

Schroders



Schroders Credit Lens

Perspective of EUR investor

Strategic Research Unit

March 2023

Marketing material for professional investors or advisers only.

Important information

- **These do not represent the investment views of Schroders' credit teams**
- Marketing material for professional investors and advisors only
- Past performance is not a guide to future performance and may not be repeated
- Yields and returns are shown hedged to EUR unless stated otherwise
- All credit spreads are option-adjusted spreads (OAS) unless stated otherwise
- Spreads are quoted in basis points (bps) where 100 basis points = 1%
- Full list on indices on page 69

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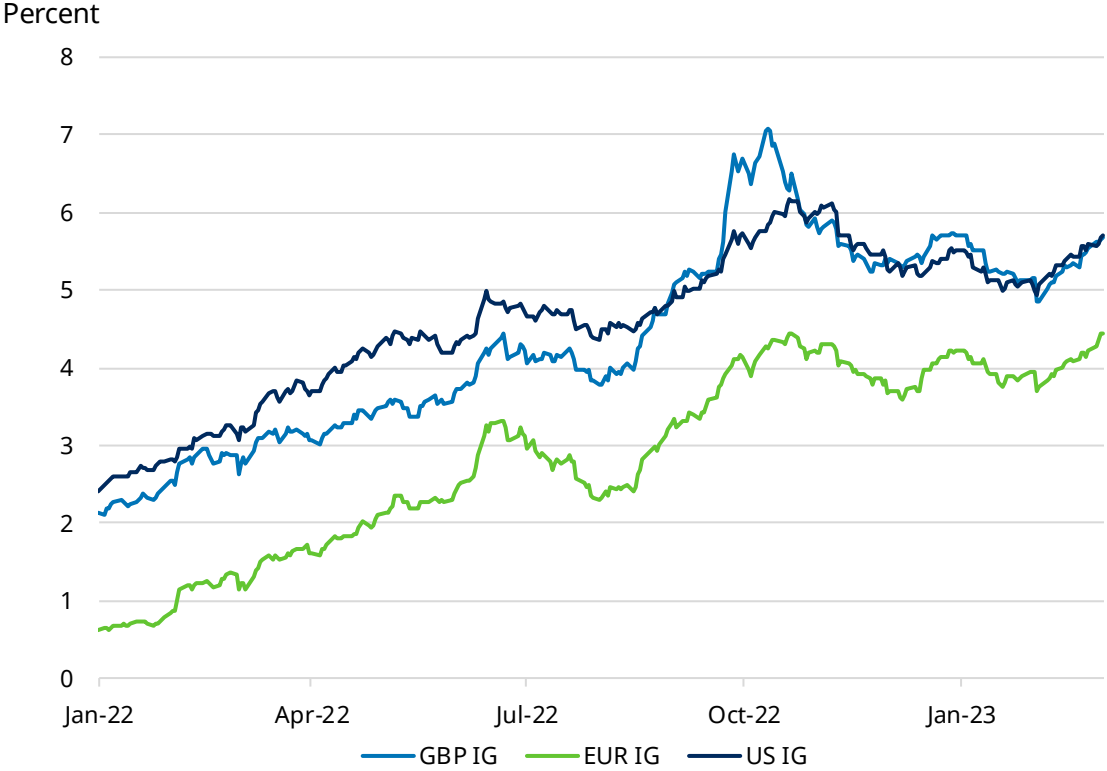
Summary

- **Corporate bond yields remain elevated and reversed some of the falls seen in January, on anticipation of policy rates staying higher for longer**
- High-yield (HY) credit spreads continued to tighten over the month, but the year-to-date (YTD) rally faded slightly, and investment-grade (IG) spreads were little changed
- Compensation for duration risk remains low, with credit curves being very flat. Longer maturity bonds offer little extra yield over shorter dated bonds
- Issuance has started the year strongly, with YTD investment-grade issuance notably higher than the same period in 2022. High-yield issuance is slightly down.
- Default rates in high-yield have slowly started to rise. More elevated distress ratios indicate that defaults could start to increase in 2023

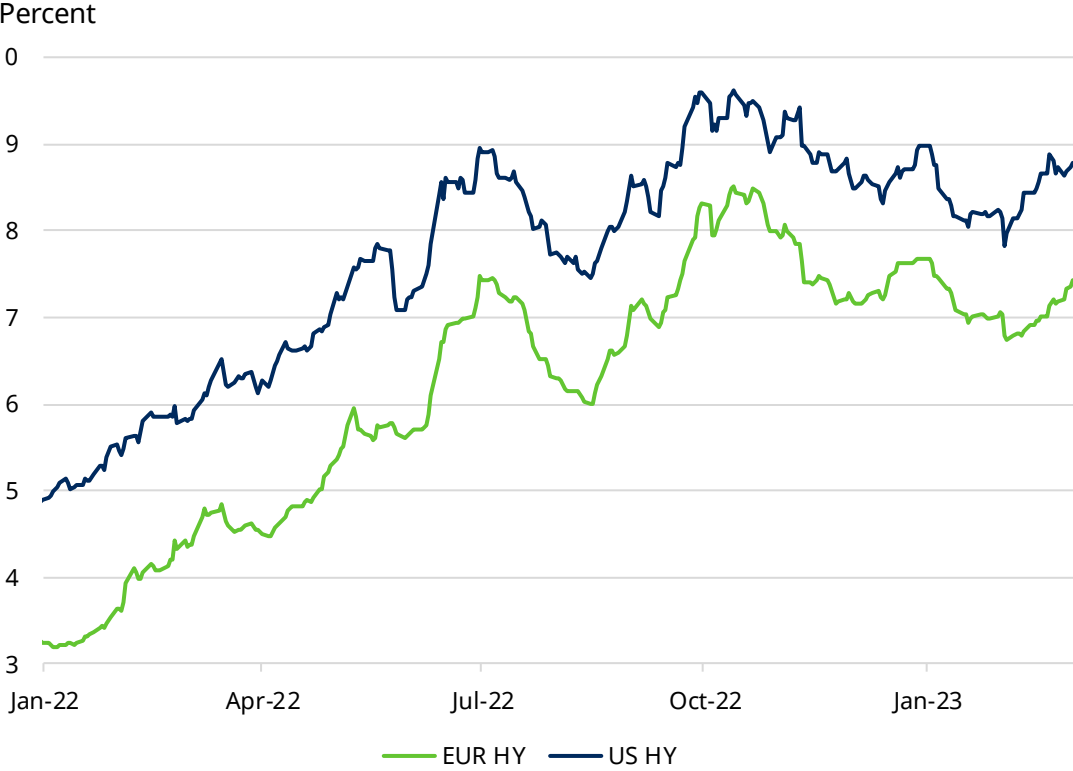
Corporate bond yields moved back higher, on anticipation of policy rates staying higher for longer

Yields remain close to the recent highs seen in 2022 Q4

IG yield



HY yield



Source: Refinitiv Datastream. Data as at 2 March 2023. Charts show local currency yields.

After a period of significant tightening, the rally in credit spreads faded slightly

Spreads remain much lower than highs seen in Q4

IG Spread



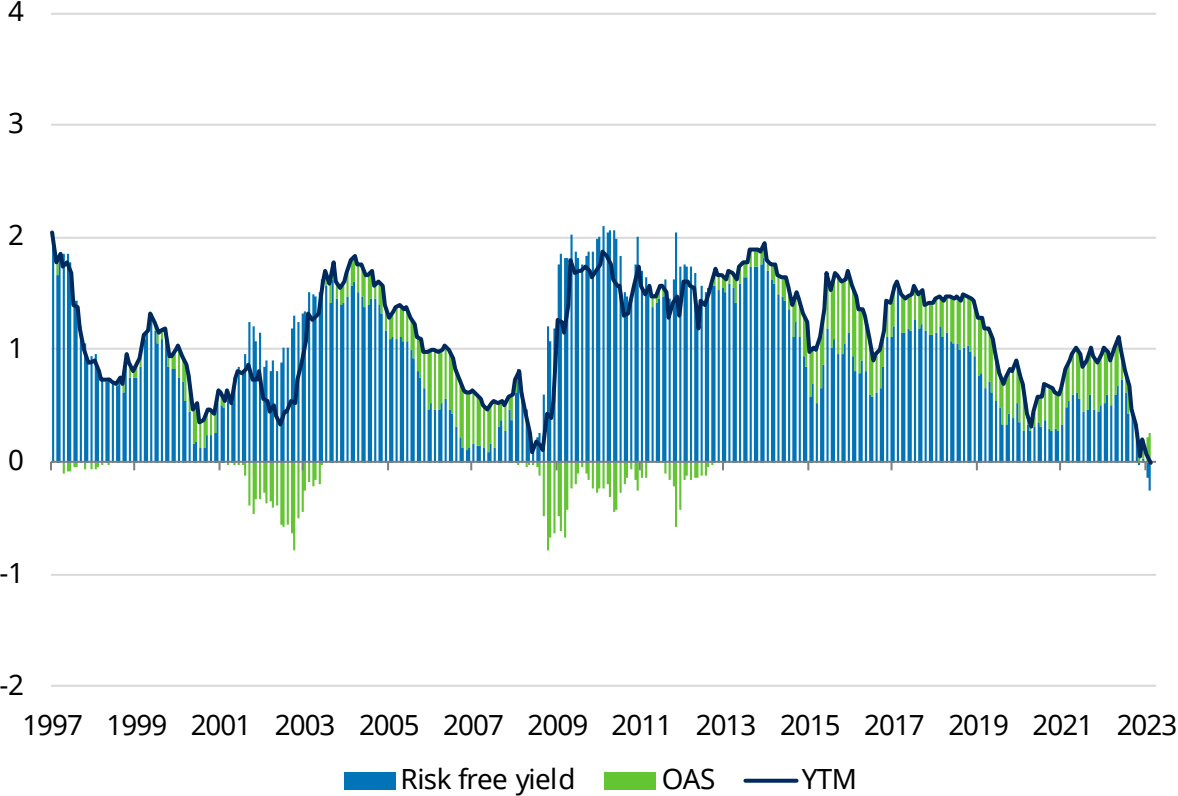
HY Spread



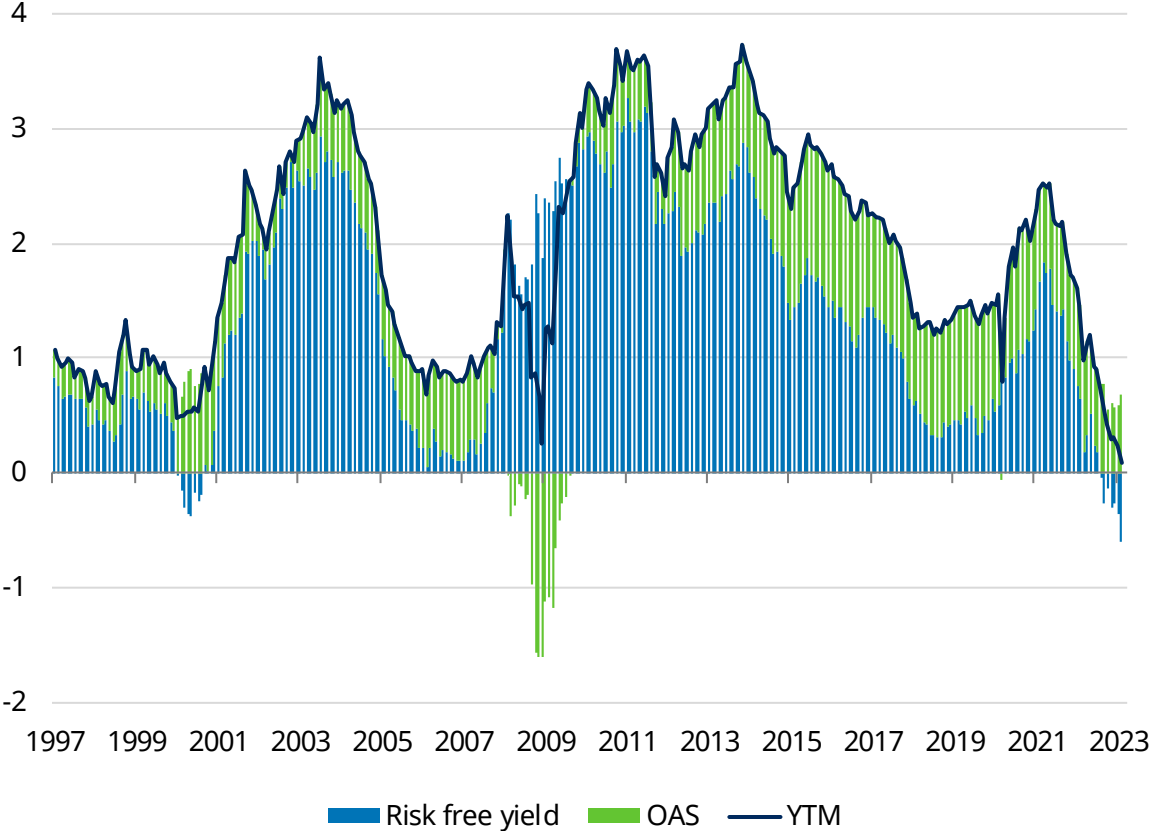
Source: Refinitiv Datastream. Data as at 2 March 2023.

Compensation for duration risk remains low, with credit curves very flat

IG EUR 10+ minus 1-5 year index yield (%)



IG USD 15+ minus 1-5 year index yield (%)



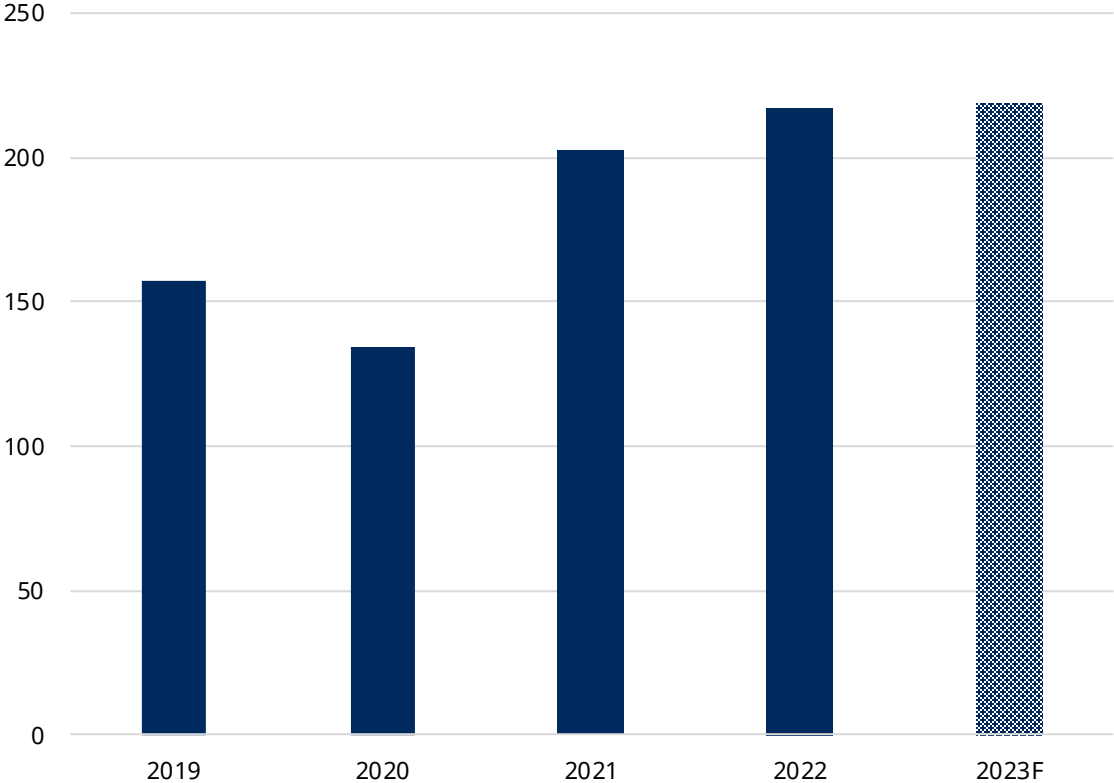
Source: Refinitiv Datastream. Data as at 28 February 2023.

