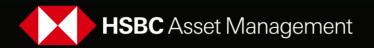
Capital Market Assumptions

1st edition



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The continental drift and expected returns

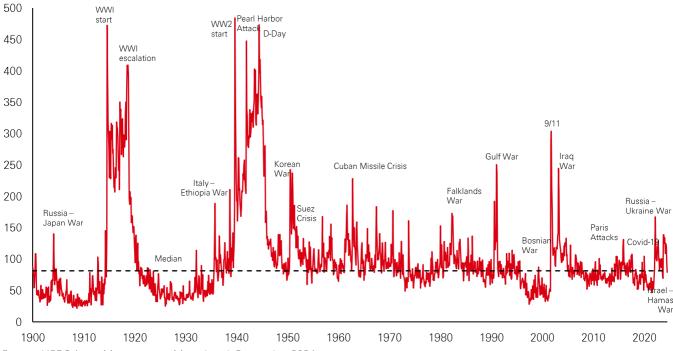
Taking geopolitical risk seriously

Economic fundamentals and current market pricing are the two key concepts underpinning our HSBC AM long-term capital market assumptions. However, increasingly, geopolitical considerations are also shaping how we assess future investment returns for the medium term.

Geopolitical risk is on the rise. GoogleTrends identifies a big pick-up in internet searches for "geopolitics" this year. In figure 1, we show the "geopolitical risk index", a quantitative measure devised by Federal Reserve economists Dario Caldara and Matteo lacoviello. This index tracks newspaper coverage of geopolitical events over time – and even has a track record going back 100 years. Recently, it's been on the rise, and it remains elevated versus historic norms. Finally, in investment markets, we see safe harbours, like gold, among the best performing asset classes in 2024. And with Treasury yields falling in recent months, the yellow metal has further wind in its sails.

Geopolitical considerations are shaping how we assess future investment returns for the medium term

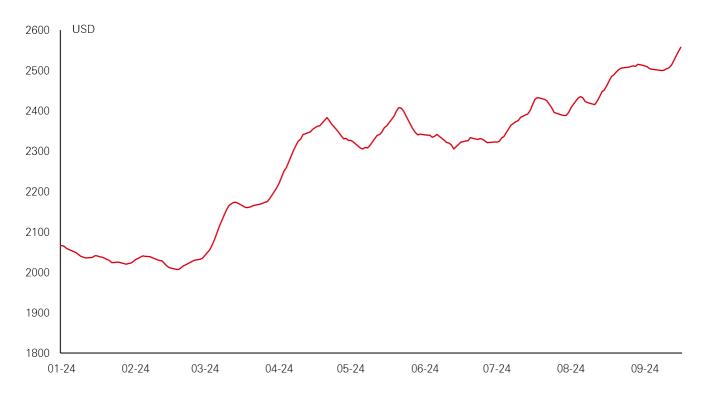
Figure 1 – Geopolitical risk index



Source: HSBC Asset Management, Macrobond, September 2024

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Figure 2 - Gold price in 2024



Source: HSBC Asset Management, Macrobond, September 2024

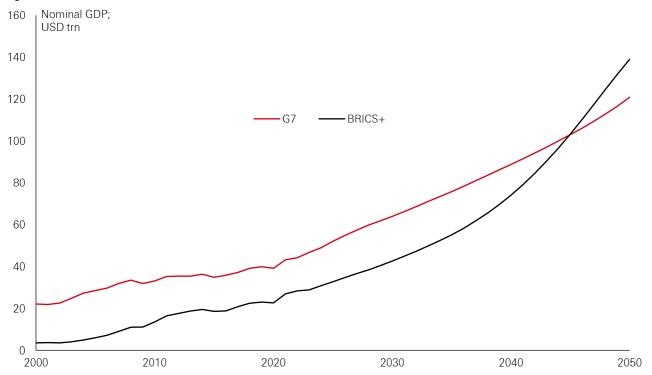
A first question might be, "so what?". Many investors already feel well-equipped to deal with geopolitical risk. Most of the time, after all, the "geopolitical risk premium" has only a fleeting or transitory influence on investment markets. Typically, geopolitical events spark a hectic news cycle, create an impulse of market volatility, and force asset correlations to one. But these effects unwind fairly quickly. And we return to "stocks for the long run".

But this time could be different. There are several reasons why we believe investors need to take geopolitics seriously in their asset allocation considerations. First, economic power is diffusing to Asia and the Global South. By the time we get to the 2030s and 2040s, the BRICS+ group will overtake the G7 as a share of global GDP (Figure 3). This power shift will have profound implications for the macro-economy and the financial system. Second, the global environment has become less friendly to international cooperation. That is a consequence of more populist politics, over-extended supply chains being shrunk back after the pandemic, national governments making greater use of industrial policies, and a dramatic rise in trade interventions (Figure 4). Third, the policies and principles that have stabilised the global order over the last thirty or forty years seem increasingly obsolete. The data already show trade flows becoming more politicised. And a number of economists are speculating that geopolitical forces are now having a "centrifugal" effect on the global order, and risking fragmentation

Investors need to take geopolitics seriously in their asset allocations.

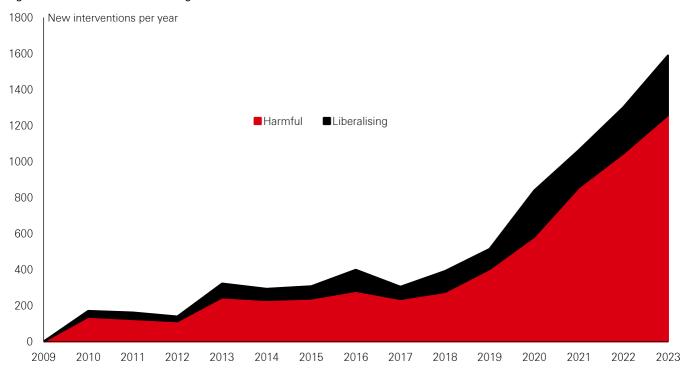
One reason is that economic power is diffusing to Asia and the Global South

Figure 3 – BRICS+ and G7 share of GDP.



