

## Global Markets Analyst

## Lessons From Two Decades of EM Fixed Income Investing

- The growth in EM local debt in the aftermath of the EM BoP crises in the late 1990s and early 2000s led to a significant increase in EM local debt issuance and the creation of a new sovereign asset class alongside EM hard currency sovereign bonds. Two decades on, we draw four broad lessons for investors.
- **A more mature asset class, with less outperformance but more resilience.** Growing up is not all it's made out to be. After a blistering start in the 2000s, returns across EM fixed income have been more modest over the past decade. But while that outperformance has faded, EM fixed income has become a more reliable source of yield in the face of several large shocks, including the Global Financial Crisis, the Covid pandemic and the subsequent inflation surge.
- **In what macro/markets environment does EM fixed income flourish?** EM debt offers a higher yield than for many other sovereign fixed income assets, but uniquely embeds positive cyclical exposure. At the same time, EM fixed income tends to benefit more from global rate relief than other cyclical fixed income assets. The recent market pricing of a soft landing in the US, with growth assets holding up even as more US rate relief is priced in, is a good example of an environment in which EM fixed income can outperform.
- **EM fixed income in broader portfolios.** A higher yield, but differentiated exposure to risks, means that adding EM to fixed income portfolios can offer diversification benefits. Hard currency EM allows investors to achieve higher returns primarily for somewhat higher volatility/risk tolerance Dollar fixed income portfolios. For local currency EM, however, the more differentiated risk exposure compared with other non-US Dollar fixed income implies that there are benefits from holding local currency debt even in portfolios that target lower volatility outcomes.
- **To hedge or not to hedge? Mind the currency risk.** For EM local debt investors, managing currency risk is a key consideration. While the impact of FX on total returns tends to diminish over long horizons, over the past decade, broad US Dollar strength has challenged EM local debt total returns. But this can also shift back and the Dollar's persistently high valuation may gradually erode in the right circumstances. In addition to total return considerations, hedging currency risk in EM local fixed income often involves trading off pro-cyclical exposure against greater alignment with global rate shifts.

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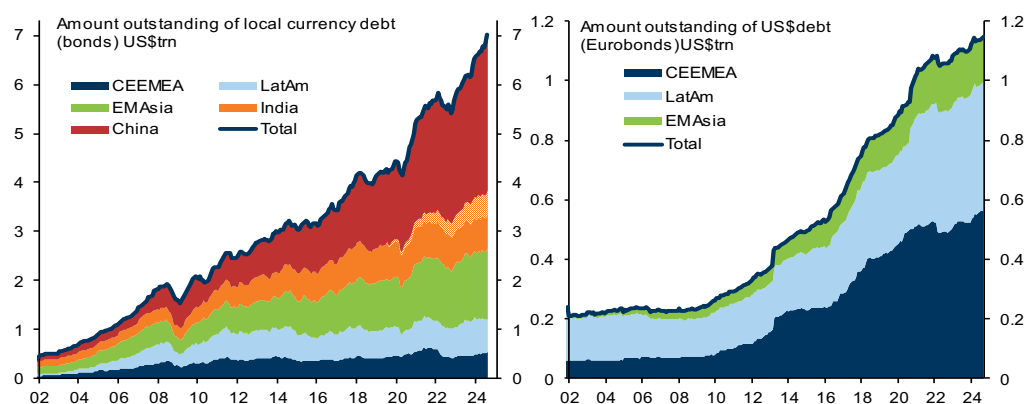
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## Lessons From Two Decades of EM Fixed Income Investing

Investing in fixed income in Emerging Markets (EM) has a long history, beginning in earnest in the early 2000s. In the aftermath of a series of balance of payments crises that involved currency and duration mismatches in the late 1990s and early 2000s (Mexico in 1994-95, the Asian crisis in 1997-98, Russia in 1998, Brazil in 1998-99 and 2001-02, and Turkey and Argentina in 2001-02), there was a concerted move towards the issuance of local currency denominated debt in addition to US Dollar debt, and a corresponding move away from hard currency pegs. In parallel, the growth of domestic financial institutions and external EM institutional mandates has allowed a deepening in EM sovereign fixed income markets. As a result, there has been significant growth in EM debt outstanding over these past couple of decades, with issuance from China and India driving the increase in local debt and the Middle East driving the increase in hard currency issuance ([Exhibit 1](#)). For convenience in the analysis that follows, we proxy for EM hard currency bond returns using the EMBI index and use the GBI-EM index for local currency fixed income returns.

### Exhibit 1: Amount Outstanding of EM Debt Has Grown Substantially Over the Years

Amount of outstanding local currency bonds and external US\$ Eurobond debt, by region



Striped orange - Fully Accessible Route (FAR) IGBs

Source: Bloomberg, Goldman Sachs Global Investment Research, Haver Analytics, National Sources, Eikon Datastream

What have we learnt from the performance of EM sovereign local and hard currency assets over these past two decades, and what do these assets offer for broader fixed income portfolios? These are the questions we look to address in this *Global Markets Analyst*. While there are many strands to the results, we draw four main conclusions:

- 1. What have we learnt from two decades of performance? A more mature asset class, with less outperformance but more resilience.** Growing up is not all it's made out to be. After a blistering start in the 2000s, returns across EM fixed income have been more modest over the past decade. But while that outperformance has faded, EM fixed income has demonstrated an impressive resilience in the face of several large shocks, including the Global Financial Crisis, the Covid pandemic and the subsequent inflation surge.
- 2. In what macro/markets environment does EM fixed income flourish?**

**Differentiated risk betas with a high yield.** EM debt offers a high yield – indeed, a higher yield than for many other sovereign fixed income assets – but uniquely embeds positive cyclical exposure. At the same time, EM fixed income tends to benefit more from global rate relief than other cyclical fixed income assets. So the best periods often tend to be a combination where rates are stable or easing and growth prospects are being re-rated higher.