Summary of corporate fundamentals

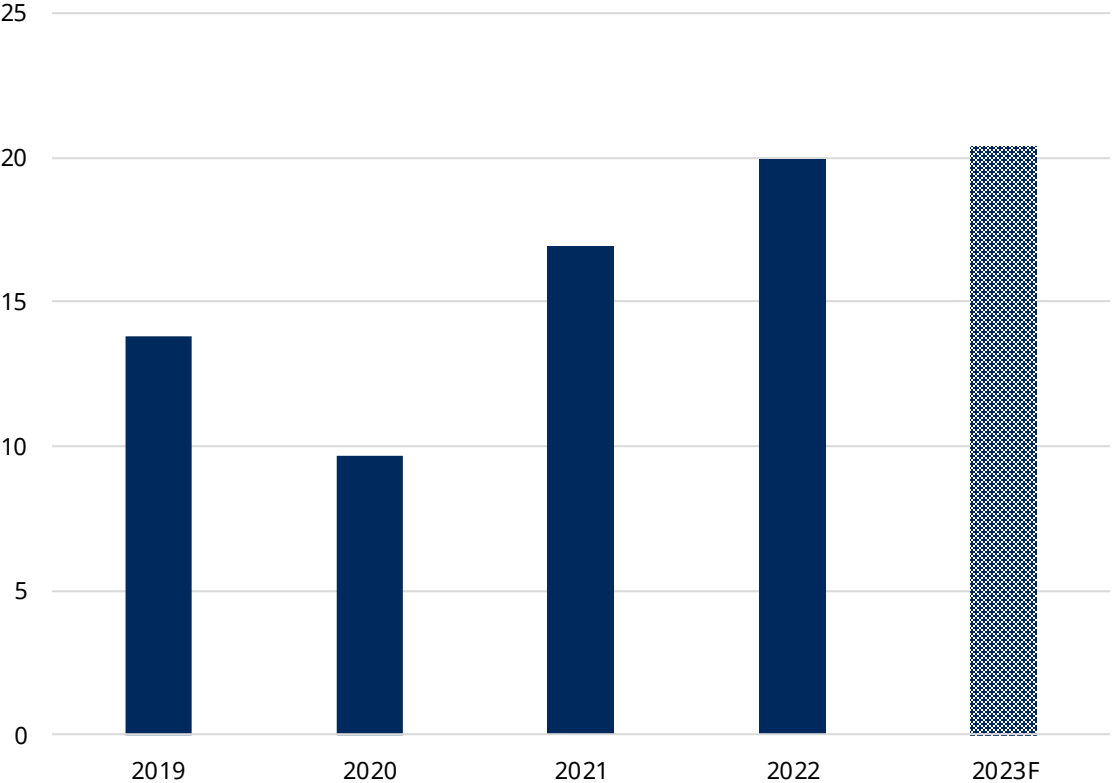
- Corporate fundamentals remained strong in Q4. However, corporate margins are now clearly falling. If costs continue to rise faster than sales, margins will remain under pressure in 2023, and earnings growth could disappoint
- Equity analysts expect earnings to be broadly flat in 2023. Given still slow debt growth, this would likely be sufficient to keep corporate leverage stable
- However, corporate margins are now clearly falling. If costs continue to rise faster than sales, margins will remain under pressure in 2023, and earnings growth could disappoint
- Interest coverage is very high, especially in IG, but is likely to deteriorate from here, as higher yields are now starting to meaningfully feed through to interest expense. Issuers with loans are seeing the most immediate impact
- Cash on balance sheet increased in Q4 for the first time the since Q2 2020
- [See the full corporate fundamentals section page 35](#)

Equity analysts expect earnings to be broadly flat in 2023 in both US and Europe

S&P500 actual and expected EPS (\$)



MSCI EMU actual and expected EPS (€)

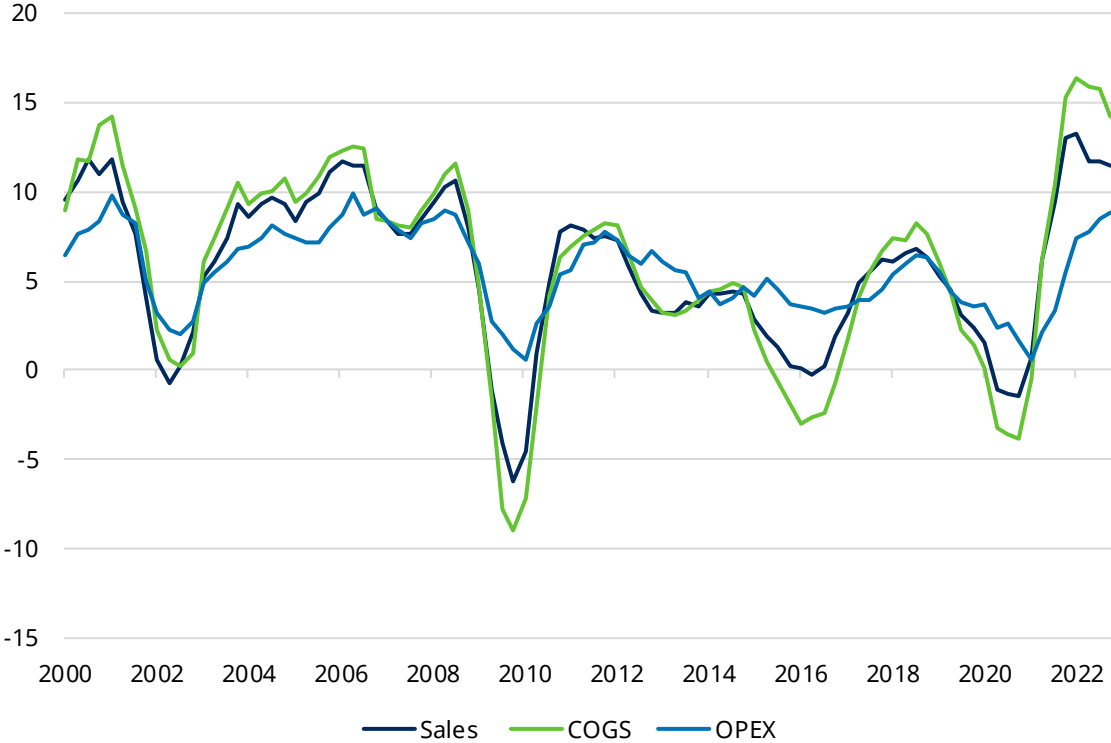


Source: IBES, Refinitiv Datastream. Data as at 2 March 2023.

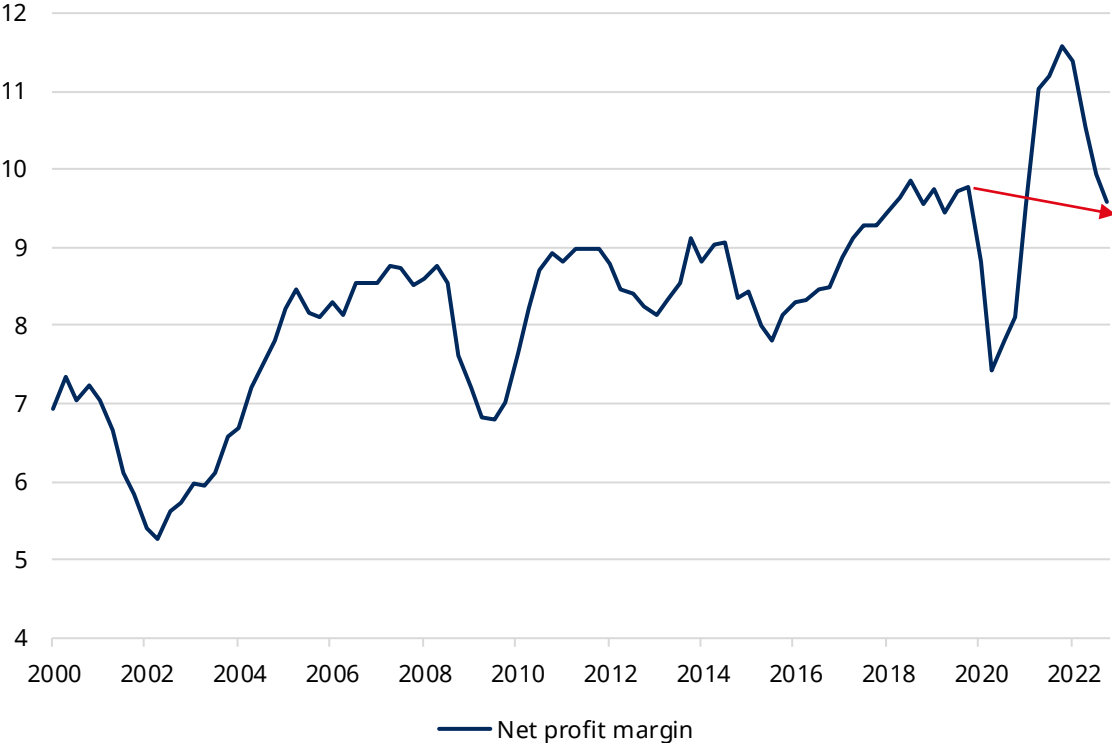
Rising costs are putting pressure on margins

US IG net margin is now lower than pre-pandemic

US IG: sales vs cost growth (%)



US IG net profit margin (%)



While input costs growth has eased somewhat, it is still above sales growth; operating expense growth is still accelerating, buoyed by fast wage growth; rising operating costs are especially problematic for companies with high share of fixed costs

Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q4 2022. COGS is cost of good sold. OPEX is operating expense.

Summary table

Cross-credit overview

Date: 28 February 2023

	IG GBP non-gilts	IG GBP corporates	IG Euro	IG USD	HY GBP	HY Euro	HY USD	Hard EMD	Local EMD	Corp. EMD
Yield to worst	5.3%	5.6%	4.3%	5.6%	9.5%	7.3%	8.7%	8.6%	6.8%	7.2%
Yield to worst (hedged to EUR) ¹	3.9%	4.2%	4.3%	3.5%	8.1%	7.3%	6.5%	6.5%	-	5.0%
Spread (bps)	142	169	147	130	559	421	422	447	261	296
Spread (percentile) ²	64%	63%	70%	42%	67%	45%	42%	67%	10%	36%
Risk premium (bps) ³	109	131	108	92	374	245	201	314	207	185
Duration	6.1	6.7	4.8	7.0	3.3	3.4	4.4	6.8	4.9	4.3
MV (billion \$)	757	566	2,820	7,576	53	406	1,232	608	1,311	513
Rating	A2	A3	A3	A3	BB3	BB3	B1	BB1	BBB2	BBB3
Nr. of issues/countries	1,299	1,093	4,114	9,831	99	754	1,931	67	20	1,916

Since Jan 1997 or inception

Annualised return ⁴	3.8%	4.0%	3.6%	3.9%	7.2%	4.7%	5.0%	5.6%	4.8%	4.9%
Annualised volatility	5.8%	6.5%	4.0%	5.9%	10.5%	11.5%	9.1%	10.8%	8.9%	7.9%
Return/volatility	0.7	0.6	0.9	0.7	0.7	0.4	0.5	0.5	0.5	0.6
Max drawdown	-25.9%	-28.2%	-16.5%	-22.3%	-29.4%	-40.2%	-34.8%	-29.6%	-17.8%	-26.0%
Correlation with MSCI EMU	0.2	0.3	0.3	0.2	0.6	0.6	0.6	0.5	0.4	0.4
Correlation with MSCI World €	0.2	0.2	0.2	0.2	0.5	0.6	0.5	0.4	0.5	0.4
Correlation with Euro Gov	0.6	0.6	0.7	0.5	0.1	0.0	0.0	0.3	0.3	0.3

Past performance is not a guide to future performance and may not be repeated.

Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 28 February 2023.

¹Local currency yield minus annualized 3-month hedging cost/return.

²Percentile shows where the current spread is relatively to the historical range of spreads, within a range of 0 to 100. The greater the percentile the higher the spread compared to history.

³Spread minus average historical default and downgrade losses (see slide 26).

⁴All returns EUR hedged returns, except EMD Local which is unhedged USD return in EUR.

Summary table (alternatives)

Cross-credit overview

Date: 28 February 2023

	US Agency MBS	US ABS	US CMBS	US leveraged loans	Cat Bonds
Yield ¹	4.7%	5.9%	6.2%	9.3%	-
Yield (hedged to EUR) ²	2.6%	3.7%	4.1%	7.2%	-
Spread (bps) ³	55	103	207	433	-
Risk premium (bps)	-	-	-	-	-
Duration	6.1	2.2	4.0	0.0	-
Market size (billion \$)	7,197	391	447	1,360	-
Rating	AAA	AAA	AAA	-	-

Since Jan 1997 or inception

Annualised return ⁴	3.2%	2.6%	3.7%	3.7%	5.8%
Annualised volatility	3.3%	2.3%	6.2%	6.9%	3.7%
Return/volatility	1.0	1.2	0.6	0.5	1.6
Max drawdown	-18.4%	-8.6%	-26.1%	-29.1%	-9.6%
Correlation with MSCI EMU	-16.2%	-6.6%	16.7%	58.1%	7.4%
Correlation with MSCI World €	-0.2	-0.1	0.1	0.6	0.1
Correlation with Euro Gov	0.6	0.3	0.2	-0.1	0.1

Past performance is not a guide to future performance and may not be repeated.

Source: Schroders, Refinitiv Datastream, Bloomberg. Data as at 28 February 2023

¹USD yield

²USD yield minus annualized 3-month hedging cost/return

³US leveraged loans spread Is over 3-month LIBOR

⁴All returns EUR hedged returns

Performance table

Cross-credit overview

Date: 28 February 2023

	IG GBP non-gilts	IG GBP corporates	IG Euro	IG USD	HY GBP	HY Euro	HY USD	Hard EMD	Local EMD	Corp. EMD
Return (local)¹										
1 month return	-2.2%	-2.4%	-1.4%	-2.9%	1.0%	-0.2%	-1.3%	-2.2%	-3.2%	-1.6%
YTD return	1.3%	1.6%	0.5%	0.9%	4.6%	3.0%	2.6%	0.9%	1.0%	1.4%
1 year return	-12.3%	-13.2%	-9.9%	-10.0%	-3.6%	-4.3%	-5.5%	-8.6%	-6.1%	-4.9%
Return (EUR hedged)²										
1 month return	-2.3%	-2.5%	-1.4%	-3.2%	0.9%	-0.2%	-1.5%	-2.5%	-0.8%	-1.8%
YTD return	1.0%	1.3%	0.5%	0.3%	1.0%	3.0%	2.1%	0.4%	1.6%	0.9%
1 year return	-13.2%	-14.1%	-9.9%	-12.7%	-4.9%	-4.3%	-8.1%	-11.5%	-0.6%	-7.6%
Spread										
1 month OAS change	0	2	-4	5	-59	-20	-8	3	-35	2
YTD OAS change	-19	-25	-19	-8	-104	-73	-57	-5	-28	-26
1 year OAS change	18	18	-1	0	89	-24	45	-23	-194	-76
Latest OAS	142	169	147	130	559	421	422	447	261	296

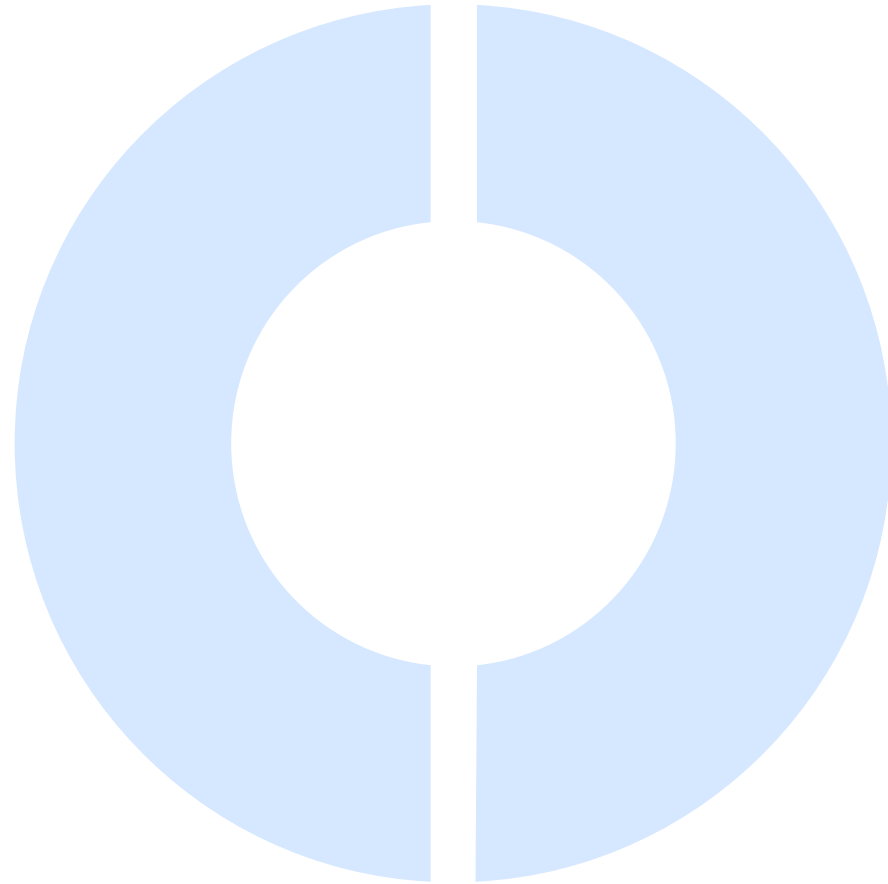
Past performance is not a guide to future performance and may not be repeated.

Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 28 February 2023.

¹Local EMD is USD return.

²Local EMD is USD return in EUR.