Source: HSBC Asset Management, EIU, Macrobond, September 2024

Figure 4 - Trade interventions rising



Source: HSBC Asset Management, EIU, Macrobond, September 2024

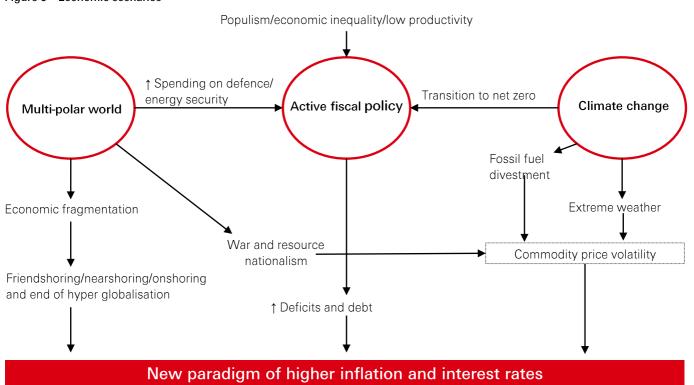
This represents a profound change, possibly creating the most uncertain and complex economic environment for the last thirty years. During the 1990s and 2000s, some economists quipped that we were in the "nice" decades, reflecting a benign mix of No Inflation and Consistent Expansion. That outcome followed from (i) stable geopolitics, (ii) rising globalisation, (iii) technological advances, and (iv) favourable demographics. But if we fast forward to today, these tailwinds are mostly exhausted (with the exception of technology).

It means that the "nice" economic regime now risks being "vile". Or, to spell it out, one of "Volatile Inflation and Limited Expansion". The supply-side of the economy has become more hostile, and much less flexible than we we have become used to. And, as per classical supply and demand calculus, if left unchecked, it implies rising prices and lower economic growth potential.

For investors, it could mean that the new regime has a bit of a retro-feel. With the politicisation of global trade, a move to regionalisation, the return of industrial policy and active fiscal policy, it could end up feeling a bit like the 1960s and 1970s!

Portfolio strategy will need to be prepared for such an eventuality and resilient to the implications of shorter business cycles, greater market dispersion, and changed correlations. More complex asset allocation solutions will likely be required.

Figure 5 – Economic scenarios



Source: HSBC Asset Management, September 2024. For Illustration purposes only

Capital markets assumptions

Our 10-year horizon capital market assumptions reflect the idea that the economic environment and market prices are the key determinants of medium-term investment returns and risks. To set them up, we use a "building block" approach. Starting with an assumption for how macro variables and interest rates will evolve, we then incorporate asset class risk premia based on prevailing market valuations and modelling asset class-specific fundamentals.

The first outcome of this work is our "pecking order of asset class returns", shown in Figure 6. Starting from safety asset classes in the bottom left-hand corner, the chart plots the 10-year expected risk/return for key asset classes. Moving out across the risk spectrum typically yields more return for investors, but the extent of that process will depend on how rich or cheap current market valuations are. Our process covers 300+ asset classes, including granular work on emerging markets and many alternative asset classes.

We use a 'building block' approach for our 10-year horizon capital market assumptions

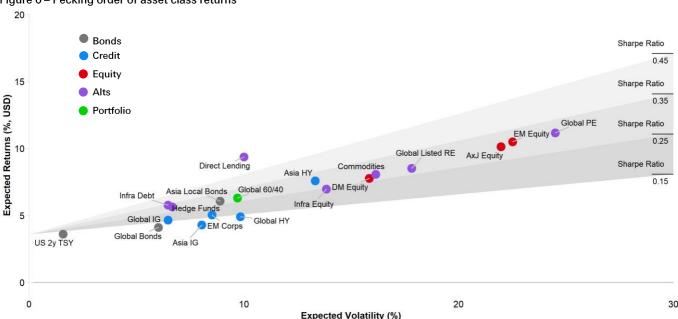


Figure 6 - Pecking order of asset class returns

Source: HSBC Asset Management, as of September 2024

Three asset allocation conclusions stand out from our research. First, the intercept on the capital market line has risen. Despite many global central banks including the US Federal Reserve already cutting rates (and more to follow over the next 12 months), the medium-term economic regime is one of more volatile inflation and a new fiscal/monetary policy mix.

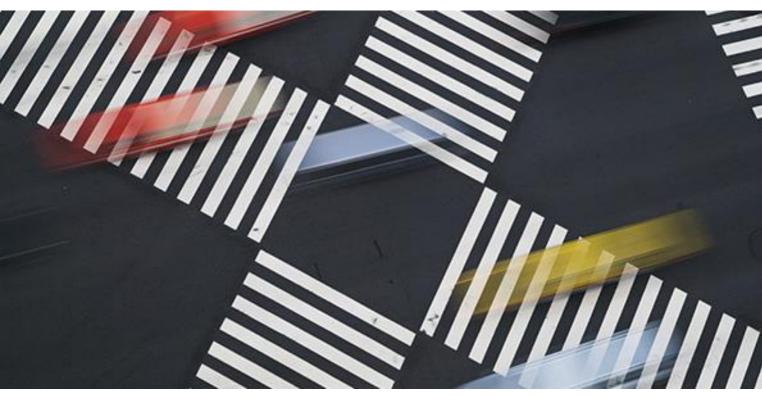
This raises our assumption for medium term interest rates and means that – strategically – the appeal of core fixed income will be heavily influenced by higher carry. Many "senior" credit asset classes, including infrastructure debt, asset backed securities, and global investment grade continue to offer very good "all in" yields.