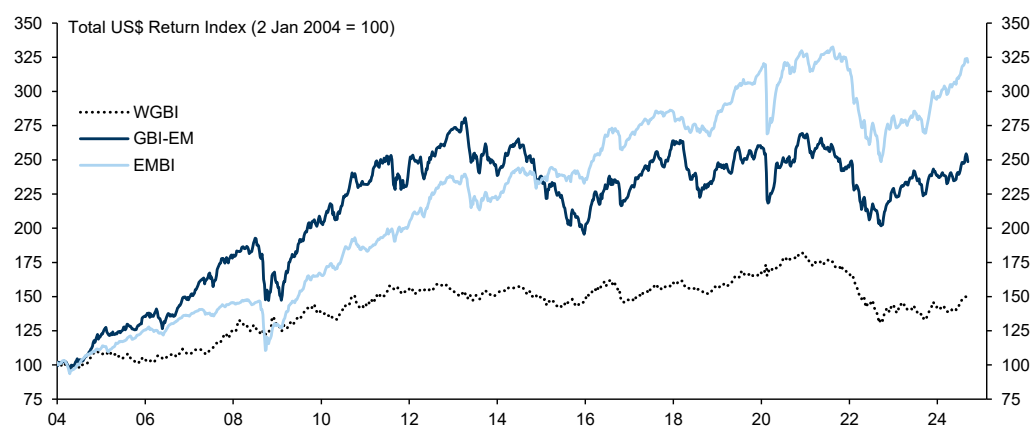
- 3. What role can EM fixed income play in broader portfolios?** Hard currency EM, in particular, allows for higher returns primarily for somewhat higher volatility/risk tolerance portfolios. For local currency EM, however, the more differentiated risk exposure compared with other non-US Dollar fixed income portfolios implies that there are benefits of holding GBI-EM even in portfolios that target lower volatility outcomes.
- 4. To hedge or not to hedge? Mind the currency risk.** For EM local debt investors, management of FX risk has been a key consideration, especially through long persistent periods of Dollar strength. Hedging Dollar risk has been important to total returns in EM and DM. But for EMs, hedging currency exposure completely comes at the cost of giving up cyclical upside.

## A Maturing Asset Class

The performance of EM fixed income over the past 20 years can be divided into two parts. Coming off the back of EM crises and cheap valuations, EM fixed income, especially local currency, recorded a strong period of initial outperformance in the lead-up to the Global Financial Crisis ([Exhibit 2](#)). Even after that, EM fixed income, local and hard currency, continued to generate solid returns, although with more volatility through the ‘taper tantrum’.

### Exhibit 2: A Strong Period of Returns, Followed by a More Mixed Performance for EM Fixed Income

Total US\$ return index for GBI-EM (EM local currency fixed income), EMBI (EM hard currency fixed income) and WGBI (global DM sovereign fixed income)



Source: Goldman Sachs Global Investment Research, Bloomberg

Over the past decade, returns in the EM local debt complex have been much more mixed as a series of shocks have roiled the global macro landscape, including the Trump ‘trade wars’, the Covid pandemic, the Russia-Ukraine war and the subsequent inflation

surge. While volatility has been high and returns have been mediocre (in hard currency) and low (in local currency), in general they have been comparable to other non-US\$ fixed income ([Exhibit 3](#))<sup>1</sup>. In other words, even though US Dollar fixed income has proved a high bar to beat in this more challenging period, EM fixed income has demonstrated a high degree of resilience.

### Exhibit 3: US Dollar EM Sovereign Returns Have Been Consistent in EM, Although Local Debt Performance Has Been More Volatile

US\$ annualised returns across fixed income indices over the last 20 years

US\$ Returns (%)		2004-2009		2009-2014		2014-2019		2019-2024		Total	
		Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
EM	EMBI	4.9%	5	11.5%	3	4.2%	1	1.9%	4	5.6%	2
	GBI-EM	10.6%	1	8.0%	5	-1.1%	9	1.2%	5	4.6%	4
DM Sov	UST	6.5%	3	2.0%	9	2.0%	4	0.5%	6	2.7%	6
	EUR Gov	6.7%	2	3.9%	8	-0.2%	7	-1.7%	8	2.1%	7
	JGBs	5.1%	4	-1.2%	10	1.1%	5	-5.8%	10	-0.3%	10
	Gilts	1.7%	8	7.1%	6	0.1%	6	-2.9%	9	1.4%	9
DM Corp	USD HY	-1.2%	10	19.1%	2	3.7%	2	5.4%	1	6.5%	1
	USD IG	2.2%	7	8.5%	4	3.3%	3	2.6%	2	4.1%	5
	EUR HY	-1.1%	9	21.8%	1	-0.3%	8	2.5%	3	5.3%	3
	EUR IG	3.5%	6	7.0%	7	-1.2%	10	-0.6%	7	2.1%	8

Performance between the start of the period (e.g. start of 2004) and the end of the 5-year period (e.g. end of 2008/start of 2009).

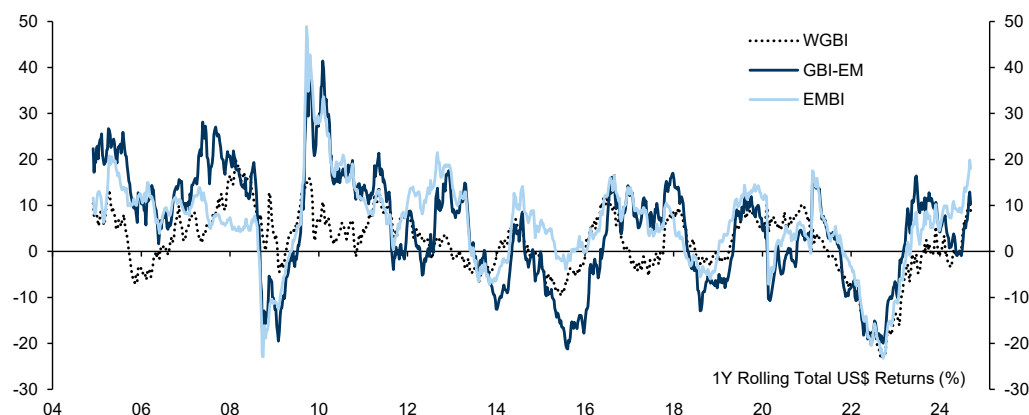
Source: Goldman Sachs Global Investment Research, Bloomberg

That resilience and maturity is most clearly visible in the performance of EM fixed income returns through the most recent post-Covid inflation surge ([Exhibit 4](#)). While returns across the EM fixed income indices were clearly negative as the Fed embarked on one of the most aggressive tightening cycles in history, the drawdowns were no worse than broad DM fixed income indices, and in many cases the subsequent bounce-back was notably sharper.