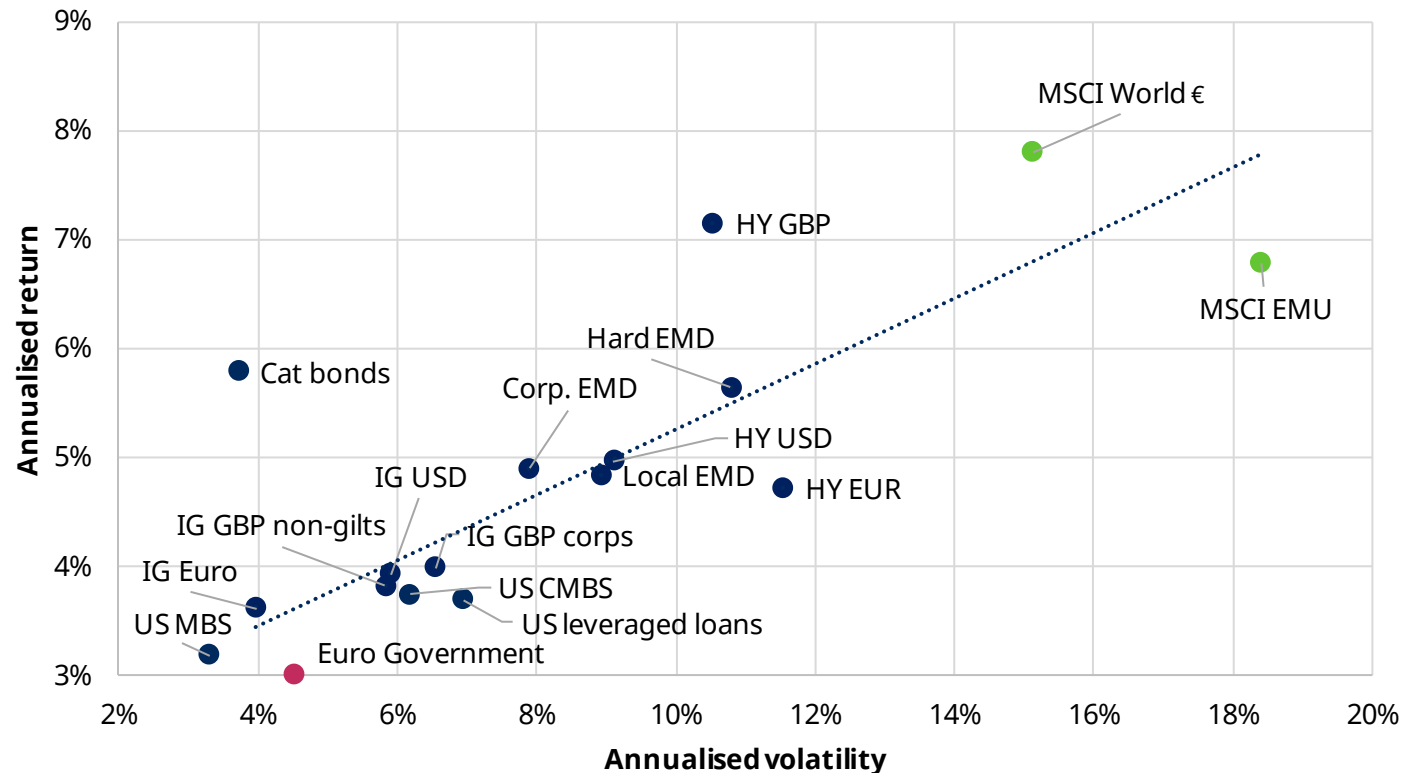
Schroders



Cross-credit analysis

Cross-credit risk-return profile

Since Jan 1997 or inception



- Little difference in risk/return characteristics of four IG indices
- The superior risk adjusted return of GBP HY index could be due to liquidity premium
- EMD has delivered higher risk-adjusted returns than DM credit

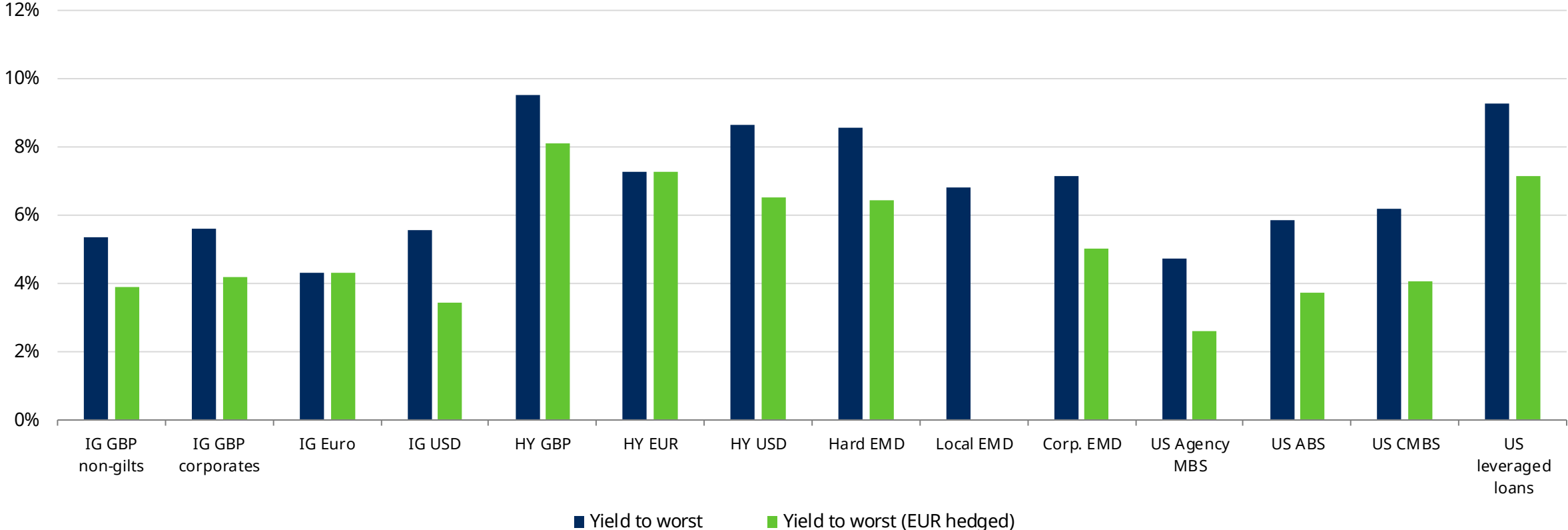
Past performance is not a guide to future performance and may not be repeated.

Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan, Barclays. Data as at 28 February 2023.

All return and volatility figures shown as EUR hedged, except EMD Local and MSCI World which are unhedged returns in EUR.

Cross-credit yield

Yield to worst



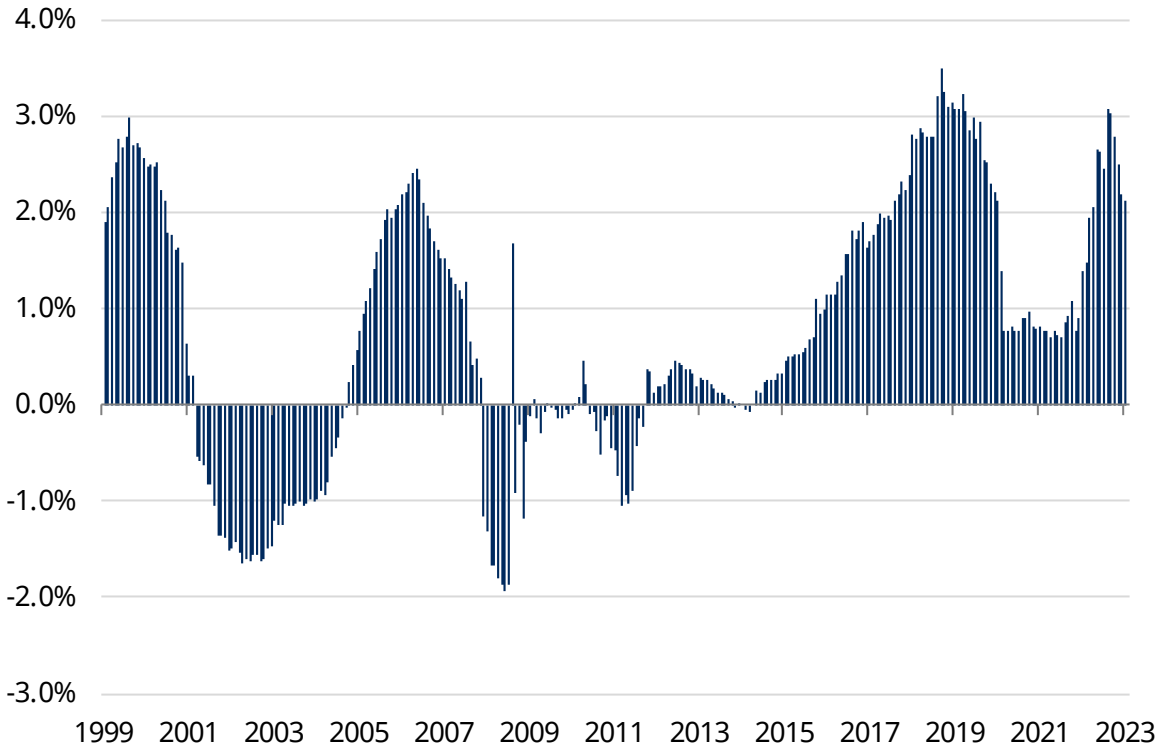
Currency-hedged USD corporates yielding less than GBP and EUR equivalents

Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan, Bloomberg. Data as at 28 February 2023. Hedged yield is local currency yield minus annualised 3-month FX hedging cost/return (see next slide).

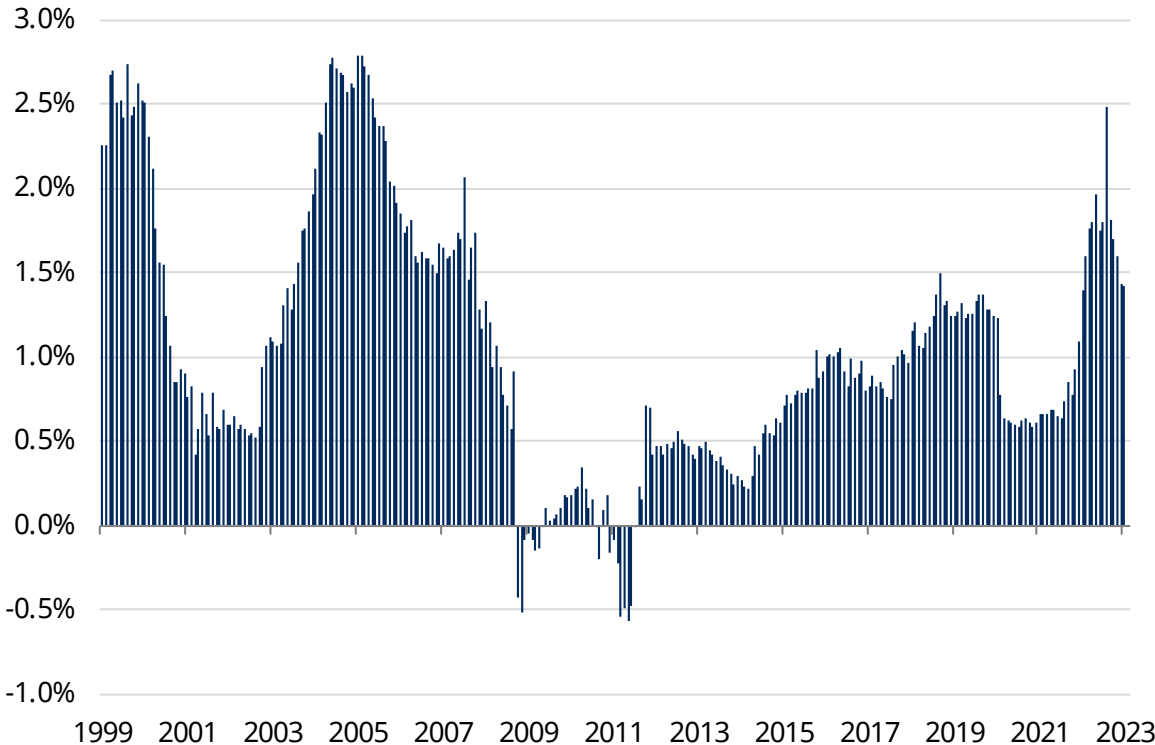
FX hedging cost or return

Using 3-month FX forwards

Annualised USD to EUR hedging cost (pos) or return (neg)



Annualised GBP to EUR hedging cost (pos) or return (neg)



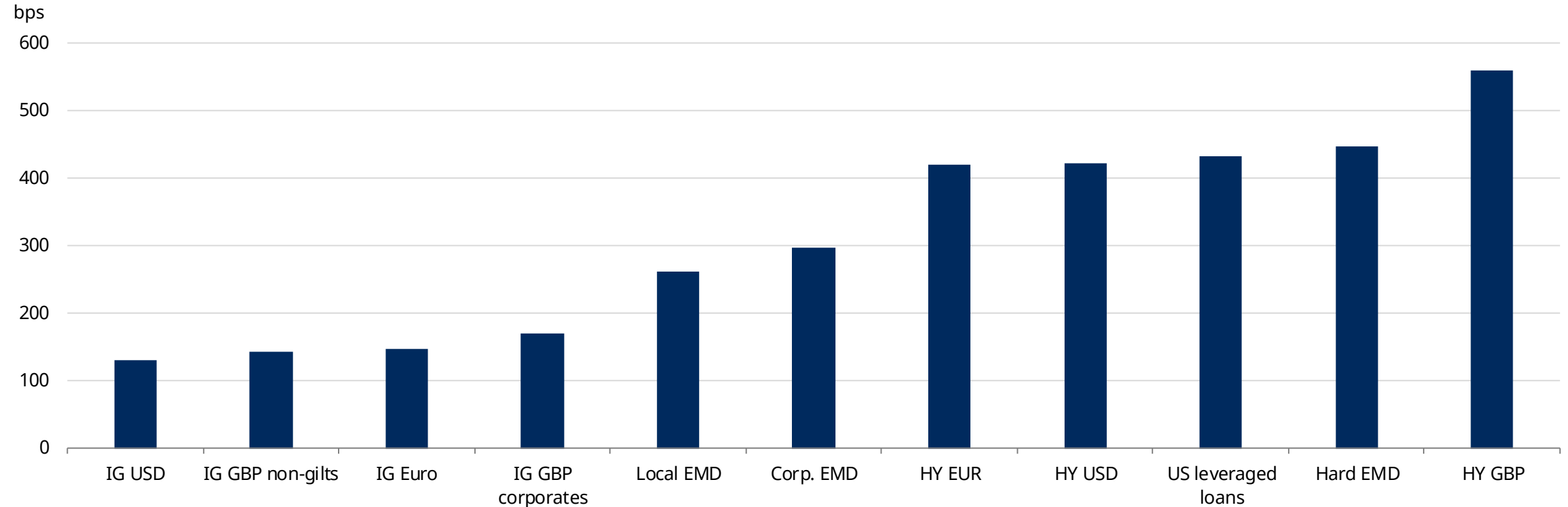
USD yields will be 2.1 lower in EUR once hedging taken account

GBP yields will be 1.4% lower in EUR once hedging taken account

Source: Refinitiv Datastream. Data as at 28 February 2023.

Cross-credit spread

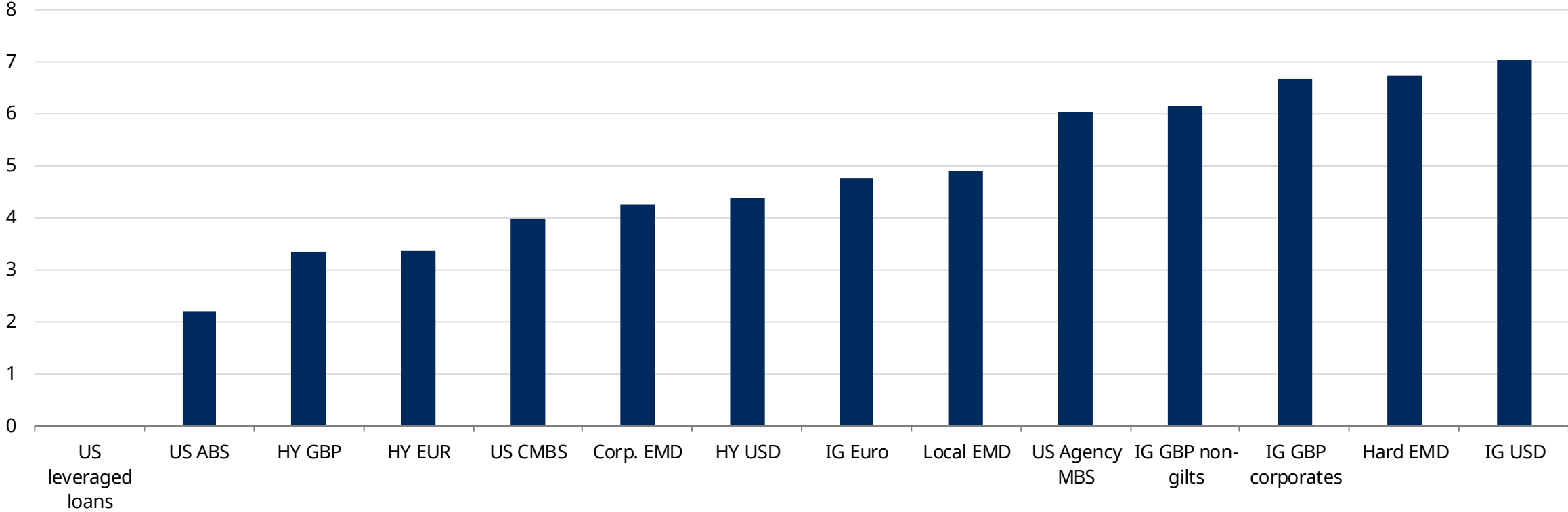
Spread



Source: Refinitiv Datastream, ICE Data Indices, J.P. Morgan, Bloomberg. Data as at 28 February 2023. Local EMD has been estimated as a spread over Treasuries of similar maturity.