Second, the slope of the capital market line remains upward. Investment markets have performed strongly in 2024, and a soft landing looks well discounted now. Expected returns and risk premia in asset classes like stocks and credits have fallen. But there remain opportunities to "put cash to work". The most compelling valuation anomaly today is in emerging markets. EM fixed income and equity returns look higher than in most of the G7, and we expect EM currencies to appreciate materially over the medium term. Opportunities in India, North Asia, and frontier markets stand out, as do themes in local currency EM bonds. You can read more on this topic in section 2.

Third, as the economic environment becomes more uncertain and complicated, there needs to be a larger role for private markets and other alternatives in asset allocations. This can take a few different forms, depending upon which part of the capital market line (Figure 6) we are looking at. Lower risk-target portfolios, for example, need to be alert to how the prospect of higher stock/bond correlations could require a greater use of alternative diversifiers, including hedge funds or commodities. Income-focused portfolios will be attracted by the double-digit yields in asset classes like private credit and infrastructure equity. For higher-risk portfolios, the emerging value in real estate and private equity, as the 2021-22 inflation burst finally fades away, could be an area of interest. You can read more on this topic in section 3.

EM fixed income and equity expected returns look higher than most of the G7, and we expect EM currencies to appreciate materially over the medium term

Diversification does not ensure a profit or protect against loss. The level of yield is not guaranteed and may rise or fall in the future.



The strategic opportunity in emerging markets

A new role for emerging markets

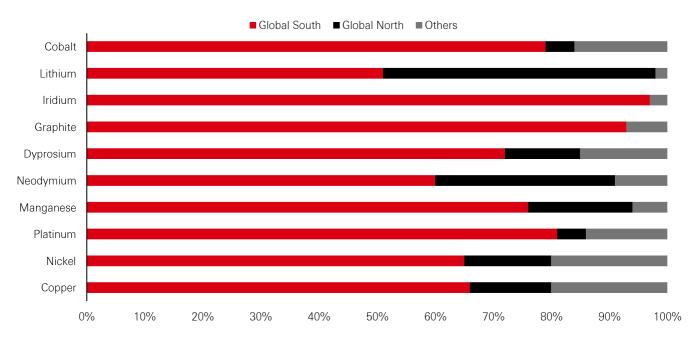
Over the next decade, emerging markets (EMs) are likely to be a land of opportunity for global investors. Even as China's economy slows, other large EMs, notably India, are set to enjoy high secular rates of growth. According to the IMF, EM economies now generate 65% of global growth. We expect this to rise in coming years.

The rise of the Global South means that EM majors are no longer "price takers"; they are shaping the new world order. China is following a policy of import substitution and boosting its share of global exports. This likely increases the importance of Chinese supply for the global economy. In India too, policy has been focused on reducing the reliance and perceived vulnerability to external supply of energy and high-tech manufacturing inputs (e.g. microprocessors).

Figure 7 shows a nice example of how the Global South is at the heart of the energy transition story. Data from the US Geological Survey suggests EM accounts for the bulk of the production of almost all essential minerals, ranging from 51% for lithium to a whopping 97% for iridium.

Emerging markets are set to be a land of opportunity for global investors, with EMs themselves shaping the new world order

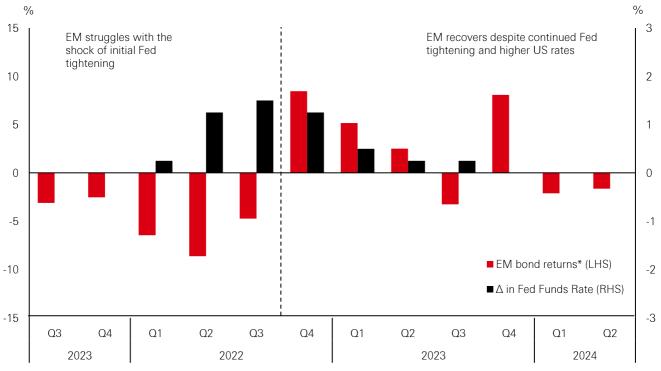
Figure 7 – Key minerals for energy transition (% of production)



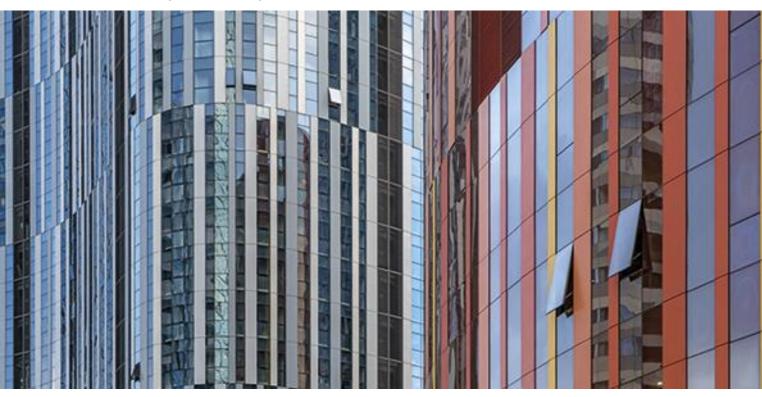
Source: HSBC Asset Management, US Geological Survey and US Department of the Interior, 2023; JRC, 2020

The economic consequence of these geopolitical shifts is likely to be that inflation and interest rates will settle at higher than their pre-Covid averages. But it's important to remember that EM majors have navigated the 2021-22 inflation burst admirably. EM central bankers tightened monetary policy in 2021, well ahead of the US Federal Reserve. And, after an initial wobble in 2022, local-currency assets performed strongly during 2023, at a time when rates in the US and advanced economies were the highest in a generation and recession worries were rife amid persistent growth challenges in China.