<sup>1</sup> Throughout the piece, we use GBI-EM to benchmark EM local currency fixed income and EMBI to benchmark EM hard currency fixed income; for USTs we use the Bloomberg US Treasuries index; for EUR Gov we use the iBoxx EUR Sovereigns index; for JGBs we use the Daiwa Bond Index; for Gilts we use iBoxx Gilts. For corporate credit benchmarks, we use Bloomberg US Corporate indices for both USD HY and USD IG, and for EUR HY and IG corporate indices we use ICE BofA ML Euro Area High Yield and iBoxx EUR Corporates indices, respectively. Throughout the piece we refer to 5-year period performance as between the start of the period (e.g. the start of 2004) and the end of the 5-year period (e.g. the end of 2008/start of 2009).

#### Exhibit 4: After a Strong, But Volatile Start, EM Fixed Income Has Matured and Withstood a Number of Major Global Shocks

GBI-EM, EMBI and WGBI total US\$ 1Y rolling return (%)



Source: Goldman Sachs Global Investment Research, Bloomberg

The most recent five-year cycle has interrupted the steady decline in EM fixed income volatility ([Exhibit 5](#)). Nevertheless, the increase in EM fixed income volatility relative to other fixed income assets has been smaller, and we think that, in a more balanced macro environment, the decline in volatility that we had begun to glimpse in the years prior to the more recent shocks can return.

#### Exhibit 5: Steadily Declining Volatility Interrupted in the Last 5 Years in EM Fixed Income

Annualised volatility of US\$ weekly returns across fixed income indices over the last 20 years

Vol of US\$ Returns (%)		2004-2009		2009-2014		2014-2019		2019-2024		Total	
		Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
EM	EMBI	9.5%	8	6.1%	3	4.8%	4	9.0%	7	7.6%	4
	GBI-EM	10.1%	9	9.4%	9	8.3%	10	9.8%	8	9.5%	8
DM Sov	UST	3.6%	1	3.5%	1	2.8%	1	4.4%	1	3.6%	1
	EUR Gov	8.5%	4	9.1%	8	6.5%	6	8.6%	6	8.3%	6
	JGBs	9.0%	7	9.0%	7	8.2%	9	7.8%	3	8.5%	7
	Gilts	8.9%	6	9.0%	6	7.6%	8	13.0%	10	9.8%	9
DM Corp	USD HY	7.6%	3	7.3%	4	4.3%	3	8.3%	4	7.1%	3
	USD IG	4.8%	2	4.3%	2	3.1%	2	7.5%	2	5.2%	2
	EUR HY	12.8%	10	13.3%	10	7.0%	7	11.1%	9	11.4%	10
	EUR IG	8.8%	5	9.0%	5	6.4%	5	8.5%	5	8.2%	5

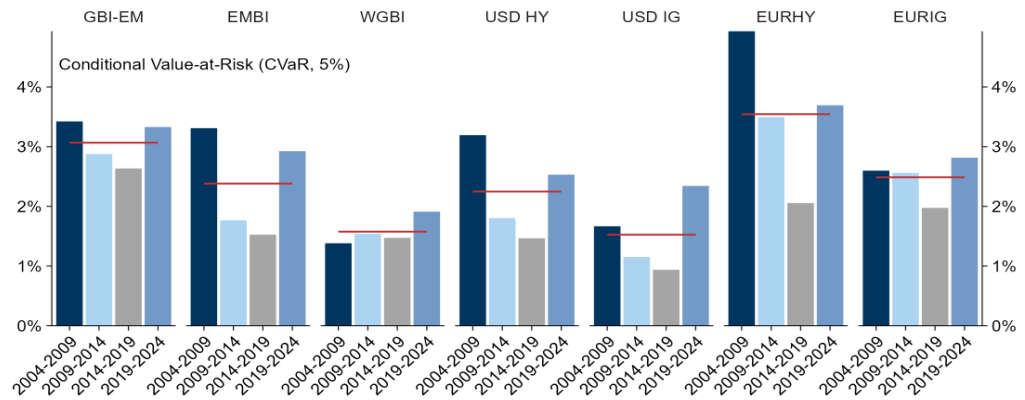
Source: Goldman Sachs Global Investment Research, Bloomberg

We observe a similar pattern when considering how EM fixed income performs in severe downturns. In [Exhibit 6](#) we plot the 5% conditional value-at-risk (CVaR) of EM and other fixed income assets during five-year cycles. This measures the historical average loss of fixed income indices (in US\$ terms) when we reach the 5th percentile of the distribution, and measures the size of negative tails. The takeaways are relatively similar to the pattern we observe for volatility — steadily reducing left-tail risks for EM fixed income — but this pattern was interrupted in the last five-year period<sup>2</sup>.

<sup>2</sup> Examples of left-tail risks in the most recent period include the Covid pandemic and the inflation shock that affected fixed income assets globally, but EM local fixed income was more directly affected by the Russia-Ukraine war, which led to the exclusion and writing down of OFZ bonds.

**Exhibit 6: Declining Left Tails for EM Fixed Income, With a Pick-up In the Last 5 Years**

Conditional Value-at-Risk (5%), or Expected Shortfall of EM and other fixed income assets, using weekly returns

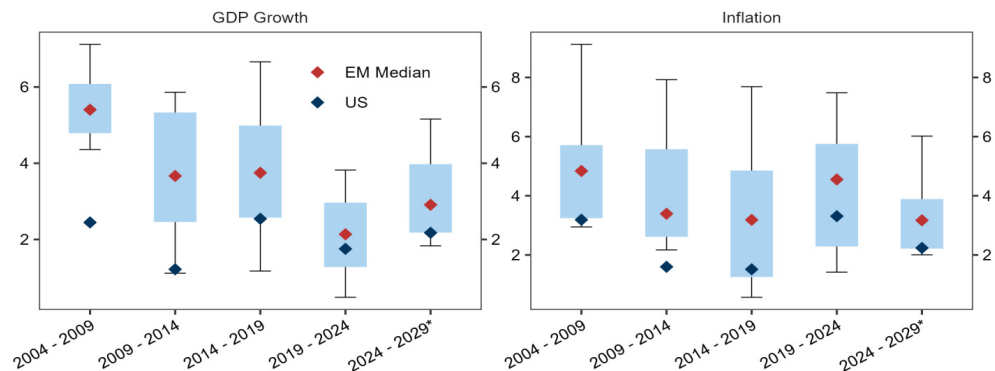


Source: Goldman Sachs Global Investment Research, Bloomberg

The change in the return and volatility profile of EM fixed income has occurred alongside changing economic fundamentals of EM economies. The exceptionally high, but volatile growth rates of the early 2000s have become less exceptional, but more stable (Exhibit 7). The rising prevalence of EM inflation-targeting central banks<sup>3</sup> and an overall improvement in policy frameworks and credibility have allowed EMs to better manage economic cycles, and have also supported an improvement in inflation performance. The policy response of the ‘early-hikers’ in LatAm and the CEE region in the most recent inflation surge is a testament to that shift, and is one of the factors that supported a more durable EM local fixed income bounce-back from the shock last year.

