance, which may be better or worse than prior results. Any hypothetical, past performance simulations are the result of estimates made by BNPP, as of a given moment, on the basis of parameters, market conditions, and historical data selected by BNPP, and should not be used as guidance, in any way, of future performance. All estimates and opinions included herein are made as of the date of publication. Unless otherwise specified in this publication, there is no intention to update it. In evaluating this material, you should know that it may have been previously provided to other clients and/or internal BNPP personnel, who may have already acted on it.

In providing this document, BNPP offers no investment, financial, legal, tax or any other type of advice to, nor has any fiduciary duties towards, recipients. This document does not constitute a prospectus, or form any part of any offer to sell or issue and is not a solicitation of any offer to purchase any financial instrument, nor shall it or any part of it nor the fact of its distribution form the basis of, or be relied on in connection with, any contract or investment decision. Financial instruments described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. To the extent that any transaction is subsequently entered into between the recipient and BNPP, such transaction will be entered into upon such terms as may be agreed by the parties in the relevant documentation. Prior to any such transaction, you should consult with your own independent advisors and consultants as necessary and appropriate.

This material does not constitute a personal recommendation for the purposes of MiFID II or take into account the particular investment objectives, financial conditions, or needs of individual clients. Certain transactions or securities mentioned herein, including derivative products, give rise to substantial risk, including currency and volatility risk, and are not suitable for all investors.

BNPP transacts business with counterparties on an arm's length basis and on the assumption that each counterparty is sophisticated and capable of independently evaluating the merits and risks of each transaction and that the counterparty is making an independent decision regarding any transaction. The author(s) attest that the views expressed in their attached commentary accurately reflect their personal views about any of the subject securities, issuers, or markets.

To the fullest extent permitted by law, no BNPP group company (nor any directors, partners, officers, employees or representatives) accepts any liability whatsoever (including in negligence) for any direct or consequential loss arising from any use of, or reliance on, material contained in this document even where advised of the possibility of such losses.

BNPP and its affiliates may make a market in, or may, as principal or agent, buy or sell securities and/or instruments of any issuer or person mentioned in this document or related derivatives. Prices, yields and other similar information included in this document are included for information purposes however numerous factors will affect market pricing at any particular time, such information may be subject to rapid change and there is no certainty that transactions could be executed at any specified price. In no circumstances shall BNPP or its affiliates be obliged to disclose any information that it has received on a confidential basis or to disclose the existence thereof.

BNPP may have a financial interest in any issuer or person mentioned in this document, including a long or short position in their securities and/or options, futures or other derivative instruments based thereon, or vice versa. BNPP, including its officers and employees may serve or have served as an officer, director or in an advisory capacity for any person mentioned in this document. BNPP may, from time to time, solicit, perform or have performed investment banking, underwriting or other services (including acting as adviser, manager, underwriter or lender) within the last 12 months for any person referred to in this document. BNPP may be a party to an agreement with any person relating to the production of this document. BNPP may to the extent permitted by law, have acted upon or used the information contained herein or the analysis on which it was based, before the document was published. BNPP may receive or intend to seek compensation for investment banking services in the next three months from or in relation to any person mentioned in this document. Any person mentioned in this document may have been provided with relevant sections of this document prior to its publication in order to verify its factual accuracy. As an investment bank with a wide range of activities, BNPP may face conflicts of interest, which are resolved under applicable legal provisions and internal guidelines.

This document is for information purposes only and there is no assurance that a transaction(s) will be entered into on such indicative terms. Any indicative price(s) contained herein or in the document have been prepared in good faith in accordance with BNPP's own internal models and calculation methods and/or are based on or use available price sources where considered relevant. Indicative price(s) based on different models or assumptions may yield different results. Numerous factors may affect the price(s), which may or may not be taken into account. Therefore, these indicative price(s) may vary significantly from indicative price(s) obtained from other sources or market participants. BNPP expressly disclaims any responsibility for the accuracy or completeness of its own internal models or calculation methods, the accuracy or reliability of any price sources used, any errors or omissions in computing or disseminating these indicative price(s), and for any use you make of the price(s) provided. The indicative price(s) do not represent (i) the actual terms on which a new transaction could be entered into, (ii) the actual terms on which any existing transactions could be unwound, (iii) the calculation or estimate of an amount that would be payable following an early termination of the transactions or (iv) the price(s) given to the transactions by BNPP in its own books of account for financial reporting, credit or risk management purposes.