Cross-credit duration

Modified duration

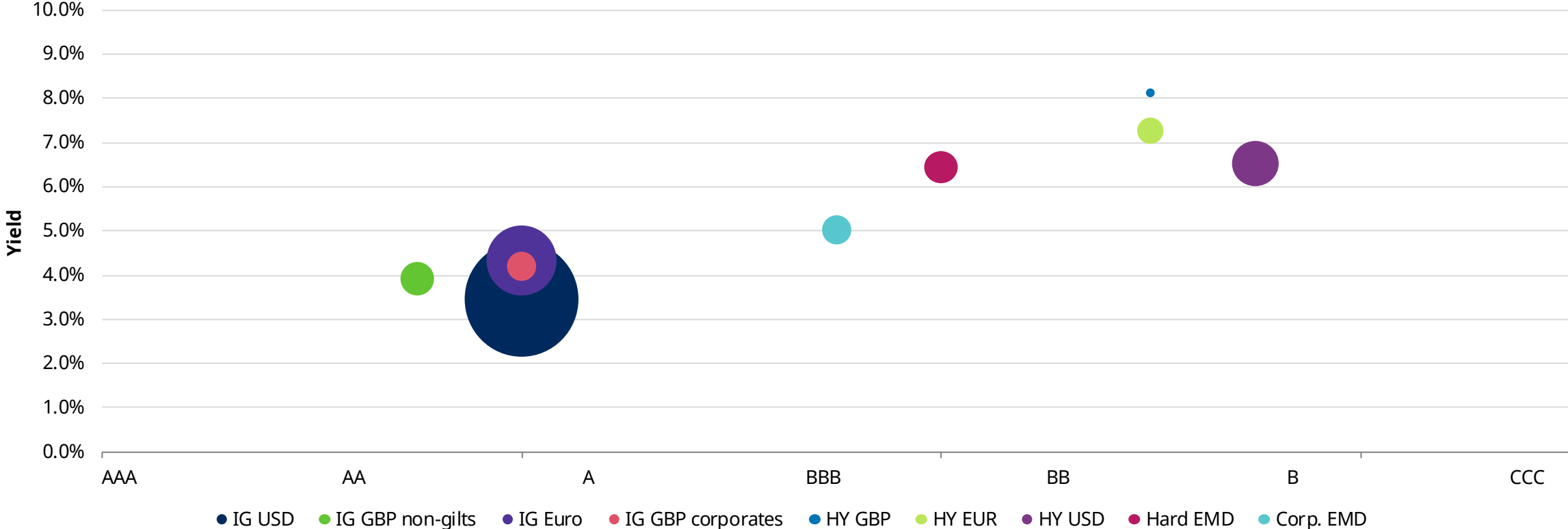


Source: Refinitiv Datastream, ICE Data Indices, J.P. Morgan, Bloomberg. Data as at 28 February 2023.

Yield vs. credit rating vs. market size

The size of bubble is proportionate to the size of the market

Yield (EUR hedged) vs credit rating vs market size

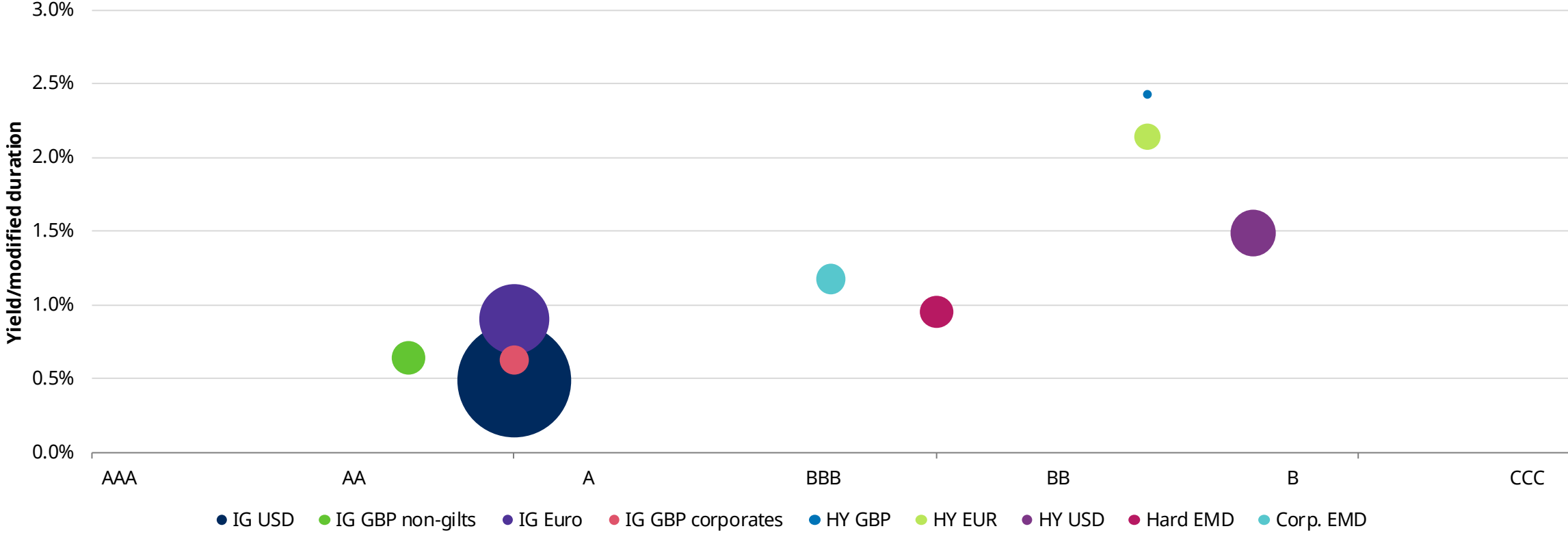


Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 28 February 2023.

Yield per unit of duration vs. credit rating vs. market size

Vertical axis is yield divided by modified duration

Yield (EUR hedged) per unit of duration vs credit rating vs market size

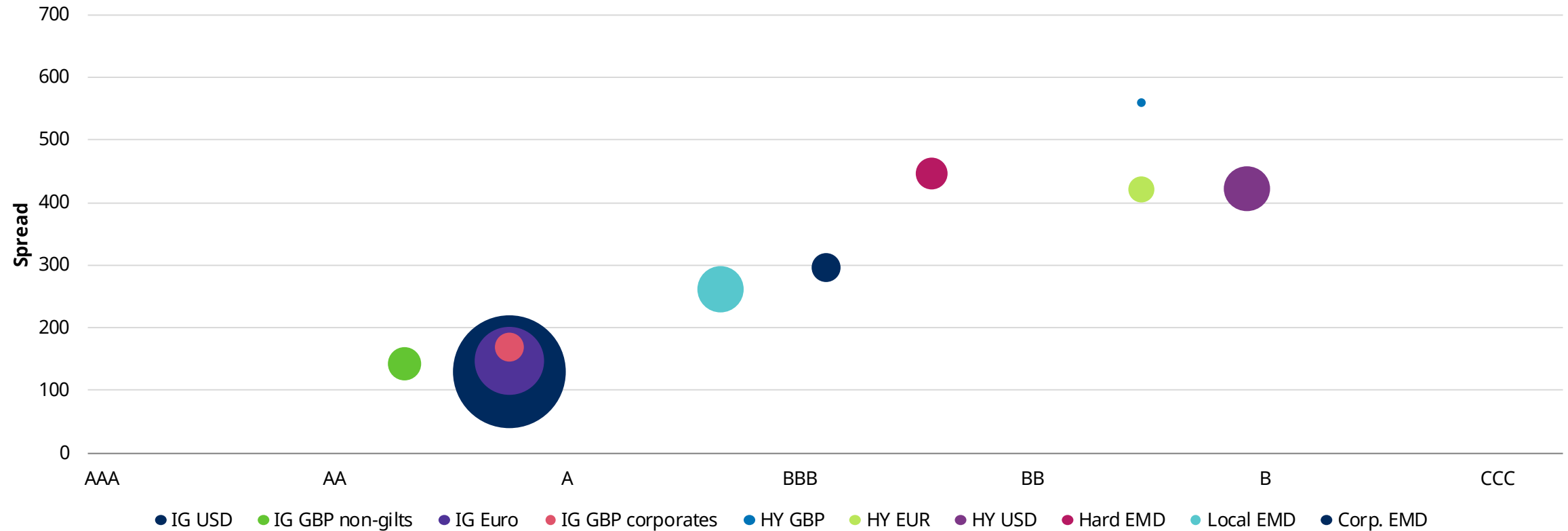


Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 28 February 2023.

Spread vs. credit rating vs. market size

The size of bubble is proportionate to the size of the market

Spread vs credit rating vs market size

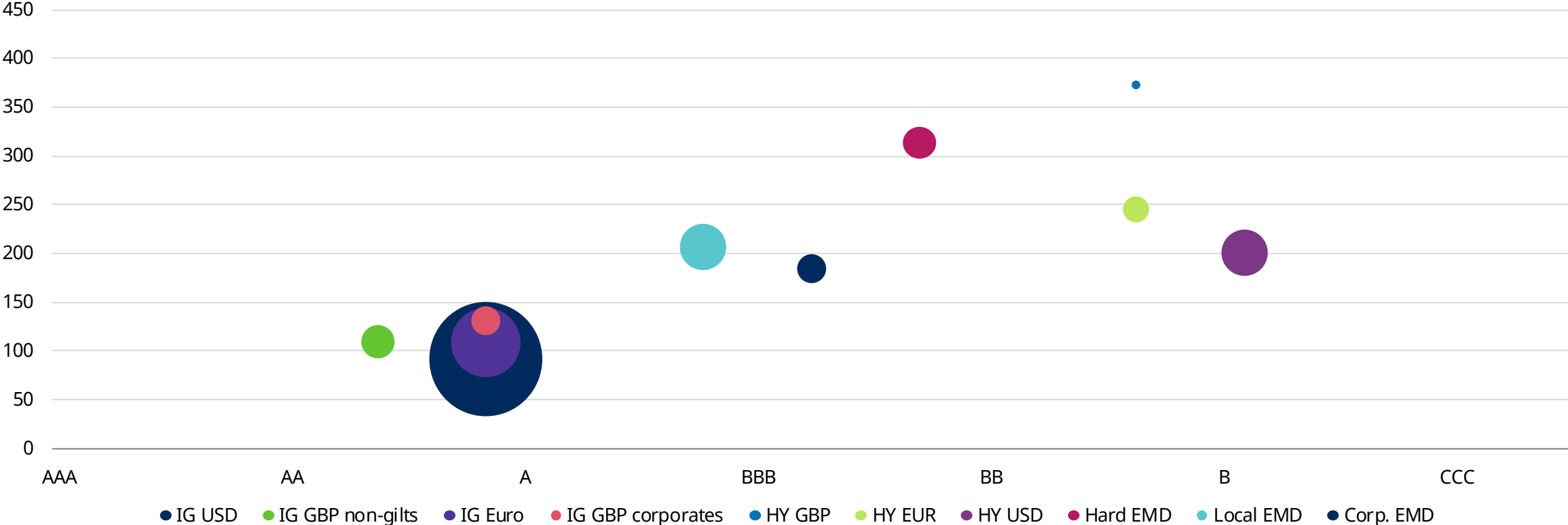


Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 28 February 2023.

Risk premium vs. credit rating vs. market size

Risk premium = credit spread – long term default and downgrade losses

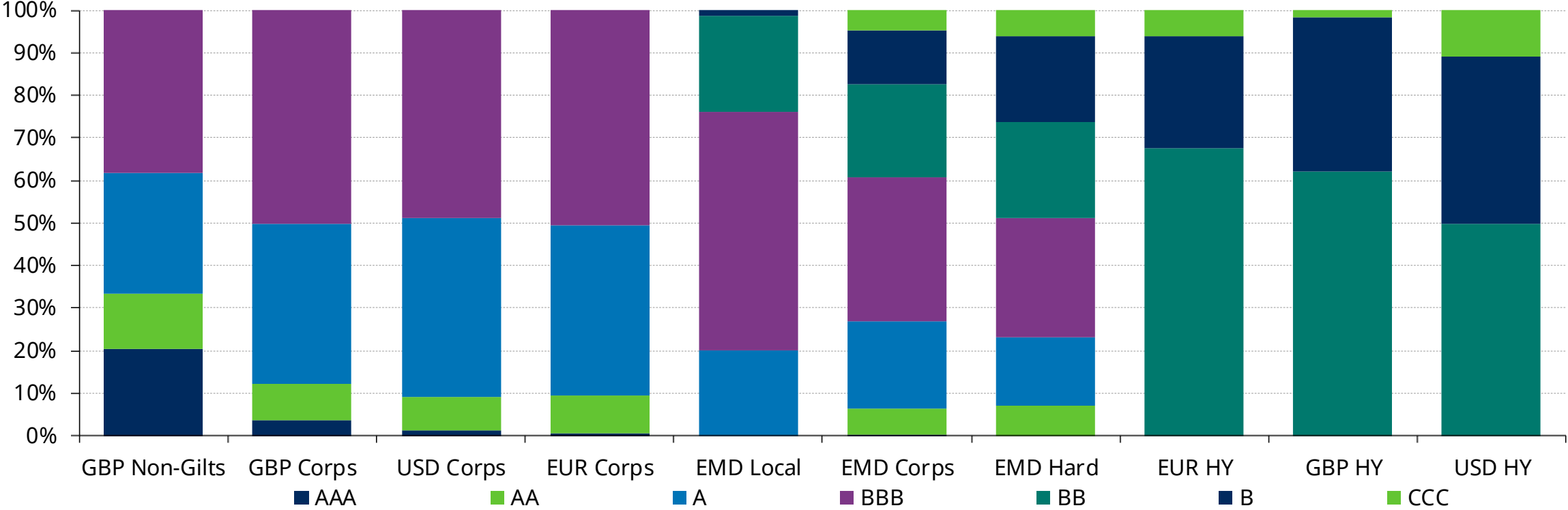
Risk premium vs credit rating vs market size



Local EMD returns are driven by rates and currency movements rather than defaults

Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 28 February 2023.

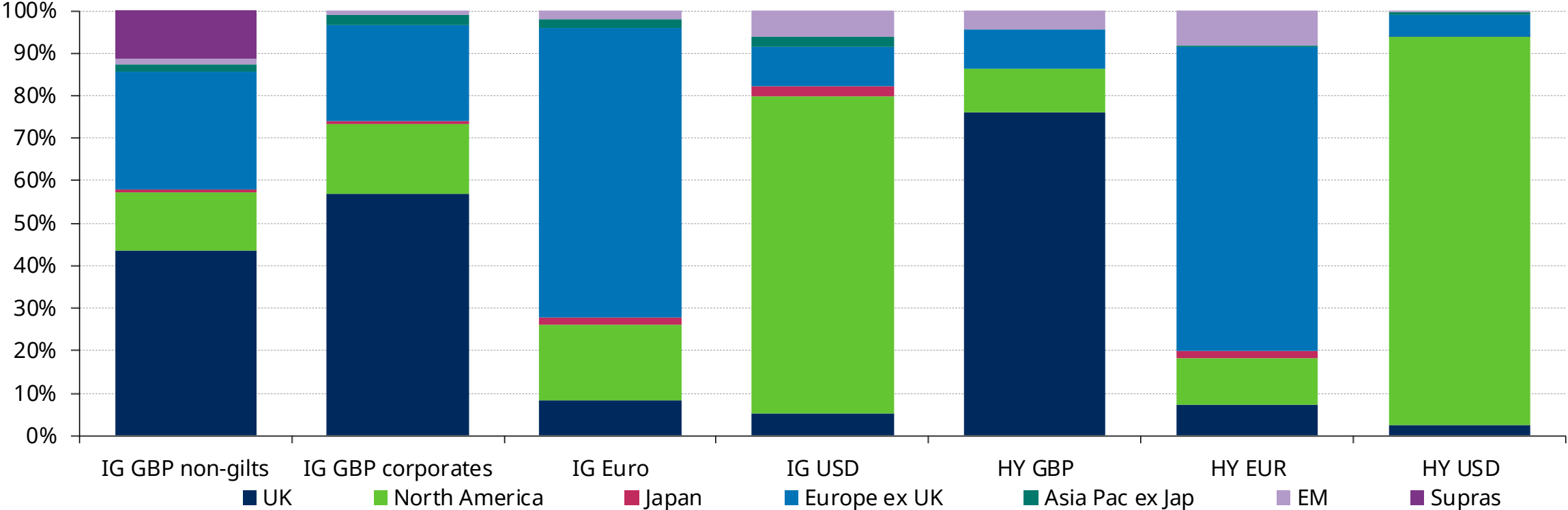
Cross-credit ratings split



US HY lower quality than UK/EUR HY; IG larger share of EMD Corporates than EMD Hard

Source: Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 28 February 2023.