**Exhibit 7: EM Growth Outperformance Has Narrowed, But Inflation Convergence Remains Intact**

Distributions of EM GDP growth rates and inflation over 5-year periods (median, 25-75% percentile (blue range), and 10-90% percentile (error bars))



\*2024-2029 range is based on the latest IMF WEO

Source: Goldman Sachs Global Investment Research, IMF

EM growth today does not come with the same rising external vulnerabilities that it had

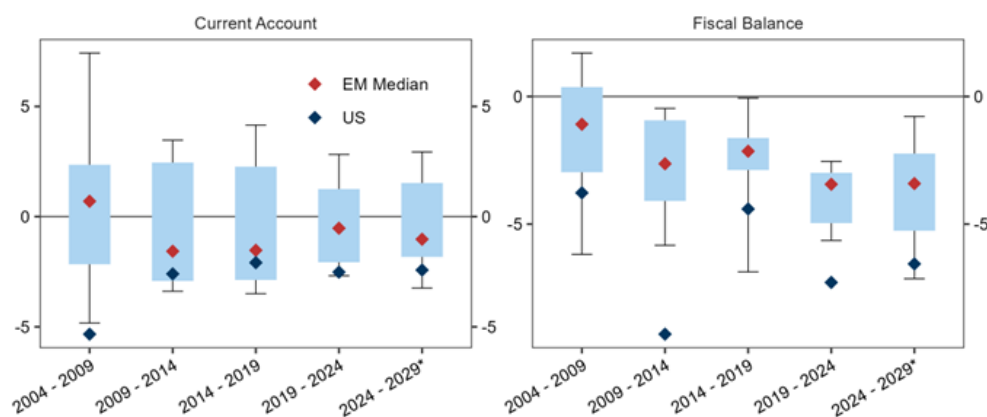
<sup>3</sup> For a more detailed discussion on the convergence of EM inflation and the drivers of this transition, see *EM Macro Themes: The Convergence in EM Inflation*, 26 January 2018.

in the 2000s and early 2010s<sup>4</sup> (Exhibit 8). Lessons from a number of notable balance of payments crises and the 2013 'taper tantrum' have led to EMs largely becoming more wary of running large current account deficits, while also supporting an accumulation of stronger external balance sheets and FX reserve positions.

Fiscal policy, on the other hand, is a concern in a number of key EM markets, especially in economies where growth performance is challenged. Nevertheless, the overall fiscal performance in EMs has been less expansionary compared with their DM counterparts in recent years, including over the Covid period. Arguably, fiscal deficits this time around also carry less risk because they have not been accompanied by a corresponding increase in external vulnerability.

#### Exhibit 8: EMs Have Seen a Reduction in External Vulnerabilities and Smaller Fiscal Imbalances Than DM Economies

Distributions of EM Current Account and Fiscal Balance over 5-year periods (median, 25-75% percentile (blue range), and 10-90% percentile (error bars))



Source: Goldman Sachs Global Investment Research, IMF

While the total return prospects may appear less exciting, we think that the positive structural changes within the asset class are here to stay. This means that the value proposition of the asset class is a more sober combination of resilience and relatively high yields compared with other fixed income assets (Exhibit 9). In addition, as we discuss below, there is added upside optionality in periods where the macro environment is better balanced and where Dollar and US asset exceptionalism is diminished.

<sup>4</sup> For more details on the transformation of EM external balance sheet and vulnerabilities, see *EM Macro Themes: Financial Integration and Net International Investment Positions Before and After the Global Financial Crisis*, 24 March 2017.

**Exhibit 9: EMs Continue to Offer a Higher Yield Than Most Other Fixed Income Assets**

Average yield (%) of fixed income assets

Average Yields (%)		2004-2009		2009-2014		2014-2019		2019-2024		Total	
		Yield	Rank	Yield	Rank	Yield	Rank	Yield	Rank	Yield	Rank
EM	EMBI	7.1%	4	5.7%	4	5.4%	3	6.2%	2	6.1%	4
	GBI-EM	7.2%	3	6.6%	3	6.5%	1	5.8%	3	6.5%	3
DM Sov	UST	4.0%	9	1.5%	9	1.8%	7	2.2%	6	2.4%	9
	EUR Gov	4.0%	8	3.4%	7	1.2%	8	1.3%	9	2.5%	8
	JGBs	1.0%	10	0.7%	10	0.2%	10	0.2%	10	0.6%	10
	Gilts	4.6%	7	3.3%	8	2.0%	6	1.9%	7	2.9%	7
DM Corp	USD HY	8.9%	1	8.5%	2	6.4%	2	6.5%	1	7.6%	1
	USD IG	5.6%	5	4.0%	5	3.3%	5	3.5%	5	4.1%	5
	EUR HY	8.5%	2	9.9%	1	4.2%	4	4.9%	4	6.9%	2
	EUR IG	4.7%	6	4.0%	6	1.2%	8	1.9%	7	3.0%	6

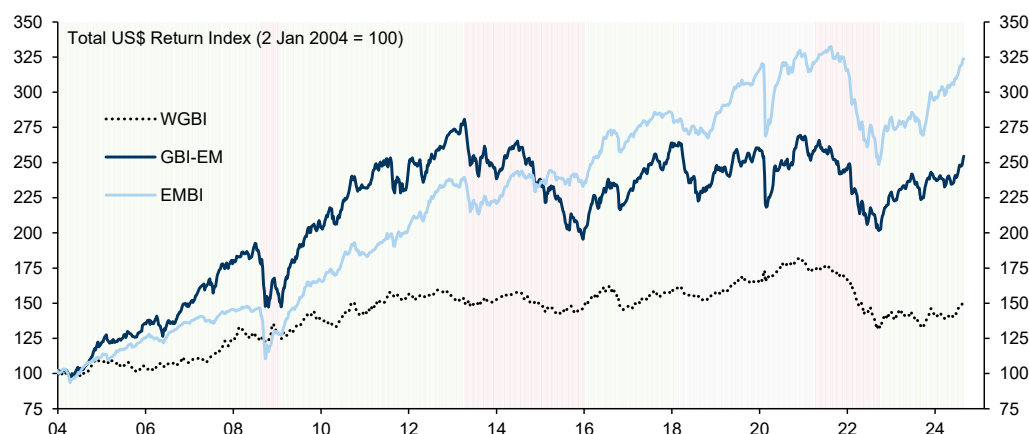
Source: Goldman Sachs Global Investment Research, Bloomberg