LEGAL NOTICE

This document is only intended to generate discussion regarding particular products and investments and is subject to change or may be discontinued. We are willing to discuss it with you on the understanding that you have sufficient knowledge, experience and professional advice to understand and make your own independent evaluation of the merits and risk of the information and any proposed structures. The information contained herein or in the document is not and under no circumstances is to be construed as, a prospectus, an advertisement, a public offering, an offer to sell securities described herein or in the document, or solicitation of an offer to buy securities described herein or in the document, in Canada, the U.S. or any other province or territory nor shall it be deemed to provide investment, tax, accounting or other advice. Transactions involving the product(s) described in this document may involve a high degree of risk and the value of such transactions may be highly volatile. Such risks include, without limitation, risk of adverse or unanticipated market developments, risk of counterparty or issuer default, risk of adverse events involving any underlying reference obligation or entity and risk of illiquidity. In certain transactions, counterparties may lose their entire investment or incur an unlimited loss.

Prior to transacting, you should ensure that you fully understand (either on your own or through the use of independent expert advisors) the terms of the transaction and any legal, tax and accounting considerations applicable to them. You should also consult with independent advisors and consultants (including, without limitation, legal counsel) to determine whether entering into any securities transactions contemplated herein or in the document would be contrary to local laws. Unless the information contained herein is made publicly available by BNPP, it is provided to you on a strictly confidential basis and where it is provided to you on a strictly confidential basis you agree that it may not be copied, reproduced or otherwise distributed by you, whether in whole or in part (other than to your professional advisers), without our prior written consent.

This document was produced by a BNPP group company. This document is for the use of intended recipients and may not be reproduced (in whole or in part) or delivered or transmitted to any other person without the prior written consent of BNPP. By accepting this document you agree to this.

Neither DTCC Solutions LLC nor any of its affiliates shall be responsible for any errors or omissions in any DTCC data included in this commentary, regardless of the cause and, in no event, shall DTCC or any of its affiliates be liable for any direct, indirect, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or lost profit, trading loses and opportunity costs) in connection with this publication.

BNP Paribas SA / BNP Paribas Arbitrage: BNP Paribas SA is supervised by the European Central Bank (ECB), the *Autorité de contrôle prudentiel et de résolution* (ACPR) and the *Autorité des marchés financiers* (AMF), and is authorised as a credit institution by the ECB and as an investment services provider by the ACPR in France. BNP Paribas is incorporated in France as a société anonyme. Registered Office: 16 boulevard des Italiens, 75009 Paris, France. www.bnpparibas.com. BNP Paribas Arbitrage is authorised as an investment firm and supervised by the *Autorité de contrôle prudentiel et de résolution* (ACPR) and the *Autorité des marchés financiers* (AMF) in France. BNP Paribas Arbitrage is incorporated in France as a *société en nom collectif*. Registered office: 160-162, boulevard Macdonald, 75019 Paris, France.

BNP Paribas London Branch: 10 Harewood Avenue, London NW1 6AA; tel: +44 20 7595 2000; fax: +44 20 7595 2555- www.bnpparibas.com. Incorporated in France with Limited Liability. Registered Office: 16 boulevard des Italiens, 75009 Paris, France. 662 042 449 RCS Paris. BNP Paribas is authorised and regulated by the European Central Bank and the Autorité de contrôle prudentiel et de resolution. Deemed Authorised by the Prudential Regulation Authority and with deemed variation of permission. Subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details of the Temporary Permissions Regime, which allows EEA-based firms to operate in the UK for a limited period while seeking full authorisation, are available on the Financial Conduct Authority's website. BNP Paribas London Branch is registered in the UK under number FC13447. UK establishment number: BR000170. UK establishment office address: 10 Harewood Avenue, London NW1 6AA.

For country specific Credit 360 disclaimers: (UK, France, Germany, Belgium, Ireland, Italy, Netherlands, Portugal, Spain, Switzerland, Canada, United States, Brazil, Turkey, Israel, Bahrain, South Africa, Australia, China, **Hong Kong – Branch, Hong Kong – Securities,** India – Branch, India **–** Securities, Indonesia, Japan – Branch, Japan – Securities, **Malaysia -** BNPP Malaysia Berhad, **BNPP - Capital (Malaysia) Sdn Bhd,** Malaysia Labuan Branch, **Philippines,** Singapore - Branch, South Korea – Branch, South Korea – Securities, Taiwan – Branch, Taiwan – Securities, Thailand, Vietnam). Please see the attached link.