Currency of issue vs country of issuer

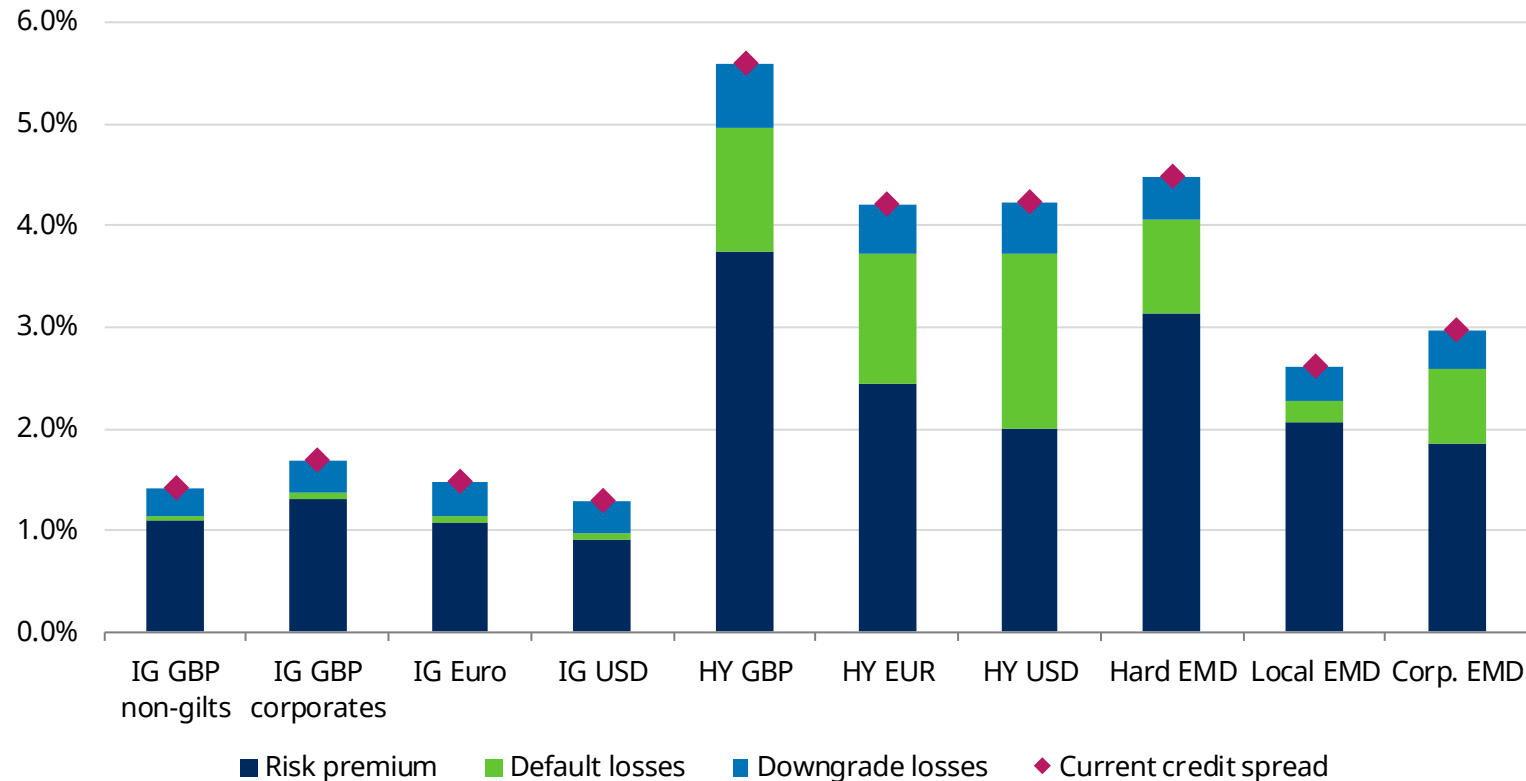


Almost half of GBP IG issuers are not based in the UK

Source: Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 28 February 2023.

Risk premium/net spread in credit

Decomposition of credit spread into expected losses and expected risk premium



- IG is more exposed to **downgrade losses** (value of a bond falling after a downgrade), while **default losses** have been negligible
- Major losses in HY come from defaults that mostly happen in recessions
- Historically, investors have received a **risk premium** for having exposure to credit, as the average default and downgrade losses have been less than the average spread

Source: Schroders, Moody's default and recovery study 2019, ICE Data Indices, J.P.Morgan. Data as at 28 February 2023.

Risk premium

Decomposition of credit spread into exp. losses and exp. risk premium

	Expected default rate ¹	Default losses ²	Downgrade losses	Current credit spread	Risk premium ³
IG GBP non-gilts	0.1%	0.0%	0.3%	1.4%	1.1%
IG GBP corporates	0.1%	0.1%	0.3%	1.7%	1.3%
IG Euro	0.1%	0.1%	0.3%	1.5%	1.1%
IG USD	0.1%	0.1%	0.3%	1.3%	0.9%
HY GBP	1.9%	1.2%	0.6%	5.6%	3.7%
HY EUR	2.0%	1.3%	0.5%	4.2%	2.5%
HY USD	2.6%	1.7%	0.5%	4.2%	2.0%
Hard EMD	1.4%	0.9%	0.4%	4.5%	3.1%
Local EMD	0.3%	0.2%	0.3%	2.6%	2.1%
Corp. EMD	1.1%	0.7%	0.4%	3.0%	1.8%

Risk premium is expected annual return on top of risk-free rate over a full credit cycle, implied by current spreads

Source: Schroders, Moody's default and recovery study 2022, ICE Data Indices, J.P.Morgan. Data as at 28 February 2023.

¹Based on average historical default rate

²Default rate * (1-recovery rate)

³Credit spread – default losses – downgrade losses

Schroders

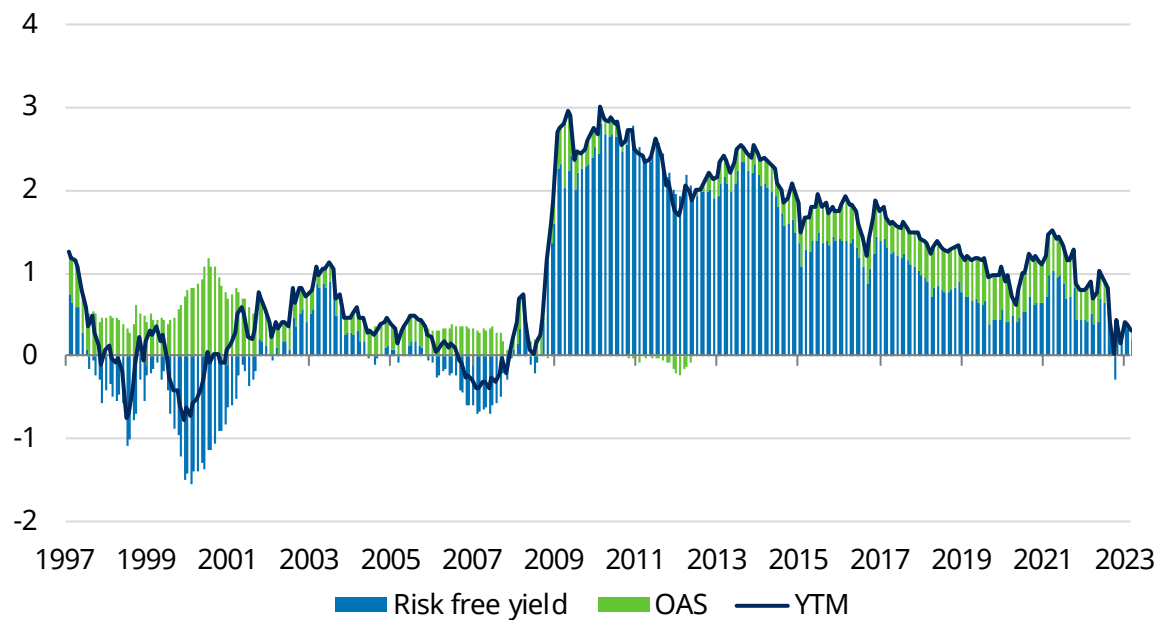


IG long vs short

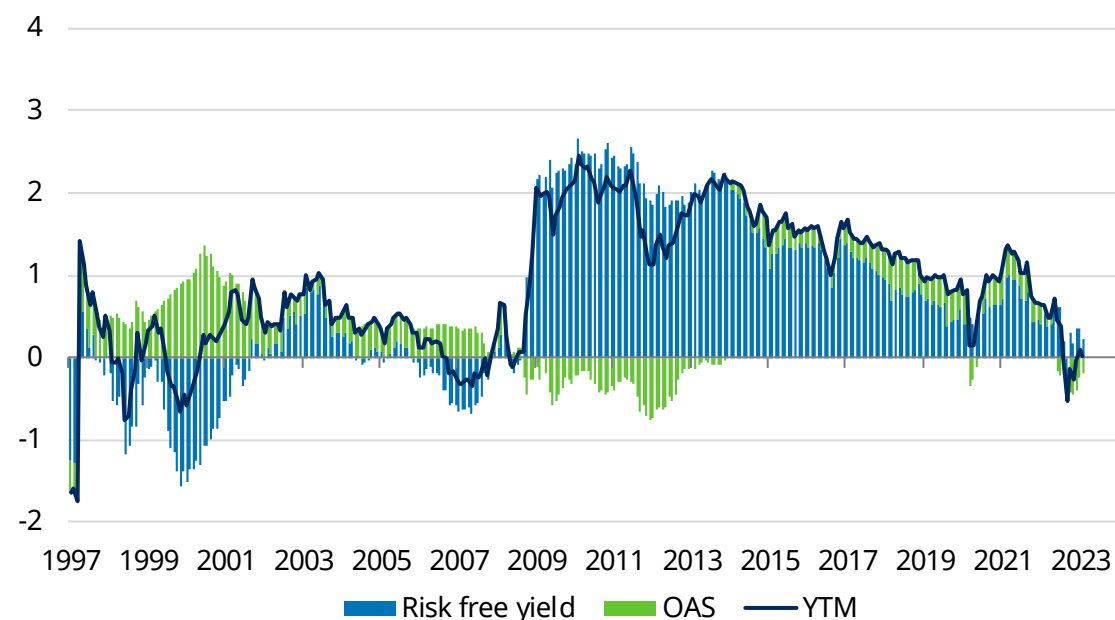
Shape of the curve

Shape of GBP IG curves

IG GBP non-gilts 10+ minus 1-5 year index yield (%)



IG GBP corporate 10+ minus 1-5 year index yield (%)

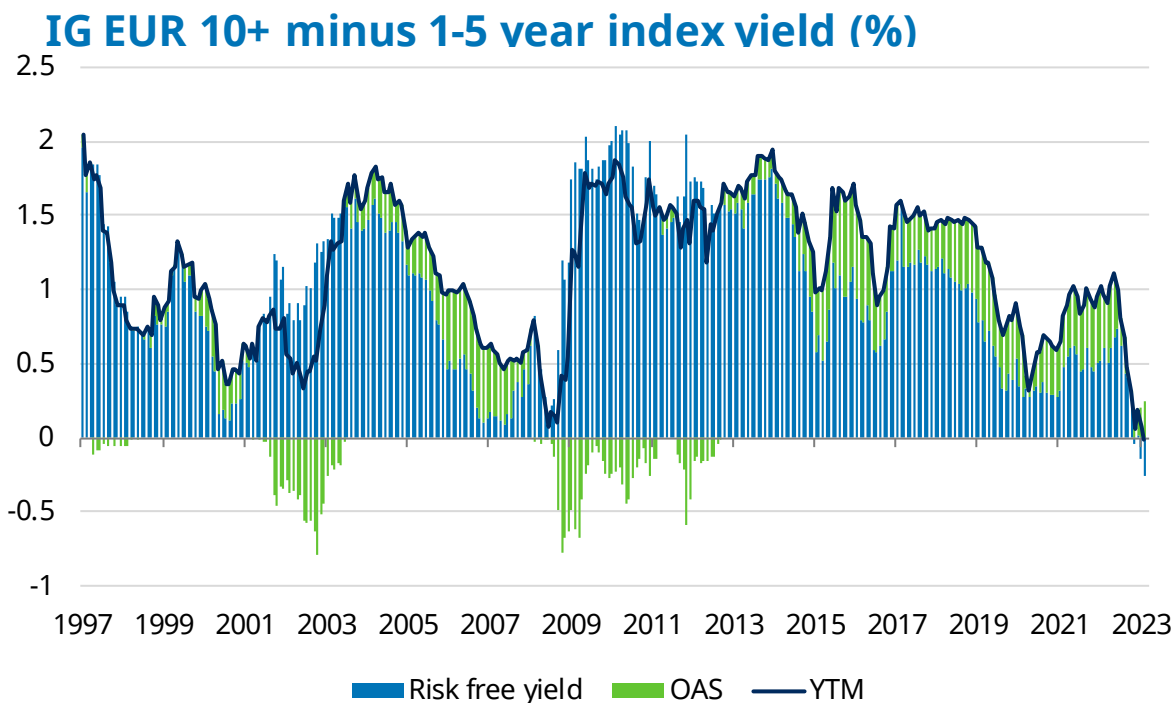


	YTW	OAS	Duration
IG GBP non-gilts 1-5 year	5.2%	130	2.9
IG GBP non-gilts Index	5.3%	142	6.1
IG GBP non-gilts 10+	5.5%	142	11.7

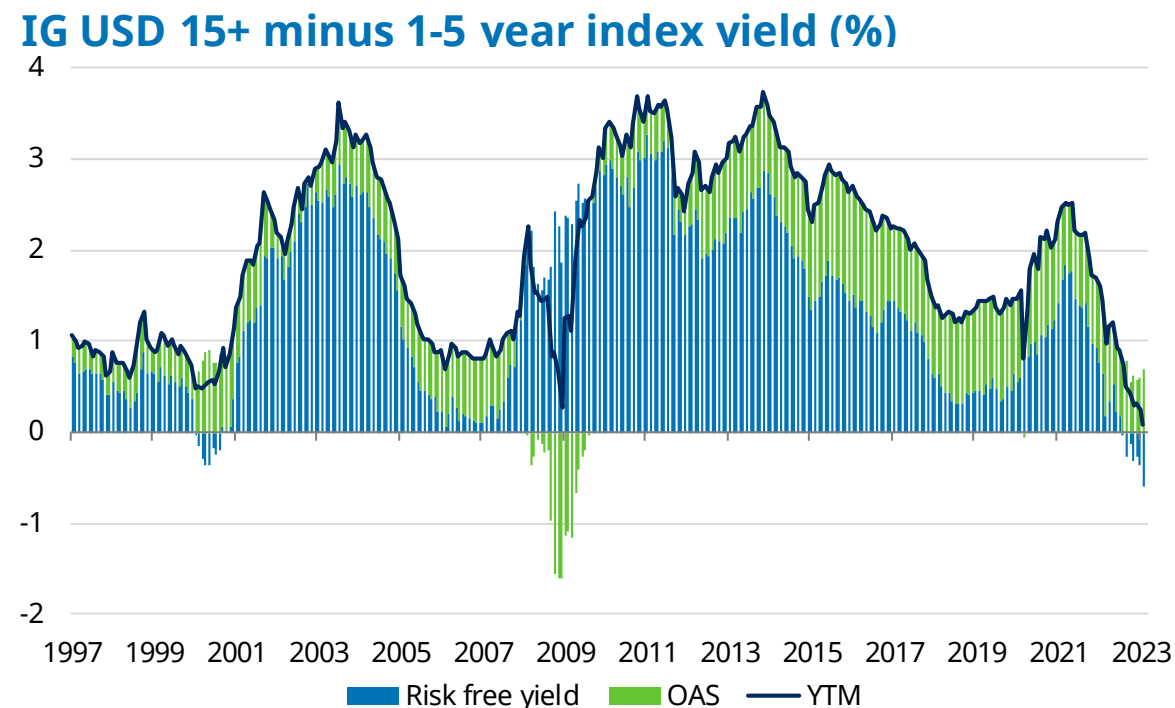
	YTW	OAS	Duration
IG GBP corporates 1-5 year	5.6%	169	3.0
IG GBP corporates Index	5.6%	169	6.7
IG GBP corporates 10+	5.6%	150	11.6

Source: Refinitiv Datastream. Data as at 28 February 2023.