**EM Fixed Income and the Macro Environment — What is the ‘Sweet Spot’?**

What have the past 20 years suggested about the kinds of macro market environments that lead to EM fixed income outperforming and underperforming? We answer this by splitting the last two decades into four periods of outperformance (the mid-2000s before the GFC; the recovery from the GFC and up to the ‘taper tantrum’; 2016-2018, before the Trump tariffs; and the last couple of years, post the Covid and Russia-Ukraine war shocks); three periods of underperformance (the most acute phase of the GFC in 2008-09; the period bookmarked by the ‘taper tantrum’ in 2013 and China Devaluation in 2015; and the period spanning the post-Covid inflation surge and Russia-Ukraine War in 2021-22); and one of mixed performance (centred around the Trump tariffs and the Covid pandemic, 2018-2021) ([Exhibit 10](#)).

**Exhibit 10: Episodic Performance of EM Fixed Income Over the Past 20 Years**

Total US\$ return index for GBI-EM, EMBI and WGBI, split into periods of outperformance (green), underperformance (red) and mixed performance (grey)



Source: Goldman Sachs Global Investment Research, Bloomberg

Benchmarked relative to the performance of other analogous macro fixed income assets ([Exhibit 11](#)), a few things stand out:

- EM fixed income tends to perform strongly when risk- and growth-sensitive assets,

including equities and high-yielding credits, do well.

- Periods of outperformance have also tended to coincide with US Dollar weakness, particularly for EM local fixed income. This is also visible through the 2018-2021 period, which covered the Covid pandemic, and resulted in a more meaningful divergence between EM local and hard currency fixed income, with US Dollar dynamics driving a more differentiated market performance between EM assets.
- Periods of EM underperformance have often started with acute market stress. This is most clear in the most intense six-month period of the Global Financial Crisis, and around Russia's invasion of Ukraine and the subsequent commodity price shock.
- Sharp oil price falls have coincided with underperformance but not always. For example, in the 2013-2016 period of underperformance, apart from pressure on EM currencies in the 'taper tantrum', this period also spanned one of the sharpest declines in oil prices and caused a meaningful divergence between local and hard currency returns. On the flip side, periods of rising oil prices have seen significant resilience and even strong performance. These exposures are unlikely to remain static: in the case of EM hard currency, the increase in the share of GCC issuers has increased the positive sensitivity to commodity prices, while the rising prominence of commodity importers in Asia (notably India and China) within the EM local universe has shifted the sensitivity in the other direction.

#### Exhibit 11: EM Performs Well With Cyclical Assets and in Periods of Broad Dollar Weakness

Annualised total US\$ return index for GBI-EM, EMBI, WGBI and other macro assets, split into key periods

Annualised Return (%)	Periods	GBI EM	EMBI	WGBI	EURHY	USDHY	SPX	MSCI-EM	DXY	Brent	UST
Out-performance	6 Jan 2004 - 12 Sep 2008	12.9%	8.0%	4.3%	6.8%	5.0%	2.3%	11.9%	-1.7%	27.9%	4.9%
	9 Mar 2009 - 3 May 2013	17.0%	16.7%	5.1%	26.5%	23.0%	23.3%	15.9%	-1.9%	23.0%	4.1%
	5 Feb 2016 - 6 Apr 2018	12.7%	8.3%	3.5%	12.4%	12.3%	16.2%	18.7%	-3.4%	36.7%	-0.3%
	28 Oct 2022 - 28 Jun 2024	10.3%	11.9%	2.8%	16.2%	10.2%	22.3%	16.2%	-2.7%	-6.0%	3.0%
Under-performance	12 Sep 2008 - 9 Mar 2009	-34.7%	-24.7%	2.3%	-61.1%	-45.2%	-71.7%	-54.9%	27.8%	-80.4%	12.2%
	3 May 2013 - 5 Feb 2016	-11.3%	-0.5%	-0.9%	-2.2%	-1.1%	5.7%	-3.5%	6.2%	-33.3%	1.9%
	7 May 2021 - 28 Oct 2022	-16.7%	-15.0%	-16.7%	-20.4%	-6.6%	-5.4%	-21.5%	14.9%	25.7%	-9.1%
Neutral	6 Apr 2018 - 7 May 2021	0.7%	4.5%	2.8%	3.6%	7.0%	17.0%	7.1%	0.0%	0.6%	4.4%

Source: Goldman Sachs Global Investment Research, Bloomberg

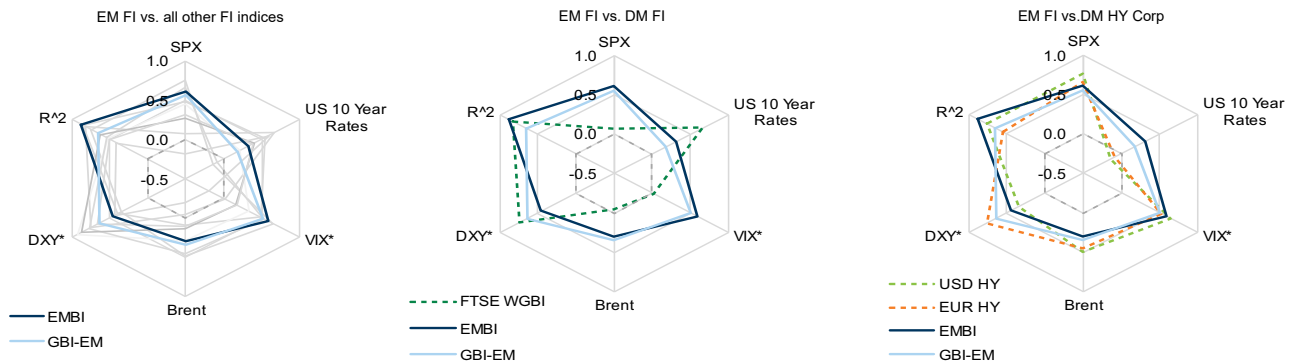
It is possible to take a more systematic look – beyond these event studies – at the macro exposures in EM fixed income compared with other fixed income benchmarks. [Exhibit 12](#) shows radiograms of correlations of EM fixed income. Each axis refers to a different key macro asset as a proxy for risk sentiment (SPX), core duration (US10Y), the broad Dollar (DXY), volatility (VIX), and commodity prices (Brent crude). The left panel shows EMBI and GBI-EM sensitivities highlighted versus all other fixed income assets; the middle panel shows EMBI and GBI-EM versus WGBI, comparing EM sovereign fixed income sensitivities to DM sovereign fixed income sensitivities, and the right panel compares EMBI and GBI-EM versus DM high-yielding corporate credit sensitivities.