For country- specific Markets 360 disclaimers (United States, Canada, United Kingdom, France, Germany, Belgium, Ireland, Italy, Netherlands, Portugal, Spain, Switzerland, Brazil, Turkey, Israel, Bahrain, South Africa, Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, New Zealand, Singapore, South Korea, Taiwan, Thailand, Vietnam) please type the following URL to access our legal notices: https://globalmarkets.bnpparibas.com/gm/home/Markets_360_Country_Specific_Notices.pdf

Some or all of the information contained in this document may already have been published on https://markets360.bnpparibas.com/

Please click here to refer to our Data Protection Notice.

IMPORTANT DISCLOSURES by producers and disseminators of investment recommendations for the purposes of the Market Abuse Regulation:

Although the disclosures provided herein have been prepared on the basis of information we believe to be accurate, we do not guarantee the accuracy, completeness or reasonableness of any such disclosures. The disclosures provided herein have been prepared in good faith and are based on internal calculations, which may include, without limitation, rounding and approximations.

The date and time of the first dissemination of this investment recommendation by BNPP or an affiliate is addressed herein.

BNPP and/or its affiliates may be a market maker or liquidity provider in financial instruments of any issuer(s) mentioned in the recommendation.

BNPP and/or its affiliates may provide such services as described in Sections A and B of Annex I of MiFID II (Directive 2014/65/EU), to any issuer(s) to which this investment recommendation relates. However, BNPP is unable to disclose specific relationships/agreements due to client confidentiality obligations.

Section A and B services include A. Investment services and activities: (1) Reception and transmission of orders in relation to one or more financial instruments; (2) Execution of orders on behalf of clients; (3) Dealing on own account; (4) Portfolio management; (5) Investment advice; (6) Underwriting of financial instruments and/or placing of financial instruments on a firm commitment basis; (7) Placing of financial instruments without a firm commitment basis; (8) Operation of an MTF; and (9) Operation of an OTF. B. Ancillary services: (1) Safekeeping and administration of financial instruments for the account of clients, including custodianship and related services such as cash/collateral management and excluding maintaining securities accounts at the top tier level; (2) Granting credits or loans to an investor to allow him to carry out a transaction in one or more financial instruments, where the firm granting the credit or loan is involved in the transaction; (3) Advice to undertakings on capital structure, industrial strategy and related matters and advice and services relating to mergers and the purchase of undertakings; (4) Foreign exchange services where these are connected to the provision of investment services; (5) Investment research and financial analysis or other forms of general recommendation relating to transactions in financial instruments; (6) Services related to underwriting; and (7) Investment services and activities as well as ancillary services of the type included under Section A or B of Annex 1 related to the underlying of the derivatives included under points (5), (6), (7) and (10) of Section C (detailing the MiFID II Financial Instruments) where these are connected to the provision of investment or ancillary services.

LEGAL NOTICE

BNPP and/or its affiliates do not, as a matter of policy, permit pre-arrangements with issuers to produce recommendations. BNPP and/or its affiliates as a matter of policy do not permit issuers to review or see unpublished recommendations. BNPP and/or its affiliates acknowledge the importance of conflicts of interest prevention and have established robust policies and procedures and maintain effective organisational structure to prevent and avoid conflicts of interest that could impair the objectivity of this recommendation including, but not limited to, information barriers, personal account dealing restrictions and management of inside information.

BNPP and/or its affiliates understand the importance of protecting confidential information and maintain a "need to know" approach when dealing with any confidential information. Information barriers are a key arrangement we have in place in this regard. Such arrangements, along with embedded policies and procedures, provide that information held in the course of carrying on one part of its business to be withheld from and not to be used in the course of carrying on another part of its business. It is a way of managing conflicts of interest whereby the business of the bank is separated by physical and non-physical information barriers. The Control Room manages this information flow between different areas of the bank where confidential information including inside information and proprietary information is safeguarded. There is also a conflict clearance process before getting involved in a deal or transaction.

In addition, there is a mitigation measure to manage conflicts of interest for each transaction with controls put in place to restrict the information flow, involvement of personnel and handling of client relations between each transaction in such a way that the different interests are appropriately protected. Gifts and Entertainment policy is to monitor physical gifts, benefits and invitation to events that is in line with the firm policy and Anti-Bribery regulations. BNPP maintains several policies with respect to conflicts of interest including our Personal Account Dealing and Outside Business Interests policies which sit alongside our general Conflicts of Interest Policy, along with several policies that the firm has in place to prevent and avoid conflicts of interest.