Figure 8 - EMs have shown resilience to higher US rates



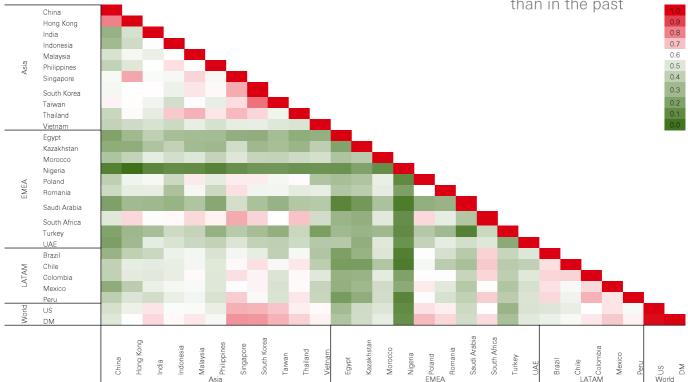
Source: HSBC Asset management, Bloomberg, Macrobond



While EM has historically been viewed as a leveraged play on the US dollar liquidity cycle and the China manufacturing cycle, the experience of 2023 suggests a different playbook in the coming years. Intra-EM return correlations have been much lower than popularly perceived. The reduced vulnerability to US monetary policy is an important milestone for EM, and one which investors will increasingly need to acknowledge in their strategic asset allocations.

Figure 9 – Intra-EM equity correlations have been low in recent years

EMs are collectively less sensitive to US policy and among themselves are a far more diverse and differentiated bunch than in the past



Source: HSBC Asset Management, September 2024

EM expected returns look "higher for longer"

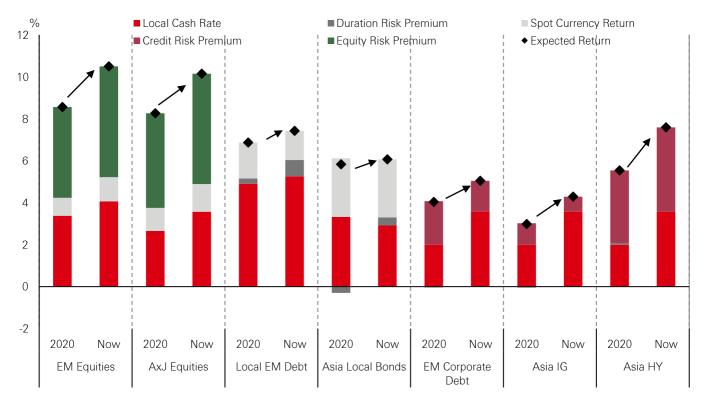
Over the next decade, we expect EM interest rates to be - on average - higher, and EM asset class returns to be higher. Higher cash rates boost total returns, of course, but asset class-specific risk premia too are attractive for a number of EM assets.

The aggregate EM equity risk premium is now wider than it was prior to the commencement of the 2021/22 global policy-tightening cycle. Likewise, the bond risk premium on EM local-currency bonds and the credit risk premium on Asia high-yield bonds are more elevated than at the end of 2020. An important component of this is related to the challenges in China's real estate sector. Prior to the unwind of carry trades over the summer, Asian equity and credit markets were recovering impressively with the MSCI Asia Pacific ex-Japan index entering a technical bull market and Asia high-yield debt strongly outperforming other major credit asset classes. Our expected return estimates were already attractive for those markets; recent price declines have increased them further.

Higher interest rates and higher asset-class risk premia imply higher long-term EM expected returns The combination of high cash rates and risk premia indicates an income and capital gain opportunity. EM local-currency bonds are helped by policy-easing cycles and returning capital flows. Although Brazil is a notable exception to the policy-easing trend, higher yields from policy tightening are serving to boost long-term expected returns.

Higher interest rates and higher asset-class risk premia imply higher long-term EM expected returns

Figure 10 - EM expected return shifts between 2020 and 2024



Source: HSBC Asset Management, Refinitiv, Bloomberg, September 2024.

The level of yield is not guaranteed and may rise or fall in the future.



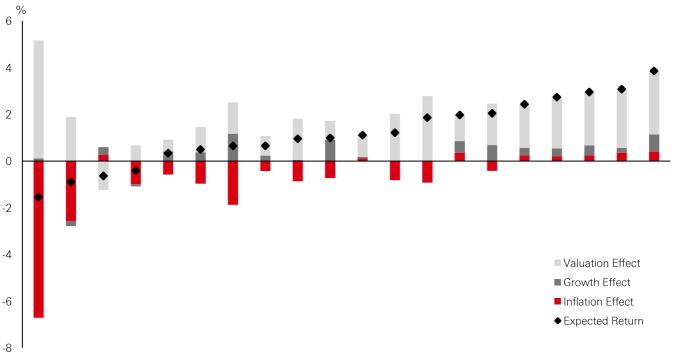
Possible end of US exceptionalism

In the medium term, we think there are strong grounds for optimism that EM can disconnect from fluctuations in the dollar liquidity cycle. But the journey to that point could be a long one. We expect a dollar bear market over the next decade; expensive valuations and large US deficits require a protracted downward adjustment in the dollar. That should create a favourable medium-term backdrop for EM.

Our currency model builds up a return expectation based on: (i) the misalignment between the current spot FX rate and a fundamental "valuation anchor"; and (ii), how that "valuation anchor" will evolve over time. The valuation anchor is based on the inflation-adjusted exchange rates, modified for productivity growth trends. Economies with persistently higher productivity growth tend to experience stronger real exchange rates (the so-called Balassa-Samuelson effect). Our analysis shows that the valuation component is the largest contributor to expected returns for most EM currencies. Every EM currency - barring four - have positive expected returns over a 10-year horizon. And all EM currency rates are expected to outperform their forward rates materially. Monetary easing in the US is an important catalyst for the start of the valuation normalisation cycle in EM.