Overall, unlike developed market sovereign fixed income, EMs tend to be more positively correlated to, and benefit from, risk-asset performance. At the same time, compared with other more cyclical fixed income assets, such as high-yield credit, EM fixed income tends to benefit more from core rate duration performance. This

combination of sensitivities to core rates and cyclical assets also explains why EM fixed income has been able to outperform in recent months – a market that is able to sustain positive growth pricing within risk assets, while also pricing in US rate relief, tends to represent one of the best environments for EM fixed income. And while EM fixed income does have a significant sensitivity to the broad Dollar, it is of a similar magnitude to non-US fixed income.

**Exhibit 12: EM Fixed Income Tends to Be Correlated to Both Risk and Global Rate Performance**

Correlation of weekly fixed income benchmark performance versus global macro assets



Correlations based on 20-year sample; R<sup>2</sup> is the variance explained of fixed income index performance by all of the global macro assets; \* - for DXY and VIX we flipped the sign to match the direction of pro-cyclical fixed income assets. The dotted grey line represents the zero-correlation line.

Source: Bloomberg, Goldman Sachs Global Investment Research

**The Value of EM Fixed Income for Dollar and Non-Dollar Fixed Income Portfolios**

Given these macro exposures, what is the role of EM fixed income in macro portfolios? Can the risk profile of EM fixed income be replicated by taking a portfolio of safer and more DM sovereign fixed income paired with credit assets? To test the extent to which this is valid, we consider the diversification benefits of adding EM to fixed income portfolios.

We gauge this in a portfolio optimisation exercise. For this, we make simplifying assumptions for the expected returns of each fixed income benchmark,<sup>5</sup> as well as taking the volatility and correlation of fixed income assets relative to each other over the past five years. [Exhibit 13](#) plots these expected returns versus their volatilities. Given that we consider the performance of these assets from the perspective of a US Dollar-based investor, the volatility of non-US Dollar-based benchmarks is typically higher given the FX exposure. We then run simulations of different possible long-only portfolios that combine these benchmarks (represented by light blue dots), and draw the possibility frontier that represents the best possible returns in volatility-adjusted terms (dashed line).

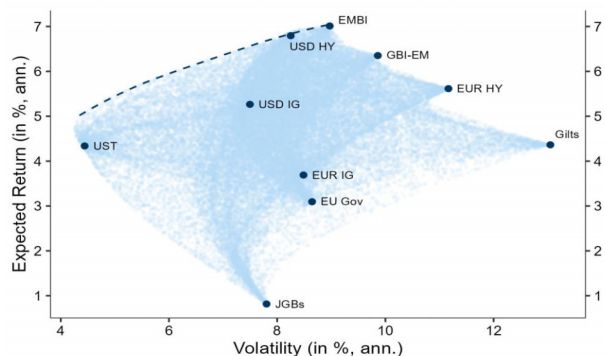
To measure the benefits of including EM in fixed income portfolios, we re-do this

<sup>5</sup> For each fixed income benchmark we consider, we look at the year-to-date average yield in 2024 as a starting point. We assume no impact from FX, nor any impact from duration in driving the returns. For HY credit assets (HY corporate credit, and EMBI), we also subtract from the yield our latest estimate of expected losses from default.

exercise by including and excluding EM benchmarks from the search for best possible volatility-adjusted long-only portfolios. Given the significant difference between the volatility profile of fixed income benchmarks that would carry FX risk, we split the exercise further by considering the change in possible outcomes of excluding and including EMBI to US Dollar fixed income portfolios, and the difference of excluding and including GBI-EM to non-US Dollar fixed income portfolios.

**Exhibit 13: Lower Returns and Higher Volatility For Non-US Dollar Fixed Income**

Assumed expected returns over the next 12M versus estimated volatility over the past 5 years

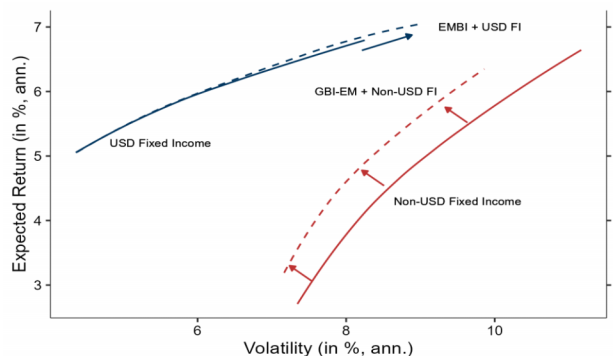


Individual dots represent portfolio outcomes, dashed line - long-only possibility frontier

Source: Goldman Sachs Global Investment Research

**Exhibit 14: Including EMBI and GBI-EM Allows Better Portfolio Outcomes for Portfolio Managers**

Long-only portfolio possibility frontiers under different possible combinations



Source: Goldman Sachs Global Investment Research

Exhibit 14 plots the possibility frontiers for each of these scenarios. In both cases, we see that the inclusion of EM fixed income pushed out the possibility frontier, allowing investors to achieve better expected returns for the same volatility. Including EMBI, in particular, allows investors to achieve higher returns primarily for somewhat higher volatility/risk tolerance portfolios. For GBI-EM, however, the more differentiated risk exposure compared with other non-US Dollar fixed income portfolios implies that there are benefits of holding GBI-EM even in portfolios that target lower-volatility outcomes.