Shape of EUR and USD IG curves



	YTW	OAS	Duration
IG Euro 1-5 year	4.3%	133	2.9
IG Euro Index	4.3%	147	4.8
IG Euro 10+	4.3%	158	11.7



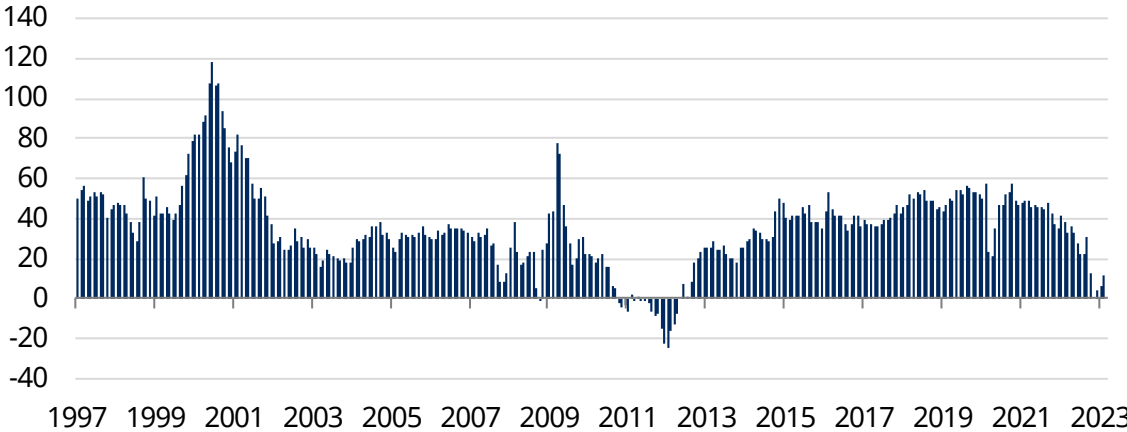
	YTW	OAS	Duration
IG USD 1-5 year	5.5%	91	2.7
IG USD Index	5.6%	130	7.0
IG USD 10+	5.6%	159	13.9

Source: Refinitiv Datastream. Data as at 28 February 2023.

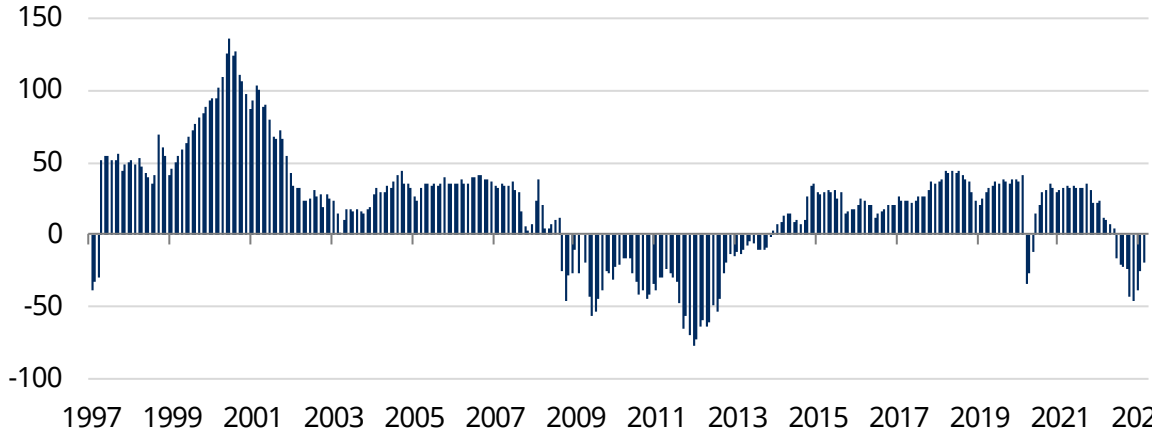
IG long vs short OAS

Shape of spread curves

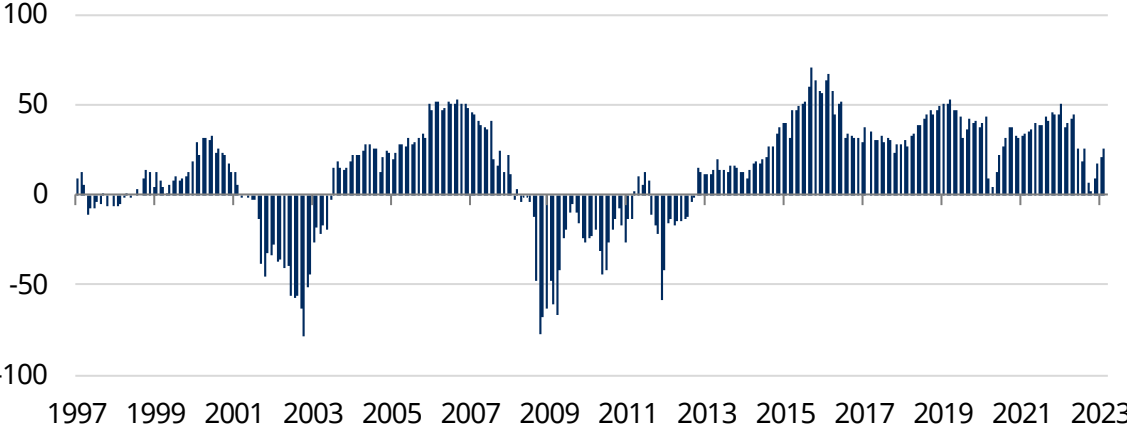
IG GBP non-gilts (bps)



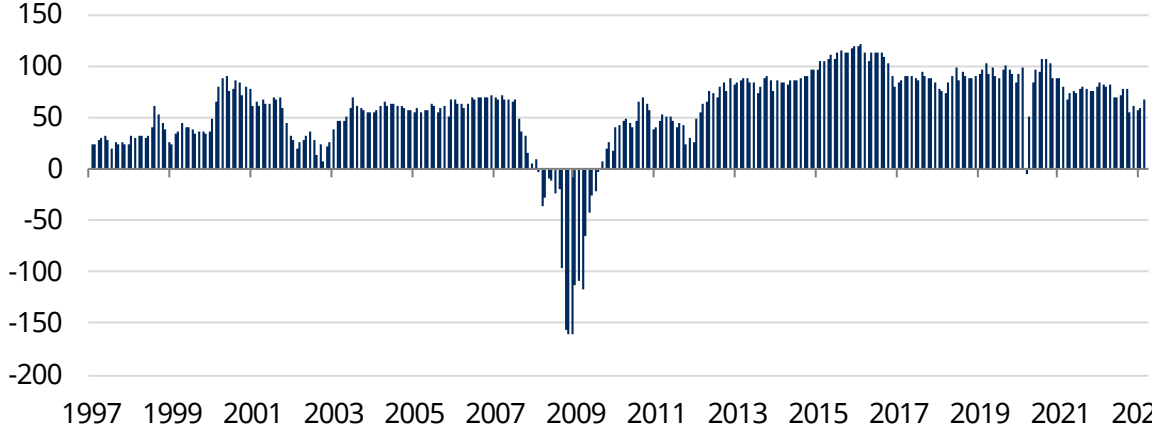
IG GBP corporates (bps)



IG EUR (bps)

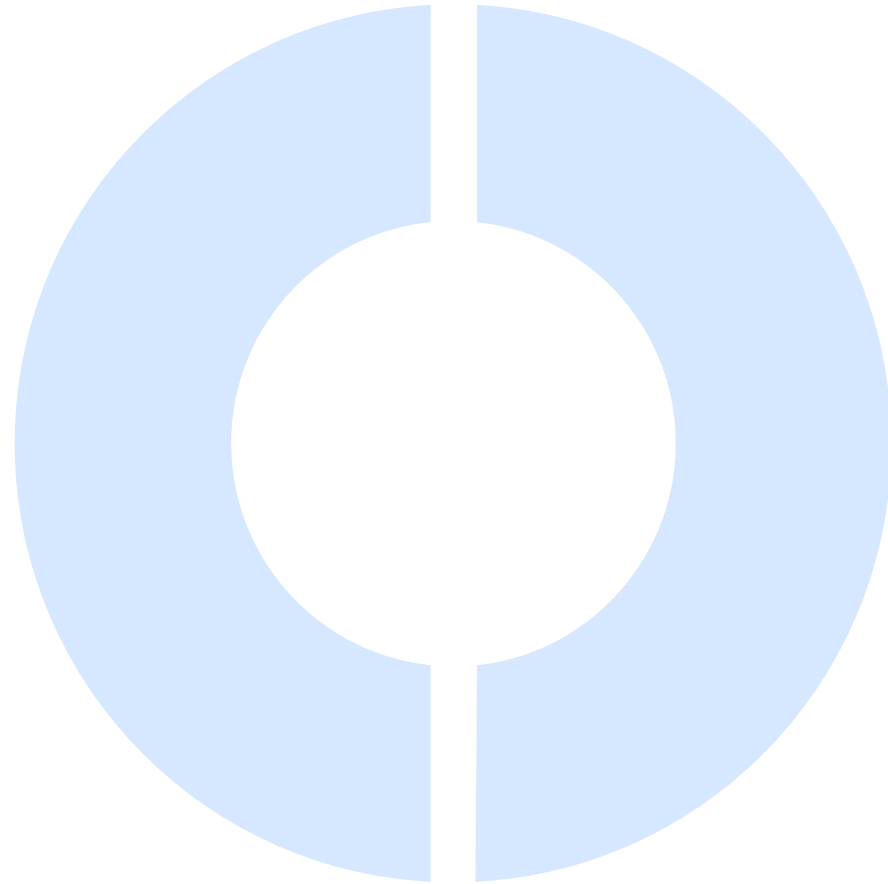


IG USD (bps)



Source: Schroders, ICE Data Indices. Figures showing 10+ minus 1-5 year index spread. Data as at 28 February 2023.

Schroders

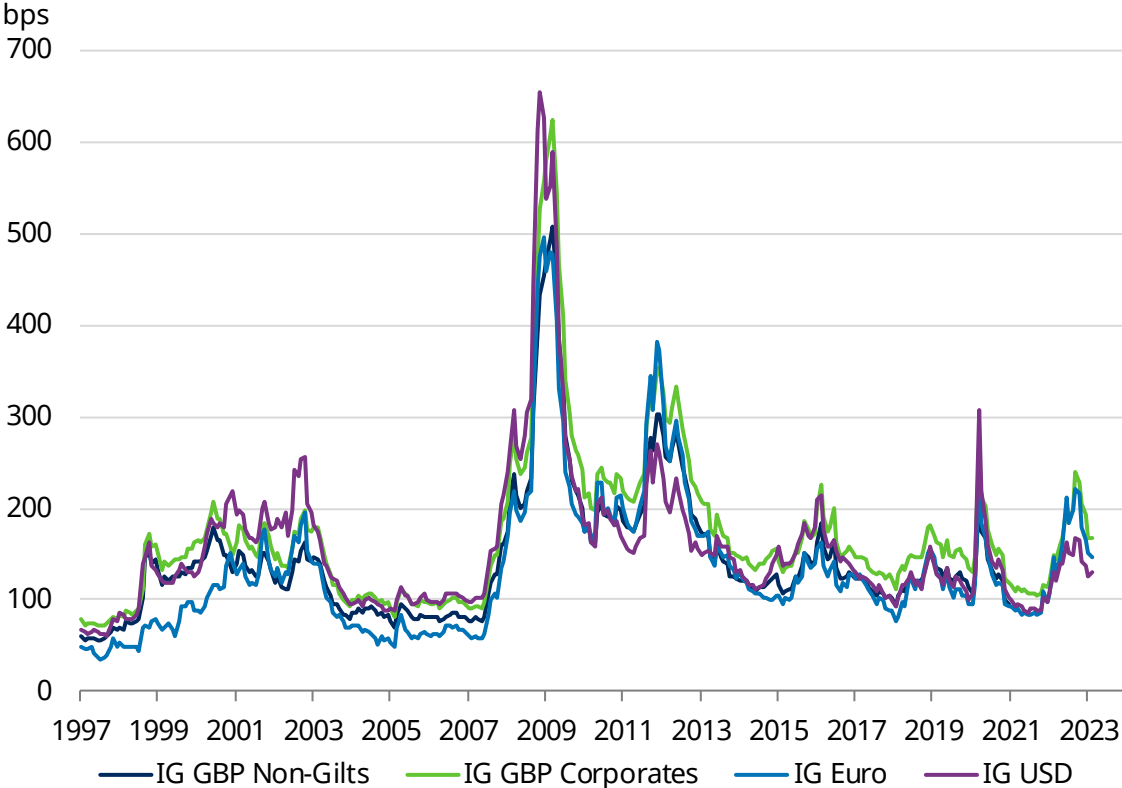


Corporate credit
Valuation

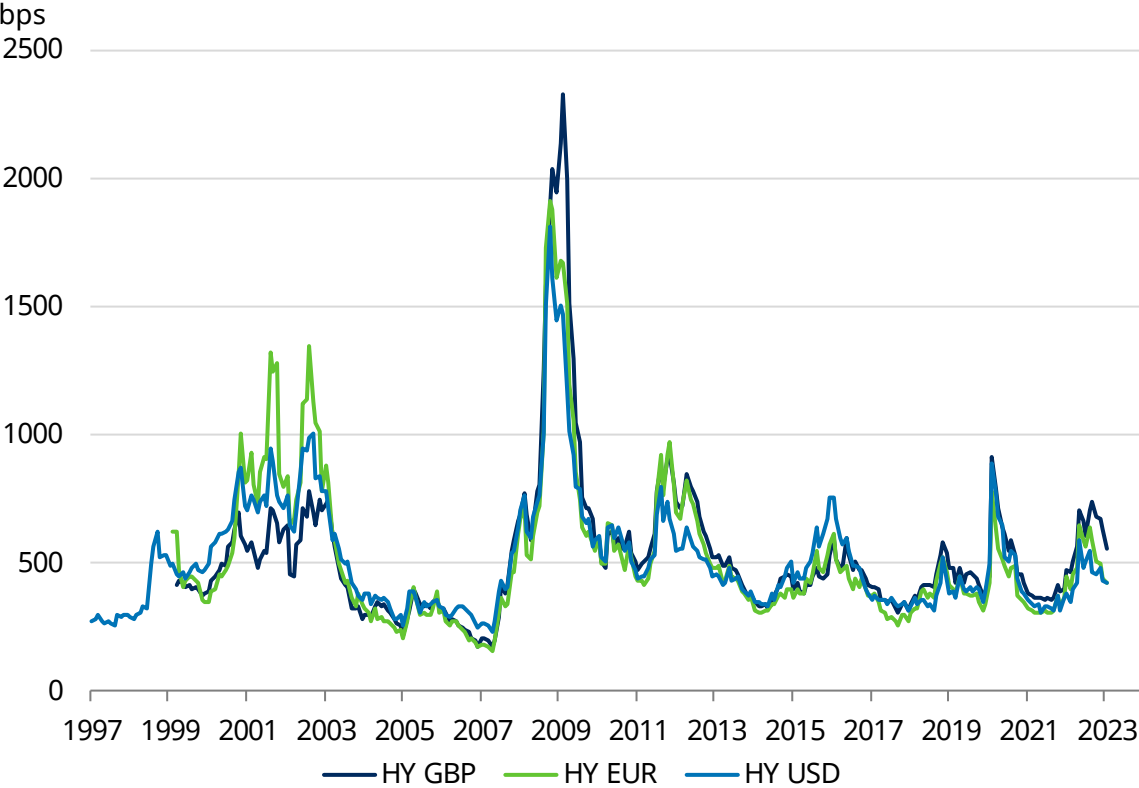
IG and HY valuation

Historical ratings-adjusted credit spreads

IG adjusted spreads



HY adjusted spreads

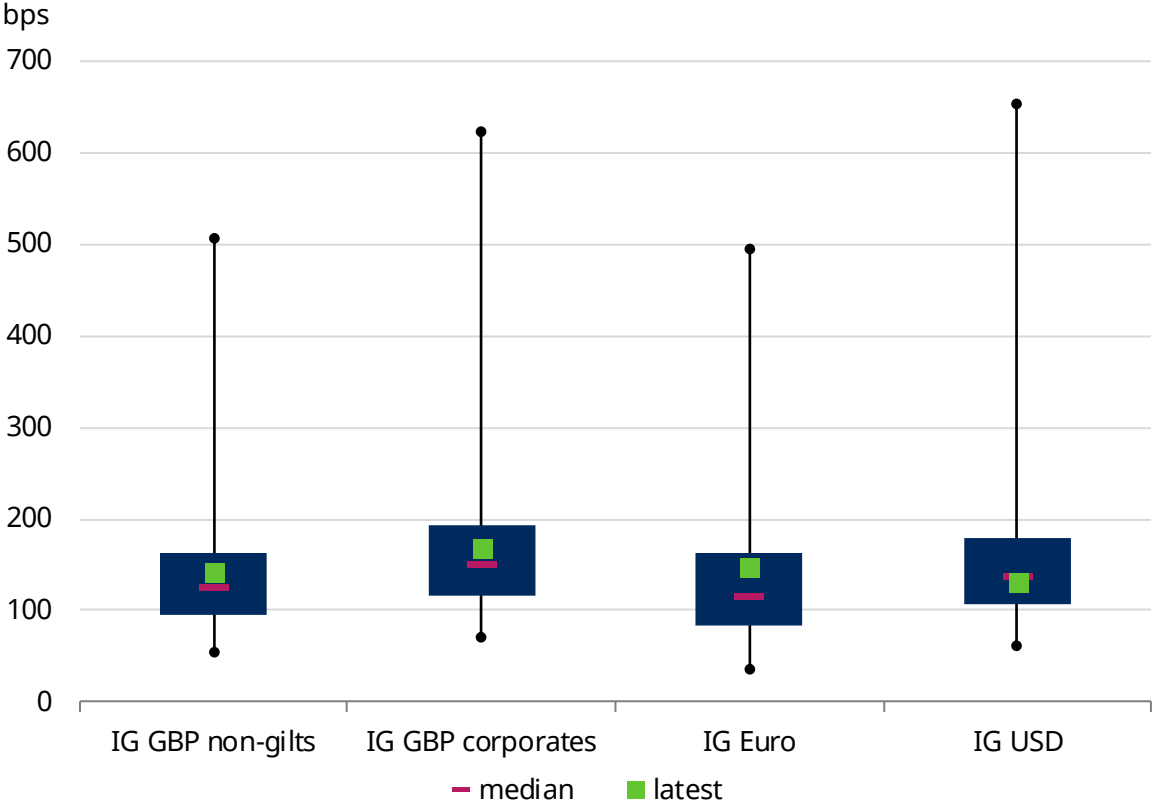


Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 28 February 2023. Spreads are adjusted for changes in the distribution of credit ratings within each index over time.