A structural bear market in the US dollar is likely to be a key tailwind to EM

Figure 11 – FX expected returns are high for most EM currencies



TRY ZAR CZK MXN PLN HUF INR PEN COP PHP ILS CLP BRL THB IDR TWD SGD MYR KRW CNY Source: HSBC Asset Management, Refinitiv, Bloomberg, September 2024

Alternative assets and the new economic regime

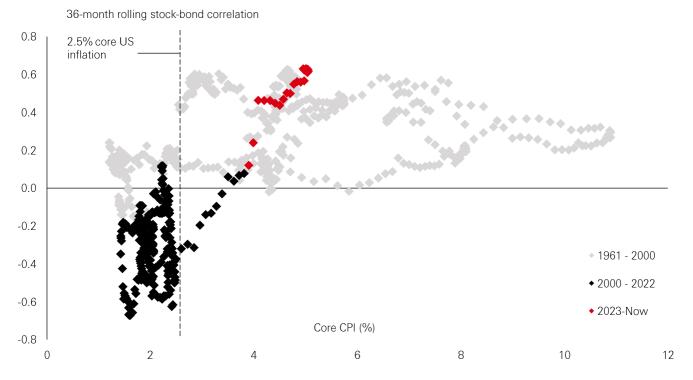
Over the last twenty years, investors have done well by "keeping it simple". Since the 2007-8 financial crisis, a simple strategy of 60% stocks and 40% bonds (especially if focused on the US market) has been hard to beat. Double-digit annual returns were made even sweeter with portfolio volatility dampened down by a reliably negative correlation between stocks and bonds.

But the economic regime appears to be at an inflection point and as discussed above, the future could be "vile" (volatile inflation, limited expansion). If that's right, then "simple" just won't cut it for investors over the next decade; portfolio strategy must become more multifaceted.

Many asset allocators are already moving portfolio strategy in this direction. More volatile inflation means that investors can no longer count on a negative stock-bond correlation. New sources of portfolio diversification and resilience, which can include alternative strategies, will become more valuable. Meanwhile, a tougher outlook for investment returns (our model suggests that the expected return to the 60/40 portfolio will fall to 6.5% annual, before inflation) means that alternative allocations to enhance portfolio yield and boost overall returns are attractive too.

The economic regime appears to be at an inflection point where the future could be VILE (volatile inflation, limited expansion). In this regime, investors can no longer count on a negative stock-bond correlation

Figure 12 - Stock bond correlation and inflation

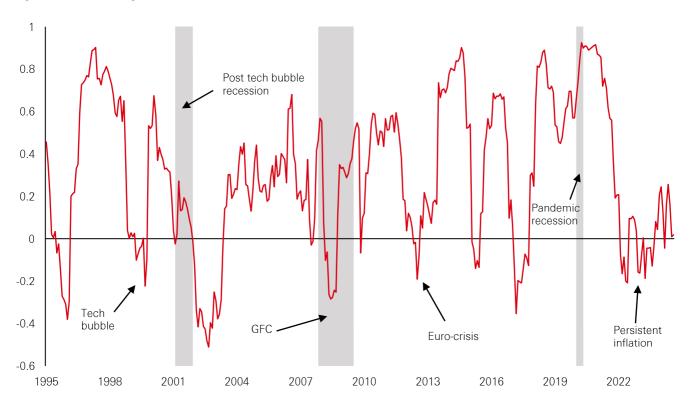


Source: HSBC Asset Management, Bloomberg, GFD, September 2024

Investor interest in alternative assets has skyrocketed, and researching these important asset classes has been a growing priority for our capital markets assumptions program. The expected return models now cover over 30 alternative and private assets, modelled using consistent assumptions and a methodology aligned to the rest of the asset class universe. Of course, alternative assets are diverse in nature, and this means that our approach necessarily becomes a bit more granular, based on technical data sets, and benefitting from the insights of our specialists in HSBC Alternatives.

Uncorrelated returns with hedge funds

Figure 13 - Macro hedge fund correlation with 60/40



Source: HSBC Asset Management, Macrobond, September 2024

Hedge fund strategies can offer uncorrelated returns and valuable tail protection in a more volatile market environment. As the chart shows, hedge funds have provided diversification benefits when the traditional 60/40 portfolio has struggled – with correlations falling to, or below, zero during phases of acute market stress.

To gauge expected returns for hedge funds, we build up a "factor model". This blends risk premia across asset classes and factors, to derive a forecast return for single hedge fund strategies (i.e. fixed income arbitrage), the composite index, and a multi-strategy approach.

With strategy leadership changing, we think multi-strategy and multi-PM styles remain appealing We've seen some oscillation in hedge fund performance already this year, with managed futures notably going from leaders in Q1, to laggards in Q2. Many allocators are also looking again at equity long-short amid significant stock market dispersion, which boosted the appeal of bottom-up stock-pickers. With strategy leadership changing, we think multi-strategy and multi-PM styles remain appealing. Our team also remains positive on discretionary global macro, with those strategies seemingly best-placed to navigate the particularly complex and uncertain economic situation.

Private credit and "all in" yields

A future of somewhat higher and more volatile inflation and higher interest rates than investors experienced during the 2010s means that private credit screens very strongly in our asset class pecking order. Private credit makes up around half of private debt AUM and combines the attributes of typically short-duration loans and fixed time periods. For investors, it means the asset class offers contractually-guaranteed yields that exceed historic stock market returns (Figure 14). Investors need to be alert to inflation and default risks, but our modelling suggests these look acceptable against very high "all in" yields.