While this exercise is relatively stylised and ultimately the results would hinge on assumptions around expected returns, we think that it nevertheless speaks to the benefits of adding EM fixed income exposure to portfolios. In simple terms, adding EM hard currency sovereigns to a fixed income portfolio expands the universe of USD-denominated debt and provides some diversification benefits, especially at higher levels of risk tolerance, whereas adding local-currency EM fixed income allows for a more distinct set of macro factor exposures that would benefit a traditional fixed income portfolio irrespective of the risk tolerance.

**Navigating FX Exposure: Hedging Can Lower Volatility But Misses Out On Cyclical Upside**

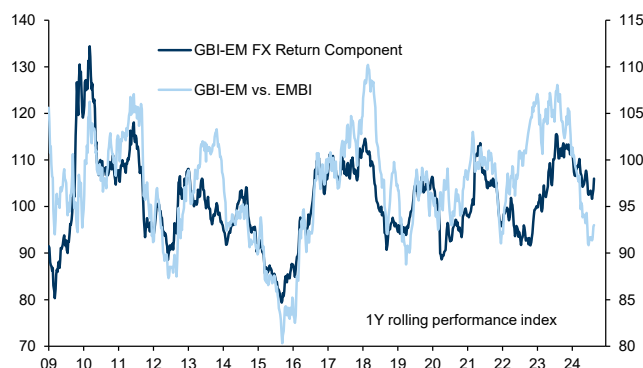
A key source of both risk and return for EM local fixed income assets managers has been the currency component. Broader EM FX developments tend to be the primary differentiator between hard currency and local fixed income assets (Exhibit 15).

At a high level, short-term volatility of FX performance should carry less weight for more

medium- and longer-term investors. The challenge, however, is that over the past twenty years EM FX has experienced relatively persistent periods of performance, at times going through multi-year trends of appreciation and depreciation. In particular, the persistent outperformance of the US Dollar and US Dollar assets has been a drag, overshadowing the asset class in the second decade of the 20-year period. However, it is important not to extrapolate too far the trends of the past ten years: the Dollar’s persistently high valuation over the past decade may also gradually erode if the circumstances are right. The Dollar will remain highly valued in the near term under our central scenario of solid US growth and asset returns, but a better balanced global growth outlook and non-recessionary Fed cuts could mean that this is less of a headwind in the years ahead.

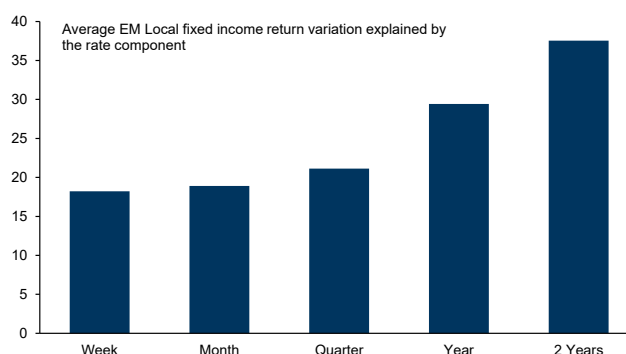
At the same time, the role of FX tends to erode over longer horizons. Looking across individual EM markets, we find that the contribution of the rate component (coupon + duration) to the variation in local fixed income performance (in US\$ terms) increases from an average of between 15% and 20% over very short-term horizons to 35-40% over multi-year horizons (Exhibit 16). Still, even at longer horizons, a significant part of return variation is driven by FX, especially since the relationship between FX and rates tends to be a volatility-adding mix in the case of EMs (i.e., EM FX weakness typically comes with higher local bond yields and lower prices).

**Exhibit 15: FX Dynamics Typically Drive the Relative Performance Between Hard Currency and Local Currency EM Fixed Income**



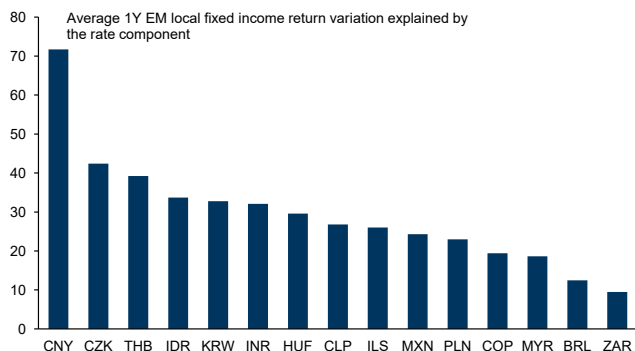
Source: Goldman Sachs Global Investment Research, Bloomberg

**Exhibit 16: The Impact of the Rate Component of EM Local Fixed Income Tends to Rise Over Time**



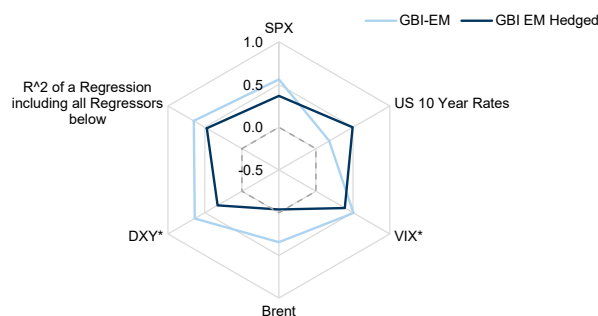
Source: Goldman Sachs Global Investment Research

**Exhibit 17: The Role of FX in Return Volatility is Greater for High-Yielding EMs**



Source: Goldman Sachs Global Investment Research

**Exhibit 18: Hedging EM Fixed Income is a Trade-Off Between Holding More Cyclical Versus More Core Rate Sensitivity**  
Correlation of GBI-EM fixed income returns to macro assets with and without hedging currency risk



Source: Goldman Sachs Global Investment Research, Bloomberg

Moreover, the extent to which FX drives total local bond performance varies across EM ([Exhibit 17](#)). Over a one-year horizon, FX tends to be a more important driver of returns for higher-yielding EMs, for example in South Africa and Brazil, while rates tend to be a more important driver for total returns in somewhat more stable and low-yielding EMs, such as China and Thailand.

Still, hedging this FX risk, which more recently tended to incur an increasingly less negative cost relative to US fixed income, also implies a considerably different risk exposure for EM fixed income. Re-running our historical sensitivity analysis, hedging EM local fixed income tends to become a trade-off between maintaining cyclical exposure versus having much greater sensitivity to core rates ([Exhibit 18](#)). For example, over much of the past decade, hedging Dollar risk would have allowed local EM fixed income returns to more clearly follow the path lower in global rates, and be less negatively affected by the persistence of the Dollar strength.