The remuneration of the individual producer of the investment recommendation may be linked to trading or any other fees in relation to their global business line received by BNPP and/or affiliates.

IMPORTANT DISCLOSURES by disseminators of investment recommendations for the purposes of the Market Abuse Regulation:

Where relevant, the BNPP disseminator of the investment recommendation is identified herein including information regarding the relevant competent authorities which regulate the disseminator. The name of the individual producer within BNPP or an affiliate and the legal entity the individual producer is associated with is identified herein. The date and time of the first dissemination of this investment recommendation by BNPP or an affiliate is addressed herein. Where this investment recommendation is communicated by Bloomberg chat or by email by an individual within BNPP or an affiliate, the date and time of the dissemination by the relevant individual is contained in the communication by that individual disseminator.

The disseminator and producer of the investment recommendations are part of the same group, i.e. the BNPP group. The relevant Market Abuse Regulation disclosures required to be made by producers and disseminators of investment recommendations are provided by the producer for and on behalf of the BNPP Group legal entities disseminating those recommendations and the same disclosures also apply to the disseminator.

If an investment recommendation is disseminated by an individual within BNPP or an affiliate via Bloomberg chat or email, the disseminator's job title is available in their Bloomberg profile or bio. If an investment recommendation is disseminated by an individual within BNPP or an affiliate via email, the individual disseminator's job title is available in their email signature.

For further details on the basis of recommendation specific disclosures available at this link (e.g. valuations or methodologies, and the underlying assumptions, used to evaluate financial instruments or issuers, interests or conflicts that could impair objectivity recommendations or to 12 month history of recommendations history) are available at https://globalmarkets.bnpparibas.com/gmportal/private/globalTradeIdea. If you are unable to access the website please contact your BNPP representative for a copy of this document.

LEGAL NOTICE – CREDIT

This document constitutes a marketing communication and has been prepared by Credit Trading Desk Analysts who work closely with the Sales and Trading function within the BNP Paribas group of companies (collectively "BNPP") for, and is directed at, (a) Professional Clients and Eligible Counterparties as defined by the recast Markets in Financial Instruments Directive (2014/65/EU) (MiFID II), and (b) where relevant, persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, and at other persons to whom it may lawfully be communicated (together "Relevant Persons"). Any investment or investment activity to which this document relates is available only to and will be engaged in only with Relevant Persons. Any person who is not a Relevant Person should not act or rely on this document or its content.

The content in this document/communication may contain "Research" as defined under the MiFID II unbundling rules. If the document/communication contains Research, it is intended for those firms who are either in scope of the MiFID II unbundling rules and have signed up to one of the BNP Paribas Global Markets Research packages, or firms that are out of scope of the MiFID II unbundling rules and therefore not required to pay for Research under MiFID II. Please note that it is your firm's responsibility to ensure that you do not view or use the Research content in this document if your firm has not signed up to one of the BNP Paribas Global Markets Research packages, except where your firm is out of scope of the MiFID II unbundling rules.

Please note any reference to EU legislation or requirements herein should be read as a reference to the relevant EU legislation or requirement and/or its UK equivalent legislation or requirement, as appropriate, where applicable, and as the context requires. For example references to "MiFID II" means Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU. and/or such directive as implemented in UK law through the relevant UK legislation and PRA and FCA rules as may give effect to Directive 2014/65/EU, as appropriate, where applicable, and as the context requires.

This document is prepared by Credit Trading Desk Analysts who work closely with the Sales and Trading function within BNPP. This is not a research report and has not been prepared by the BNPP Research Department, and the views expressed herein may differ from those of the BNPP Research Department. This Commentary should not be considered objective or unbiased. BNPP may engage in transactions in a manner inconsistent with the views expressed in this material. BNPP may trade as principal in the instruments (or related derivatives), may have proprietary positions in the instruments (or related derivatives), and may make markets in the instruments (or related derivatives) discussed herein. The author of this Commentary may know the nature of BNPP trading positions and strategies. Sales and Trading personnel are indirectly compensated based on the size and volume of their transactions. This material is based upon information that BNPP considers reliable as of the date hereof, but BNPP does not represent that it is accurate or complete. Any reference to past performance is not indicative of future performance, which may be better or worse than prior results. Any hypothetical, past performance simulations are the result of estimates made by BNPP, as of a given moment, on the basis of parameters, market conditions, and historical data selected by BNPP, and should not be used as guidance, in any way, of future performance. All estimates and opinions included herein are made as of the date of publication. Unless otherwise specified in this publication, there is no intention to update it. In evaluating this material, you should know that it may have been previously provided to other clients and/or internal BNPP personnel, who may have already acted on it.