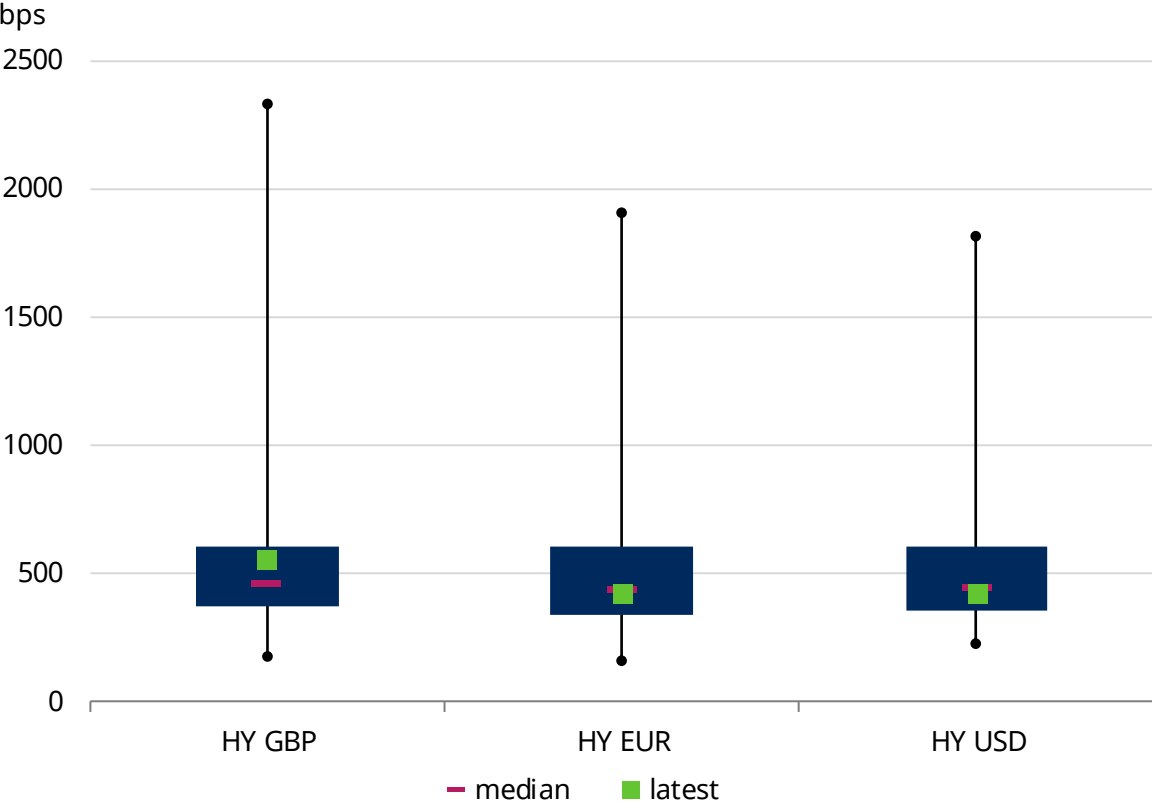
IG and HY valuation

Spread percentiles¹

IG adjusted spreads



HY adjusted spreads



Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 28 February 2023. Spreads are adjusted for changes in the distribution of credit ratings within each index over time.
¹Percentiles shows where the current spread is relatively to the historical range of spreads, within a range of 0 to 100. The greater the percentile the higher the spread compared to history.

Schroders



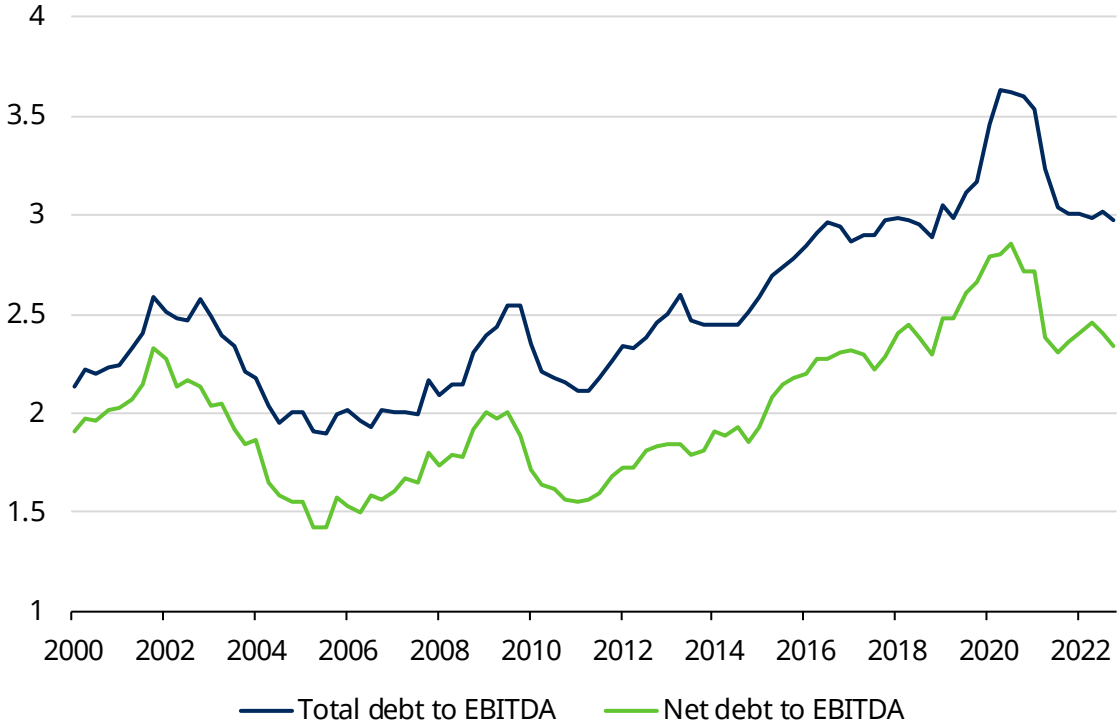
Corporate credit
Fundamentals

US IG leverage

Leverage has been broadly stable in recent quarters

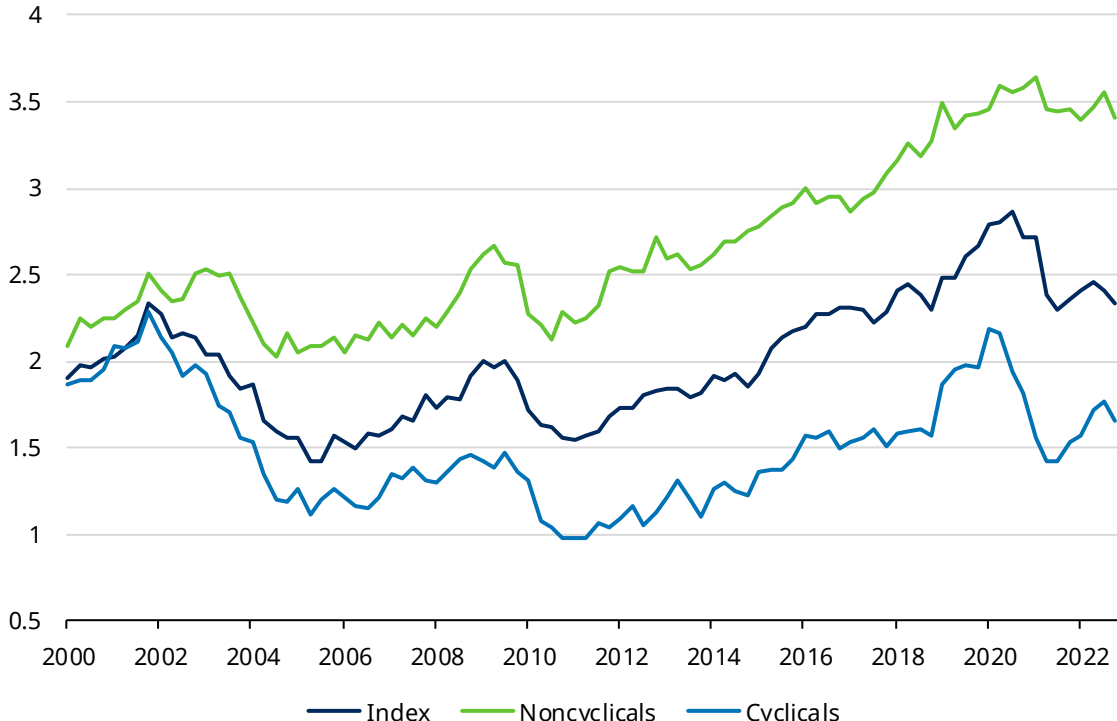
US IG leverage

Debt to last 12 months EBITDA



US IG net leverage

Net debt to last 12 months EBITDA



An increase in cash balances led to a drop in net leverage in Q4

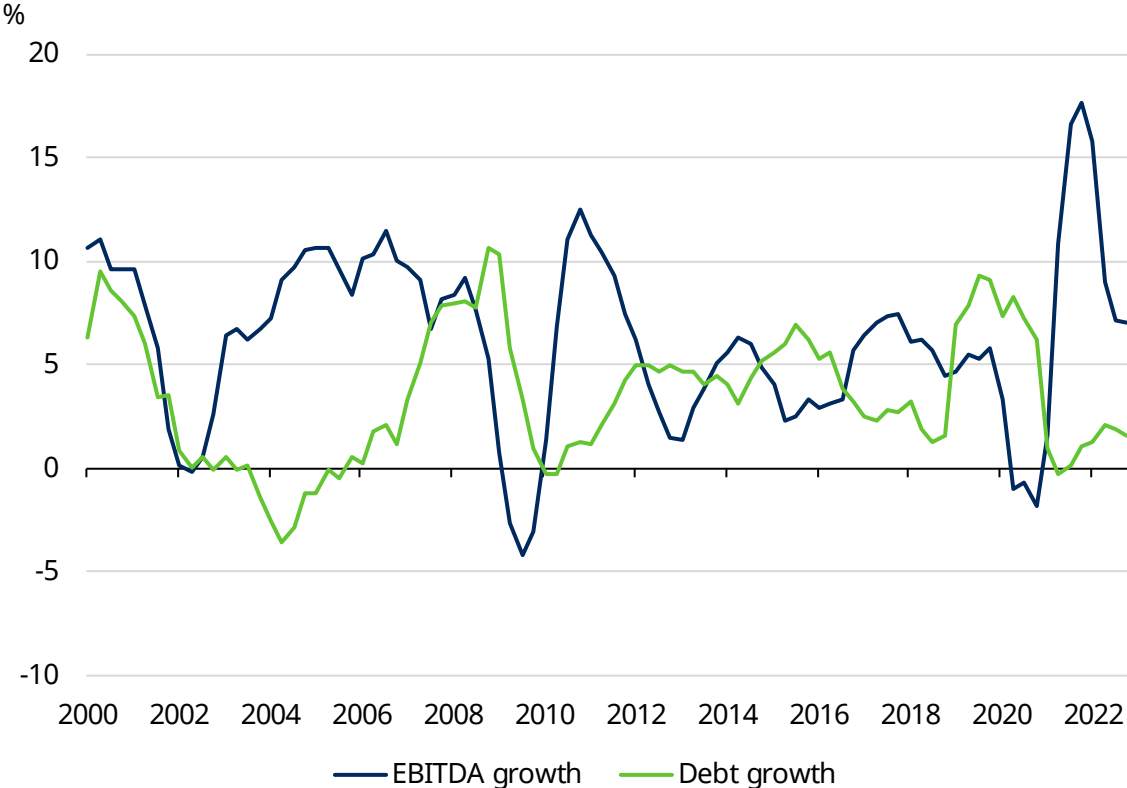
Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q4 2022.

Cyclical sectors: Basic Materials, Consumer Discretionary, Industrials, Technology. **Noncyclical sectors:** Communications, Consumer Staples, Utility, Health Care.

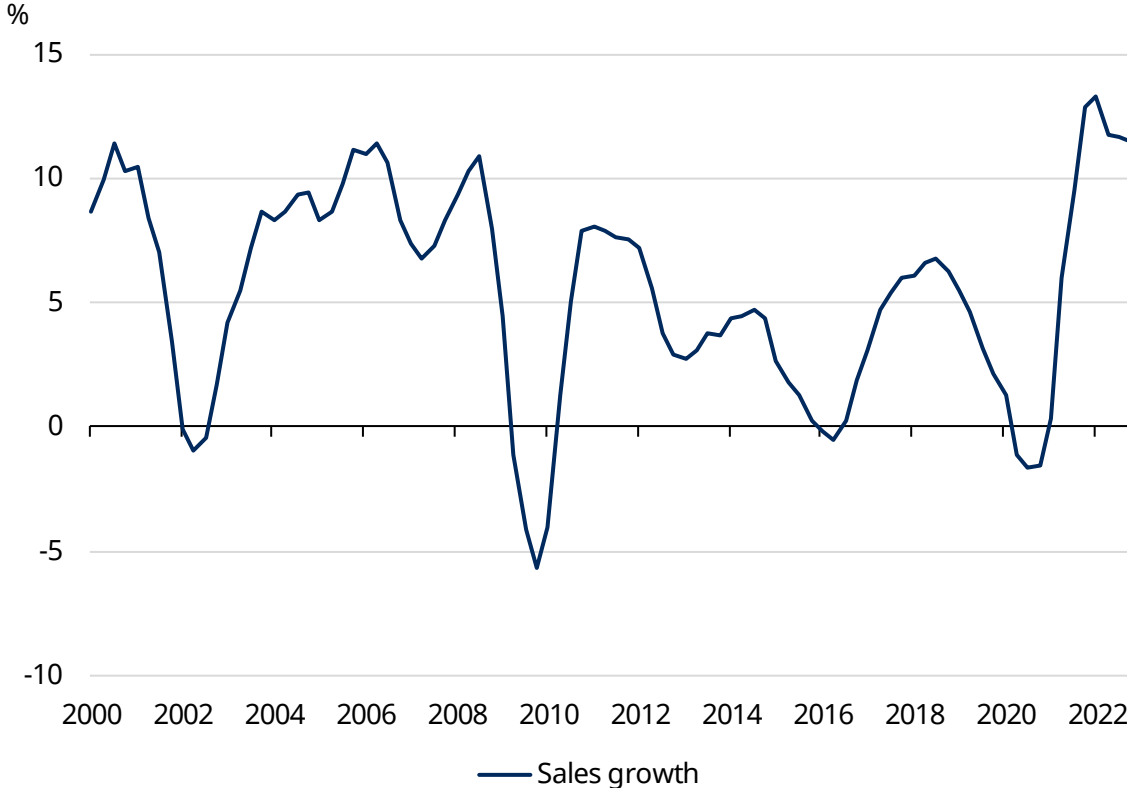
US IG earnings, sales and debt growth

Sales and earnings growth is still strong, aided by high nominal growth and inflation