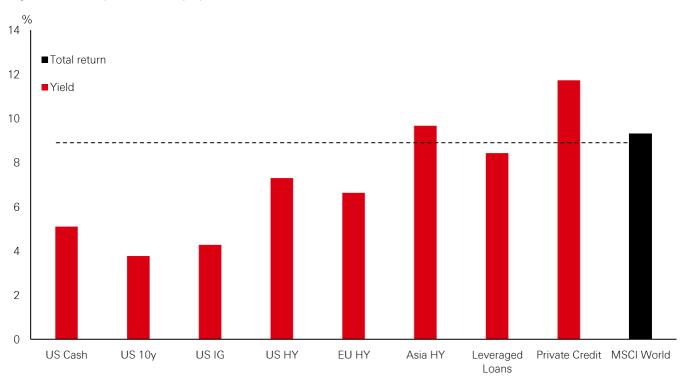
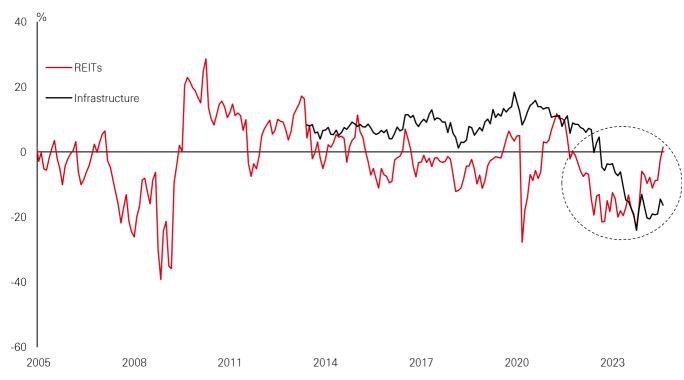


Figure 14 - Credit yields versus equity returns

Source: HSBC Asset Management, Pitchbook, September 2024

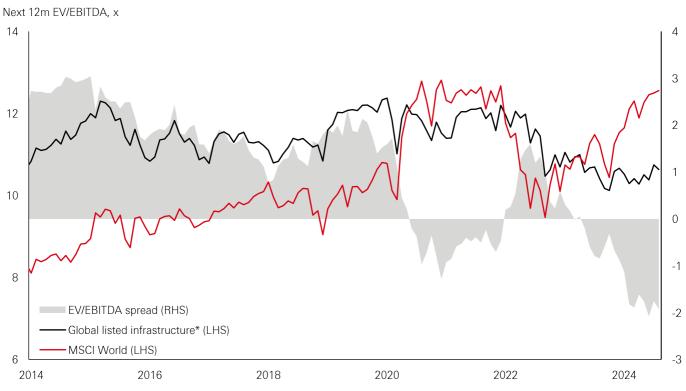
According to data from Pitchbook, private credit fundraising this year has seen its worst start since 2016 and stood at just 37% of 2023's total at the mid-year point. It seems like a difficult time to raise funds for most private credit managers. Activity remains heavily-concentrated with the largest managers, and dominated by North America, but parts of Asia and the GCC are growing strongly.

Figure 15 - Real estate and infra discount to NAV



Source: HSBC Asset Management, Green Street, September 2024

Figure 16 – Listed infrastructure versus global equity next 12m EV/EBITDA



Source: HSBC Asset Management, September 2024. *Dow Jones Brookfield Global Infrastructure

One potential issue for the asset class's return profile is the accumulation of dry powder. According to Pitchbook, dry powder is around \$525bn, but the amount sitting on the sidelines for three years or more is now the largest since 2011. This points to the recent trend of slow M&A deal-making, but also an opportunity for smaller funds, who are not reliant on the largest deals to deploy capital.

The beginnings of a meaningful rate cutting cycle should help REITs, of course, while balance sheets look solid and leverage low by historical standards. With many real estate participants credit-constrained, listed real estate investors may find themselves well placed for internal growth. And valuation discounts could encourage corporate activity as another way to boost shareholder value. Our investment team favours secular themes, like senior housing, and areas with good income growth, like industrial warehouses.

The story is a similar one in listed infrastructure. Laggard and more defensive parts of the market are well aligned with our tactical market views for a more volatile phase in investment markets during H2. Infrastructure's steady and stable return stream could appeal as global growth cools.

The secular perspective is also encouraging for the asset class. Infrastructure investing seems well placed to navigate a global macro system with geopolitical tensions more of a feature than a bug. And to succeed in a new economic environment, where national governments are making more active use of industrial policy, but also where successful digital and energy transitions remain paramount.

Green shoots for private equity?

Our HSBC AM House View has advised cautious positioning on private equity. Increasingly, however, our PE specialists are pointing to green shoots, and the decline in deal-making may be coming to a close. This possible turning point merits investors' attention.

On a like-for-like basis with other asset classes, we measure private equity expected returns in the low teens today. That reflects a sizeable equity and illiquidity premium. For an easy frame of reference, that converts to an IRR of around 20%, i.e. similar to what our PE investment team target on their fund of fund strategy. These returns look attractive and, with valuations now lower after the 2021-22 inflation burst and rapid policy tightening, we may be seeing the beginnings of an interesting entry point for longer-term investors.

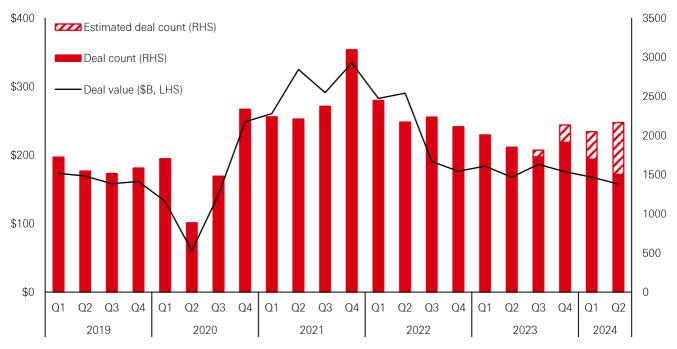
Some headwinds remain for the asset class, however. Exit markets remain mixed; data suggests that exit values are improving, but it is difficult to see a strong bounce back in sentiment or activity levels. During the last quarter, exits were just 36% of investments. That takes a toll on GPs. And suggests that the market has still not found its equilibrium.