In providing this document, BNPP offers no investment, financial, legal, tax or any other type of advice to, nor has any fiduciary duties towards, recipients. This document does not constitute a prospectus, or form any part of any offer to sell or issue and is not a solicitation of any offer to purchase any financial instrument, nor shall it or any part of it nor the fact of its distribution form the basis of, or be relied on in connection with, any contract or investment decision. Financial instruments described herein may not be eligible for sale in all jurisdictions or to certain categories of investors.

This material does not constitute a personal recommendation for the purposes of MiFID II or take into account the particular investment objectives, financial conditions, or needs of individual clients. Certain transactions or securities mentioned herein, including derivative products, give rise to substantial risk, including currency and volatility risk, and are not suitable for all investors.

BNPP transacts business with counterparties on an arm's length basis and on the assumption that each counterparty is sophisticated and capable of independently evaluating the merits and risks of each transaction and that the counterparty is making an independent decision regarding any transaction. The author(s) attest that the views expressed in their attached commentary accurately reflect their personal views about any of the subject securities, issuers, or markets; and that no part of their compensation was/is/will be directly or indirectly related to the expressed recommendation or views.

LEGAL NOTICE – CREDIT

To the fullest extent permitted by law, no BNPP group company accepts any liability whatsoever (including in negligence) for any direct or consequential loss arising from any use of, or reliance on, material contained in this publication even where advised of the possibility of such losses.

This document was produced by a BNPP group company. This document is for the use of intended recipients and may not be reproduced (in whole or in part) or delivered or transmitted to any other person without the prior written consent of BNPP. By accepting this document you agree to this.

Neither DTCC Solutions LLC nor any of its affiliates shall be responsible for any errors or omissions in any DTCC data included in this commentary, regardless of the cause and, in no event, shall DTCC or any of its affiliates be liable for any direct, indirect, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or lost profit, trading loses and opportunity costs) in connection with this publication.

Please click here to refer to our Data Protection Notice.

IMPORTANT DISCLOSURES by producers and disseminators of investment recommendations for the purposes of the Market Abuse Regulation:
Although the disclosures provided herein have been prepared on the basis of information we believe to be accurate, we do not guarantee the accuracy, completeness or reasonableness of any such disclosures. The disclosures provided herein have been prepared in good faith and are based on internal calculations, which may include, without limitation, rounding and approximations.

The date and time of the first dissemination of this investment recommendation by BNPP or an affiliate is addressed above.

BNPP and/or its affiliates may be a market maker or liquidity provider in financial instruments of the issuer mentioned in the recommendation.

BNPP and/or its affiliates may provide such services as described in Sections A and B of Annex I of MiFID II (Directive 2014/65/EU), to the Issuer to which this investment recommendation relates. However, BNPP is unable to disclose specific relationships/agreements due to client confidentiality obligations.

Section A and B services include A. Investment services and activities: (1) Reception and transmission of orders in relation to one or more financial instruments; (2) Execution of orders on behalf of clients; (3) Dealing on own account; (4) Portfolio management; (5) Investment advice; (6) Underwriting of financial instruments and/or placing of financial instruments on a firm commitment basis; (7) Placing of financial instruments without a firm commitment basis; (8) Operation of an MTF; and (9) Operation of an OTF. B. Ancillary services: (1) Safekeeping and administration of financial instruments for the account of clients, including custodianship and related services such as cash/collateral management and excluding maintaining securities accounts at the top tier level; (2) Granting credits or loans to an investor to allow him to carry out a transaction in one or more financial instruments, where the firm granting the credit or loan is involved in the transaction; (3) Advice to undertakings on capital structure, industrial strategy and related matters and advice and services relating to mergers and the purchase of undertakings; (4) Foreign exchange services where these are connected to the provision of investment services; (5) Investment research and financial analysis or other forms of general recommendation relating to transactions in financial instruments; (6) Services related to underwriting; and (7) Investment services and activities as well as ancillary services of the type included under Section A or B of Annex 1 related to the underlying of the derivatives included under points (5), (6), (7) and (10) of Section C (detailing the MiFID II Financial Instruments) where these are connected to the provision of investment or ancillary services.