But, depending on the market environment, hedging currency exposure completely risks missing out on scenarios where both factors are pushing in a more favourable direction. Indeed, one of the biggest drivers of EM local performance over the past few months has been the strong performance of low-yielding Asia FX, which has benefited from US rate relief, even if the follow-through on the rate component was relatively small and the FX carry versus the US Dollar was negative.

**Kamakshya Trivedi, Tadas Gedminas and Emilia Illinger\***

*Emilia is an intern in the Global Markets team.*

## Appendix: Fixed Income Sensitivities Over Time

### Correlation of fixed income US\$ performance with S&P 500

Correlation to SPX		2004-2009		2009-2014		2014-2019		2019-2024		Total	
		Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
EM	EMBI	0.72	8	0.35	6	0.35	9	0.77	9	0.61	8
	GBI-EM	0.69	7	0.55	8	0.31	7	0.66	6	0.56	7
DM Sov	UST	-0.21	2	-0.43	1	-0.31	1	0.02	1	-0.20	1
	EUR Gov	0.27	3	0.25	5	-0.04	3	0.46	3	0.27	3
	JGBs	-0.42	1	-0.19	2	-0.29	2	0.21	2	-0.18	2
	Gilts	0.39	4	0.02	3	0.06	4	0.55	4	0.32	4
DM Corp	USD HY	0.87	10	0.58	9	0.60	10	0.91	10	0.76	10
	USD IG	0.56	6	0.22	4	0.11	6	0.67	7	0.49	6
	EUR HY	0.80	9	0.60	10	0.32	8	0.76	8	0.66	9
	EUR IG	0.49	5	0.46	7	0.09	5	0.60	5	0.45	5

Source: Goldman Sachs Global Investment Research

### Correlation of fixed income US\$ performance with US 10Y performance

Correlation to US 10Y		2004-2009		2009-2014		2014-2019		2019-2024		Total	
		Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
EM	EMBI	0.41	6	0.25	6	0.35	6	0.28	4	0.31	5
	GBI-EM	0.29	4	0.11	5	0.19	3	0.11	2	0.18	3
DM Sov	UST	0.99	10	0.99	10	0.98	10	0.97	10	0.97	10
	EUR Gov	0.47	7	0.10	4	0.41	7	0.60	7	0.40	7
	JGBs	0.58	8	0.48	9	0.59	8	0.76	9	0.60	9
	Gilts	0.25	3	0.31	7	0.33	5	0.56	6	0.38	6
DM Corp	USD HY	-0.15	1	-0.29	2	-0.13	1	0.06	1	-0.15	1
	USD IG	0.61	9	0.34	8	0.75	9	0.61	8	0.54	8
	EUR HY	-0.04	2	-0.30	1	-0.03	2	0.12	3	-0.09	2
	EUR IG	0.33	5	-0.08	3	0.20	4	0.40	5	0.22	4

Source: Goldman Sachs Global Investment Research

### Correlation of fixed income US\$ performance with VIX

Correlation to VIX		2004-2009		2009-2014		2014-2019		2019-2024		Total	
		Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
EM	EMBI	0.82	10	0.37	7	0.41	9	0.56	9	0.59	9
	GBI-EM	0.74	8	0.42	8	0.27	8	0.53	7	0.51	7
DM Sov	FTSE WGBI	0.08	2	-0.08	3	-0.11	2	0.08	2	0.02	2
	EUR Gov	0.32	4	0.13	4	-0.04	4	0.14	3	0.16	3
	JGBs	-0.34	1	-0.19	1	-0.25	1	-0.02	1	-0.19	1
	Gilts	0.25	3	-0.09	2	-0.06	3	0.31	4	0.18	4
DM Corp	USD HY	0.72	7	0.59	10	0.53	10	0.74	10	0.65	10
	USD IG	0.74	9	0.14	5	0.19	7	0.50	6	0.48	6
	EUR HY	0.71	6	0.50	9	0.18	6	0.54	8	0.52	8
	EUR IG	0.55	5	0.29	6	0.00	5	0.31	5	0.33	5

Source: Goldman Sachs Global Investment Research

**Correlation of fixed income US\$ performance with DXY**

Correlation to DXY		2004-2009		2009-2014		2014-2019		2019-2024		Total	
		Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
EM	EMBI	0.45	3	0.40	4	0.31	3	0.64	3	0.45	4
	GBI-EM	0.69	5	0.61	5	0.53	5	0.71	6	0.64	5
DM Sov	FTSE WGBI	0.79	7	0.74	7	0.72	7	0.75	7	0.75	7
	EUR Gov	0.93	9	0.88	9	0.86	8	0.85	9	0.88	9
	JGBs	0.38	1	0.27	1	0.48	4	0.68	4	0.43	3
	Gilts	0.83	8	0.61	6	0.54	6	0.70	5	0.66	6
DM Corp	USD HY	0.40	2	0.33	3	0.12	1	0.51	1	0.35	1
	USD IG	0.46	4	0.32	2	0.12	2	0.57	2	0.39	2
	EUR HY	0.76	6	0.79	8	0.89	9	0.81	8	0.77	8
	EUR IG	0.94	10	0.94	10	0.94	10	0.90	10	0.92	10

Source: Goldman Sachs Global Investment Research

**Correlation of fixed income US\$ performance with Brent Oil**

Correlation to Brent		2004-2009		2009-2014		2014-2019		2019-2024		Total	
		Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
EM	EMBI	0.27	5	0.31	5	0.39	8	0.28	7	0.29	6
	GBI-EM	0.32	7	0.47	7	0.34	7	0.30	8	0.35	8
DM Sov	FTSE WGBI	0.00	2	0.04	2	0.01	3	-0.20	2	-0.05	2
	EUR Gov	0.22	4	0.34	6	0.09	5	-0.01	4	0.14	5
	JGBs	-0.31	1	-0.22	1	0.00	2	-0.23	1	-0.19	1
	Gilts	0.30	6	0.19	4	0.04	4	-0.04	3	0.10	4
DM Corp	USD HY	0.55	9	0.49	8	0.66	10	0.47	10	0.49	10
	USD IG	0.19	3	0.14	3	-0.01	1	0.04	5	0.10	3
	EUR HY	0.57	10	0.59	10	0.41	9	0.36	9	0.46	9
	EUR IG	0.37	8	0.49	9	0.22	6	0.15	6	0.30	7

Source: Goldman Sachs Global Investment Research

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