Infrastructure investing seems well placed to navigate a global macro system with geopolitical tensions more of a feature than a bug

Our Private Equity specialists point to green shoots, and the decline in deal-making may be coming to an end. This possible turning point merits investors' attention

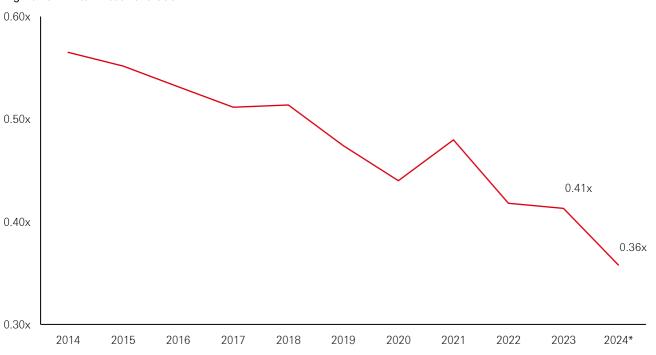
However, we are encouraged by a recovery in activity. Even anecdotal evidence of more deals is a positive for the asset class because it means capital can be returned to investors and recycled into new fund commitments. A complex macro-economic environment poses challenges, but it's also worth keeping an eye on the green shoots in private equity markets.

Figure 17 – Private equity deal activity by quarter



Source: Pitchbook, data as of July 2024

Figure 18 - Exit / investment ratio



Source: Pitchbook, data as of July 2024

10-year expected returns for selected assets

Assets Class	Reference Index	Local Expected Return (%)	Risk Premium	USD Unhedged Expected Return (%)	USD Hedged Expected Return (%)
Cash					
USD Cash	USD Swap OIS	3.58	0.00	3.58	3.58
GBP Cash	UK Base Rate	2.93	0.00	3.74	3.58
EUR Cash	EURO Swap OIS	2.32	0.00	3.62	3.58
JPY Cash	JPY Swap OIS	0.74	0.00	5.87	3.58
Government Bonds					
US Treasury	Current US 10y	3.65	0.06	3.65	3.65
JS Aggregate	Bloomberg US Treasury	3.62	0.03	3.62	3.62
JS TIPS	Bloomberg US Gov Inflation-linked all maturities	4.62	1.04	4.62	4.62
JK Gilts	Current GBP 10yr	3.90	0.97	4.71	4.56
German Bunds	Current German 10yr	1.88	-0.44	3.18	3.15
Euro Aggregate	Bloomberg Euro-Agg Treasury	2.61	0.30	3.91	3.88
Japan	Current Japan 10yr	0.48	-0.26	5.61	3.33
China	Current China 10yr	1.42	-0.09	5.28	3.49
ndia	Current India 10yr	5.90	0.09	6.55	3.68
Asia Local	JPM JADE Global Asia Diversified Broad	3.30	0.38	6.06	3.97
EM Local Currency	JPM GBI-EM Global Diversified	6.04	0.78	7.43	4.37
EM Hard Currency	JPM EMBI Global Diversified	5.45	1.87	5.45	5.45
Global Aggregate	Bloomberg Global Agg	2.86	0.11	4.11	3.69
Global Index Linked (ILBs)	Bloomberg World Gov Inflation-linked all maturities	4.43	1.32	4.90	4.90
Credit					
JS Corporate	Bloomberg US Corporate Agg	4.83	1.25	4.83	4.83
JS Investment Grade	Bloomberg US Investment Grade	e 4.82	1.24	4.82	4.82
JS High Yield	Bloomberg US High Yield	4.90	1.31	4.90	4.90
JS MBS	Bloomberg US MBS	4.01	0.42	4.01	4.01
JS Leverage Loans	JPM Liquid Loan	4.31	0.73	4.31	4.31
Euro Corporate	Bloomberg Euro-Agg Corporate	2.92	0.60	4.22	4.19
Euro Investment Grade	Bloomberg Euro-Agg Corporate Investment Grade	2.81	0.50	4.11	4.08
Euro High Yield	Bloomberg Liquidity Screened Euro High Yield	3.68	1.36	4.98	4.94
Asia Corporate	JPM Asia Credit (JACI)	4.66	1.08	4.66	4.66
Asia Investment Grade	JPM Asia Credit Investment Grade (JACI)	4.29	0.70	4.29	4.29
Asia High Yield	JPM Asia Credit High Yield (JACI)	7.59	4.01	7.59	7.59
EM Corporate	JPM CEMBI	5.04	1.46	5.04	5.04
EM Investment Grade	JPM CEMBI Investment Grade	4.65	1.06	4.65	4.65
EM High Yield	JPM CEMBI High Yield	5.71	2.13	5.71	5.71

Source: HSBC Asset Management, September 2024

Any forecast, projection or target where provided is indicative only and is not guaranteed in any way. HSBC Asset Management accepts no liability for any failure to meet such forecast, projection or target.