BNPP and/or its affiliates do not, as a matter of policy, permit pre-arrangements with issuers to produce recommendations. BNPP and/or its affiliates as a matter of policy do not permit issuers to review or see unpublished recommendations.

BNPP and/or its affiliates acknowledge the importance of conflicts of interest prevention and have established robust policies and procedures and maintain effective organisational structure to prevent and avoid conflicts of interest that could impair the objectivity of this recommendation including, but not limited to, information barriers, personal account dealing restrictions and management of inside information.

BNPP and/or its affiliates understand the importance of protecting confidential information and maintain a "need to know" approach when dealing with any confidential information. Information barriers are a key arrangement we have in place in this regard. Such arrangements, along with embedded policies and procedures, provide that information held in the course of carrying on one part of its business to be withheld from and not to be used in the course of carrying on another part of its business. It is a way of managing conflicts of interest whereby the business of the bank is separated by physical and non-physical information barriers. The Control Room manages this information flow between different areas of the bank where confidential information including inside information and proprietary information is safeguarded. There is also a conflict clearance process before getting involved in a deal or transaction.

In addition, there is a mitigation measure to manage conflicts of interest for each transaction with controls put in place to restrict the information flow, involvement of personnel and handling of client relations between each transaction in such a way that the different interests are appropriately protected. Gifts and Entertainment policy is to monitor physical gifts, benefits and invitation to events that is in line with the firm policy and Anti-Bribery regulations. BNPP maintains several policies with respect to conflicts of interest including our Personal Account Dealing and Outside Business Interests policies which sit alongside our general Conflicts of Interest Policy, along with several policies that the firm has in place to prevent and avoid conflicts of interest.

The remuneration of the individual producer of the investment recommendation may be linked to trading or any other fees in relation to their global business line received by BNPP and/or affiliates.

IMPORTANT DISCLOSURES by disseminators of investment recommendations for the purposes of the Market Abuse Regulation:

The BNPP disseminator of the investment recommendation is identified above including information regarding the relevant competent authorities which regulate the disseminator. The name of the individual producer within BNPP or an affiliate and the legal entity the individual producer is associated with is identified above in this document. The date and time of the first dissemination of this investment recommendation by BNPP or an affiliate is addressed above. Where this investment recommendation is communicated by Bloomberg chat or by email by an individual within BNPP or an affiliate, the date and time of the dissemination by the relevant individual is contained in the communication by that individual disseminator.

The disseminator and producer of the investment recommendations are part of the same group, i.e. the BNPP group. The relevant Market Abuse Regulation disclosures required to be made by producers and disseminators of investment recommendations are provided by the producer for and on behalf of the BNPP Group legal entities disseminating those recommendations and the same disclosures also apply to the disseminator.

If an investment recommendation is disseminated by an individual within BNPP or an affiliate via Bloomberg chat or email, the disseminator's job title is available in their Bloomberg profile or bio. If an investment recommendation is disseminated by an individual within BNPP or an affiliate via email, the individual disseminator's job title is available in their email signature.

For further details on the basis of recommendation specific disclosures available at this link (e.g. valuations or methodologies, and the underlying assumptions, used to evaluate financial instruments or issuers, interests or conflicts that could impair objectivity recommendations or to 12 month history of recommendations history) are available at https://globalmarkets.bnpparibas.com/gmportal/private/globalTradeIdea. If you are unable to access the website please contact your BNPP representative for a copy of this document.

For country specific disclaimers (UK, France, Germany, Belgium, Ireland, Italy, Netherlands, Portugal, Spain, Switzerland, Canada, United States, Brazil, Turkey, Israel, Bahrain, South Africa, Australia, China, Hong Kong – Branch, Hong Kong – Securities, India – Branch, India – Securities, Indonesia, Japan – Branch, Japan – Securities, Malaysia - BNPP Malaysia Berhad, BNPP - Capital (Malaysia) Sdn Bhd, Malaysia Labuan Branch, Singapore - Branch, South Korea – Branch, South Korea – Securities, Taiwan – Branch, Taiwan – Securities, Thailand, Vietnam). Please see the attached link
Some or all of the information contained in this document may already have been published on https://globalmarkets.bnpparibas.com

The cover image was generated by an artificial intelligence system (DALL·E 3). It is for aesthetic purposes only and should not be used for any other purposes.

BNP PARIBAS

The bank for a changing world