10-year expected returns for selected assets

Assets Class	Reference Index	Local Expected Return (%)	Risk Premium	USD Unhedged Expected Return (%)	USD Hedged Expected Return (%)
Credit continued					
Global Corporate	Bloomberg Global Agg Corporate	4.33	1.07	4.68	4.65
Global Investment Grade	Bloomberg Global Agg Corporate Investment Grade	4.28	1.03	4.65	4.62
Global High Yield	Bloomberg Global High Yield	4.68	1.31	4.90	4.90
Global Securitised Credit	80% Bloomberg US ABS Floating Rate, 20% Bloomberg EURO ABS Floating Rate	4.07	0.74	4.33	4.32
Equity					
Global	MSCI ACWI	7.43	4.15	8.04	7.74
Developed Markets	MSCI World	7.23	4.03	7.77	7.62
US	MSCI USA	7.13	3.55	7.13	7.13
UK	MSCI United Kingdom	7.58	4.65	8.39	8.23
Germany	MSCI Germany	8.37	6.06	9.67	9.64
Europe ex UK	MSCI Europe ex UK	7.95	5.76	9.29	9.34
Japan	MSCI Japan	5.97	5.23	11.10	8.82
Hong Kong	MSCI Hong Kong	9.41	5.83	9.41	9.41
Emerging Markets	MSCI Emerging Markets	9.34	5.27	10.49	8.86
China (Onshore)	MSCI China A Onshore	8.92	7.41	12.78	10.99
China	MSCI China	10.65	7.07	10.65	10.65
India	MSCI India	9.47	3.66	10.11	7.24
Asia ex-Japan	MSCI Asia ex Japan	8.82	5.25	10.14	8.83
LATAM	MSCI EM Latin America	16.30	7.57	17.44	11.16
ASEAN	MSCI ASEAN	8.70	5.48	11.08	9.06
Frontier	MSCI Frontier Markets	8.82	5.24	8.82	8.82
GCC	MSCI GCC	7.61	4.03	7.61	7.61
Alternatives					
Hedge Funds	Credit Suisse Hedge Fund	5.64	2.05	5.64	5.64
Private Equity	Pregin Private Equity (Buyout)	11.16	7.58	11.16	11.16
Private Credit	Cliffwater Direct Lending (Senio Only)	9.37	5.78	9.37	9.37
Global REITs	FTSE EPRA/NAREIT Global	7.75	4.73	8.52	8.31
Unlisted Infrastructure					
Equity	Edhec Broadmarket Unlisted Infrastructure Equity	10.73	7.52	11.84	11.11
Debt	Edhec Broadmarket Private Infrastructure Debt	4.95	1.68	5.78	5.27
Commodities	Bloomberg Commodities	8.06	4.48	8.06	8.06
FX*					
JS Dollar	US Dollar (DXY)	-1.78	=	-	=
EM FX	JPM ELMI+	1.57	-	-	-
Asia FX	Bloomberg Asia Dollar	3.00		-	-

^{*}Reported as price return, all others total return. Source: HSBC Asset Management, September 2024

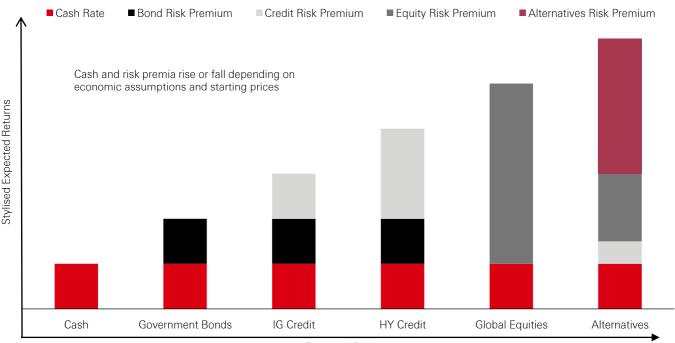
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Technical appendix

Asset class return assumptions come from two key "building blocks": (1) a risk-free interest rate; and (2), a risk premium, which reflects the future reward for taking economic, asset-specific, specialist, or currency risk.

Figure 19 illustrates this idea. The risk-free interest rate is modelled using our scenario for policy interest rates for advanced and emerging economies. Then, based on current market pricing and the economic assumptions for asset class fundamentals, we model a "risk premium" for each asset. By doing this, our expected returns framework is anchored by current market pricing, rather than just our economic forecasts.

Figure 19 - Risk premia time vary



Expected Risk

Source: HSBC Asset Management, For illustrative purpose only

Under normal economic and market conditions, the more risk we take, the greater the return. But over the market cycle, the implied rewards (or risk premium) to each asset class can vary materially. This means that, in real time, the bars in Figure 19 will move up and down; sometimes risk will be over-rewarded, and at other times, under-rewarded.

This framework provides a disciplined way to assess the changing market odds across our investable universe. And can help asset allocators to tilt investment portfolios through time, in favour of more attractively-priced asset classes and away from less-attractive ones.

We currently estimate expected returns for 300+ asset classes, including developed and emerging economies, alternative assets, and currencies. Figure 20 explains some key details. Further information on our approach is available.

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Technical appendix

Figure 20 - Expected returns framework

Cash

- In the near-term, our scenario is informed by cyclical economic and policy analysis
- Over the medium term, interest rates are assumed to mean-revert to their equilibrium values
- Equilibrium assumptions are set with reference to our economists' views on long-horizon neutral rates.
- Equilibrium assumptions for DM and EM economies are made consistent with their structural characteristics.

Bonds

- Current bond yields implicitly reflect an average cash rate and a bond risk premium
- We imply today's bond risk premium from the forward curve and our cash scenario
- We then model a reversion to an equilibrium bond risk premium
- The return calculation for DM and EM bond returns reflects carry, roll returns and capital gains/losses

Credits

- We build a scenario for how credit spreads will evolve, and model recovery and default rates
- ◆ Those economic and market assumptions are supported by historical analysis, as well as by the valuable inputs from our large DM and EM credit research teams
- ◆ The modelled credit risk premium reflects: (i) carry pick-up, (ii) a default loss, (iii) and a gain/loss from spread changes

Equities

- We follow a 3-stage dividend discount model for DM and EM stock markets, sectors, and factors (including ESG)
- First stage incorporates the information from analyst expectations
- Second stage converges cyclical assumptions toward an economic-led equilibrium
- A final stage reflects long run profits assumptions, and a normalised equity risk premium

Alternatives

- Hedge Funds are modelled as strategies with exposure to market and specialist betas
- PE IRRs forecasted and combined with deployment/distribution assumptions
- Listed Real Assets modelled using equity approach.
 Unlisted Real Assets on a hold-to-maturity basis (debt) and using specialised data (equity)
- Commodity future returns reflect margin, roll yields, and spot moves

Currencies

- We assume that spot FX rate will move to fair value over time
- Fair value is determined by Purchasing Power Parity, adjusted for productivity differentials
- Reversion to fair value is slow. And mis-pricings correct over time
- Total asset return assumptions reflect cash returns, asset risk premia, and FX (i.e. hedged or unhedged currency risk)

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