US IG EBITDA and debt growth



US IG sales growth



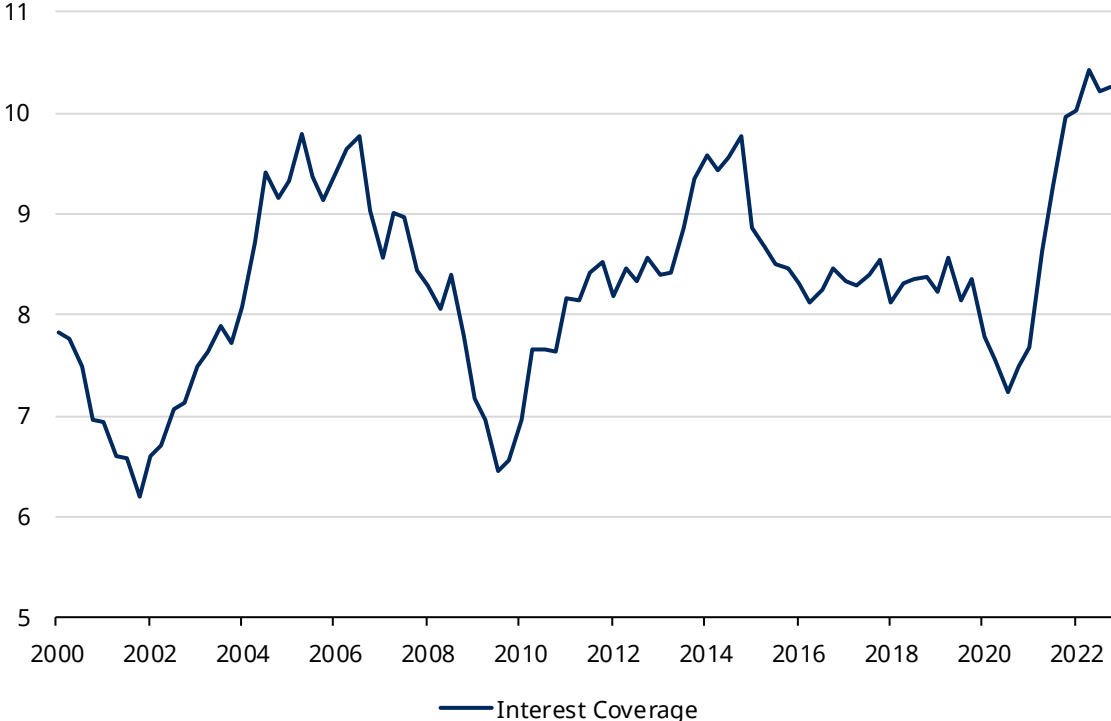
Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

US IG interest coverage

Interest coverage remains very elevated

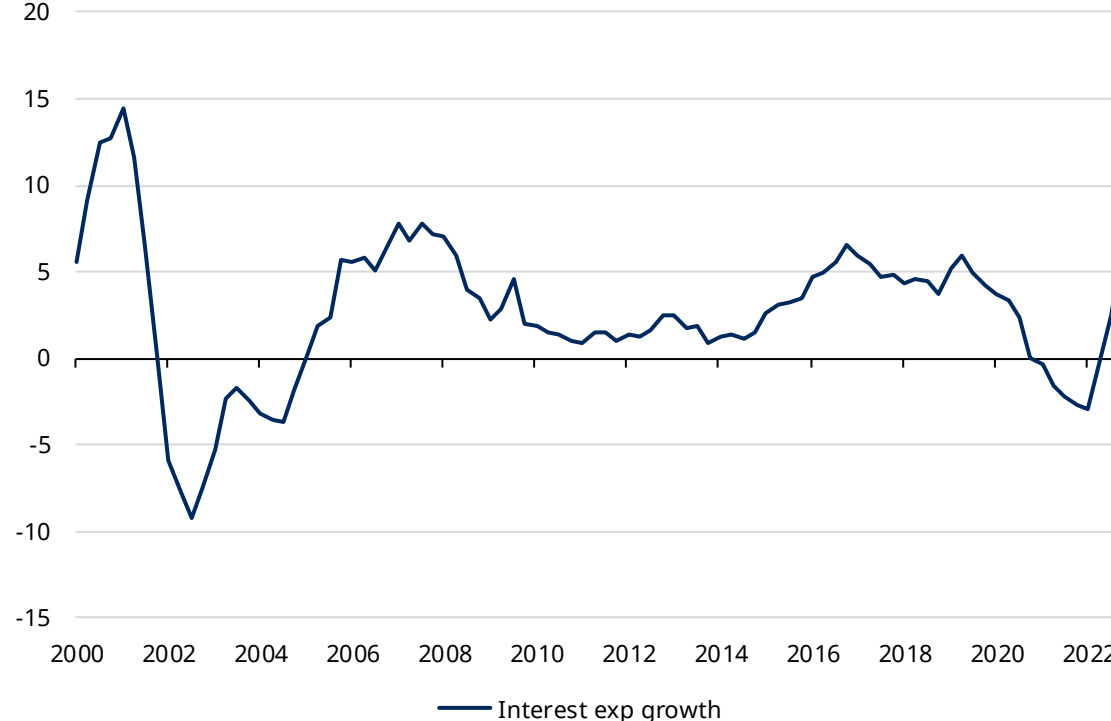
US IG interest coverage ratio

Last 12 months EBITDA to interest expense



US IG annual interest expense growth

%



Interest expense growth is the highest since 2016 as higher bond yields are starting to have an impact

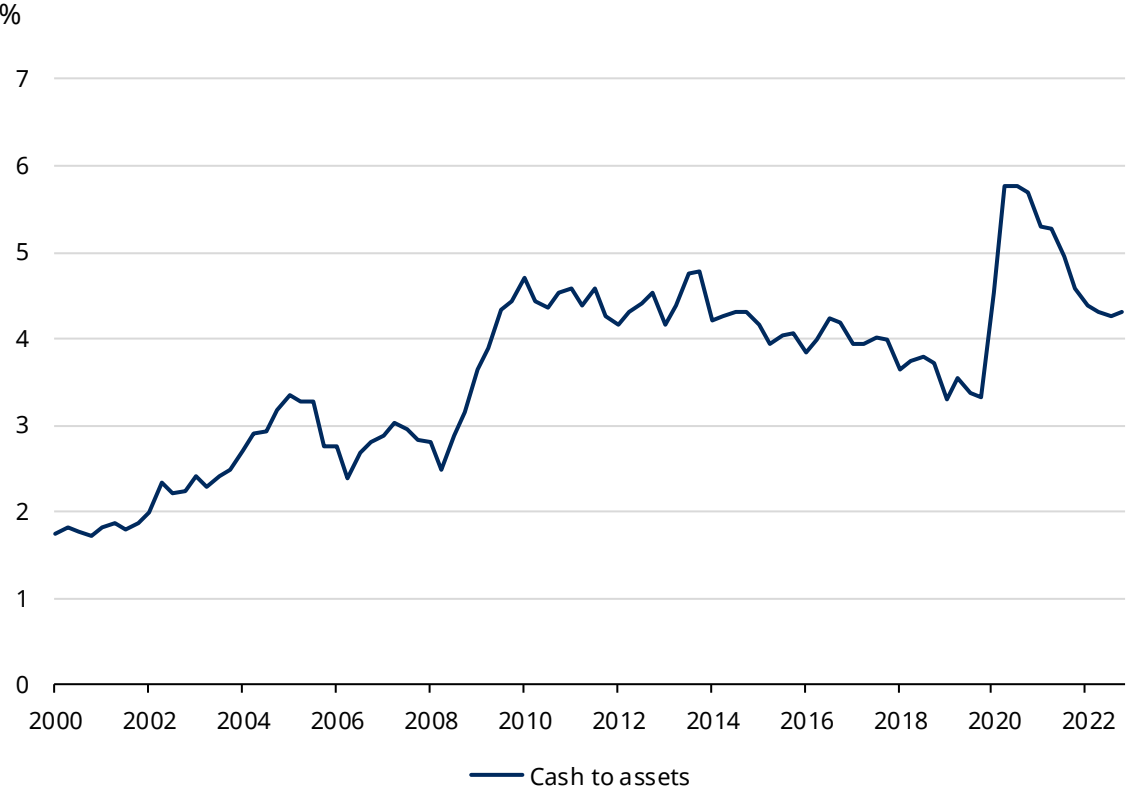
Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

US IG cash balances slightly increased in Q4 for the first time since Q2 2020

US IG cash to short term debt



US IG cash to assets

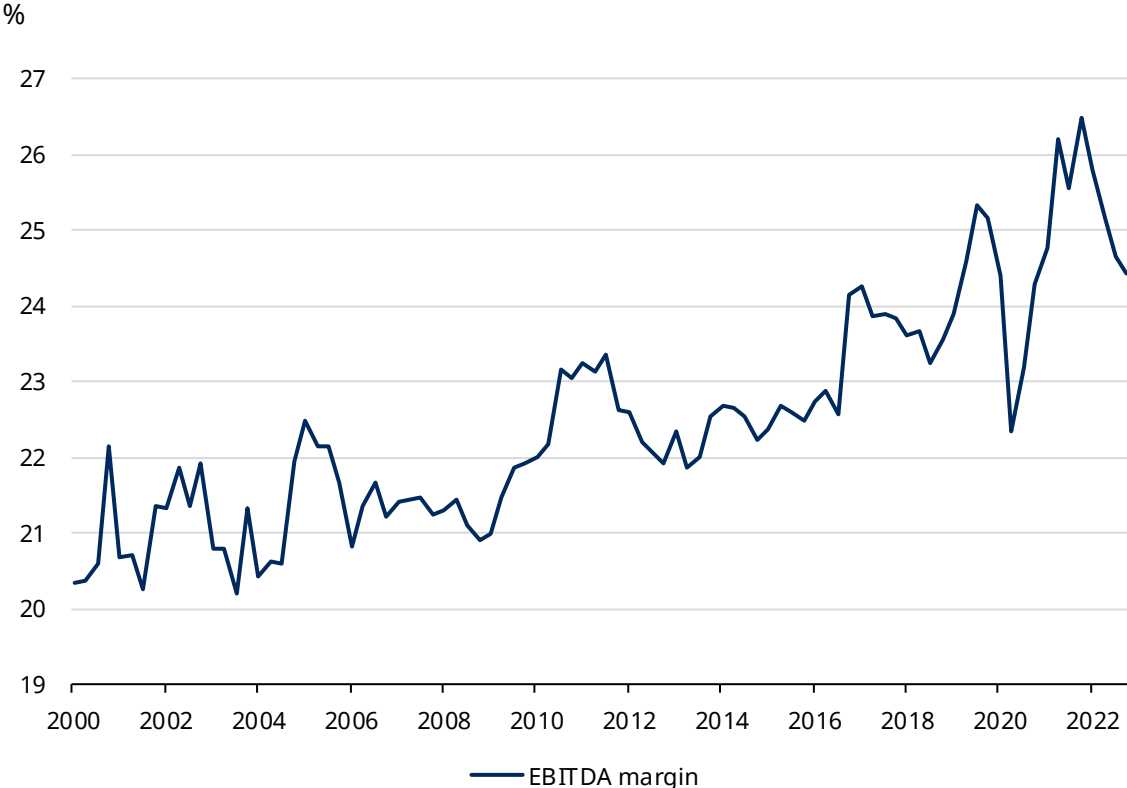


Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

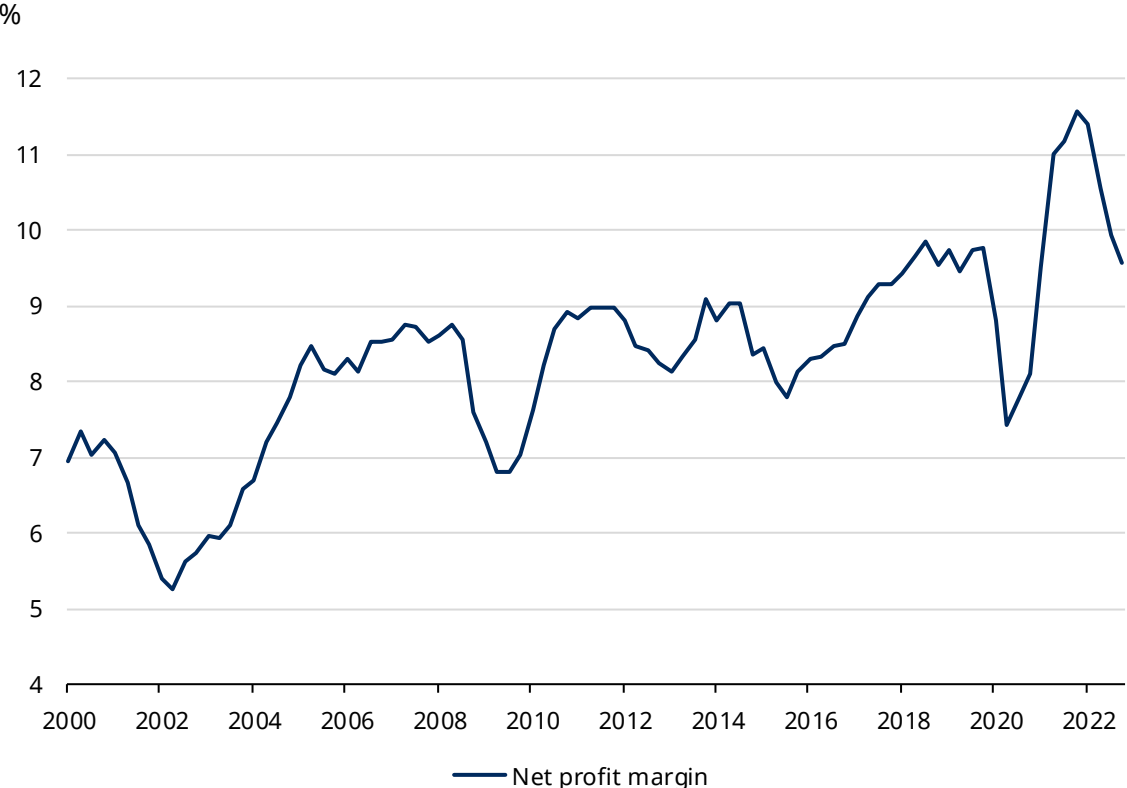
US IG corporate margins

Margins have started to fall meaningfully from record high levels

US IG EBITDA margin



US IG net profit margin



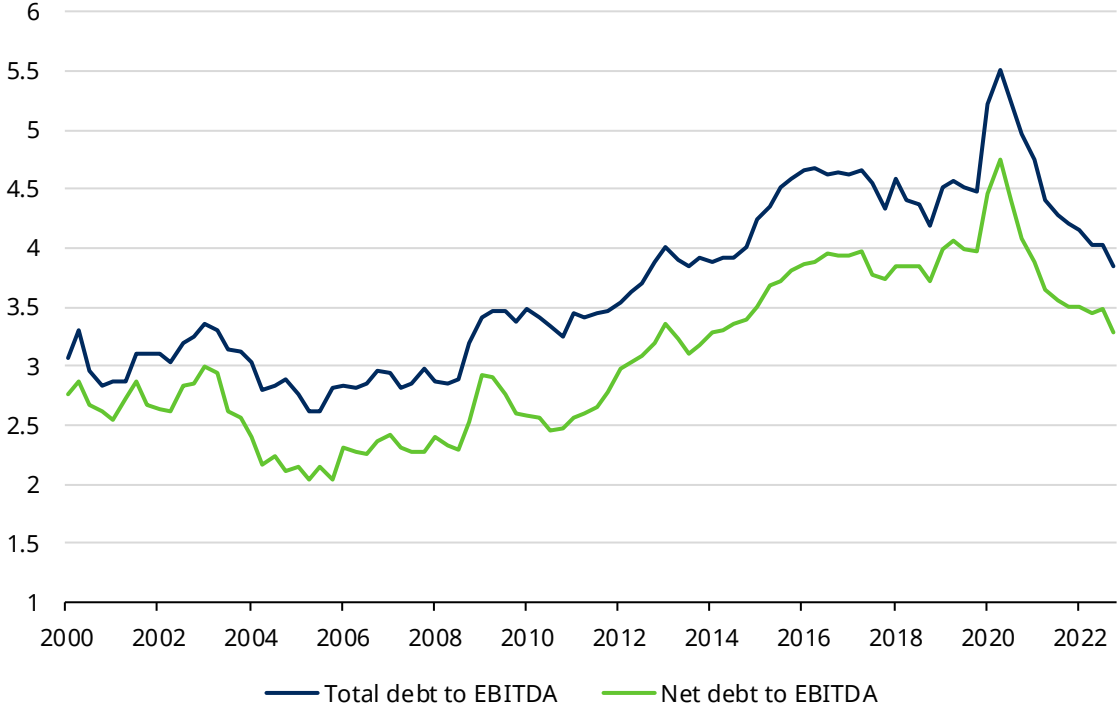
Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q4 2022.

US HY gross leverage is still falling

Ex-energy leverage also fell in Q4

US HY leverage

Debt to last 12 months EBITDA



US HY ex-energy leverage

Debt to last 12 months EBITDA

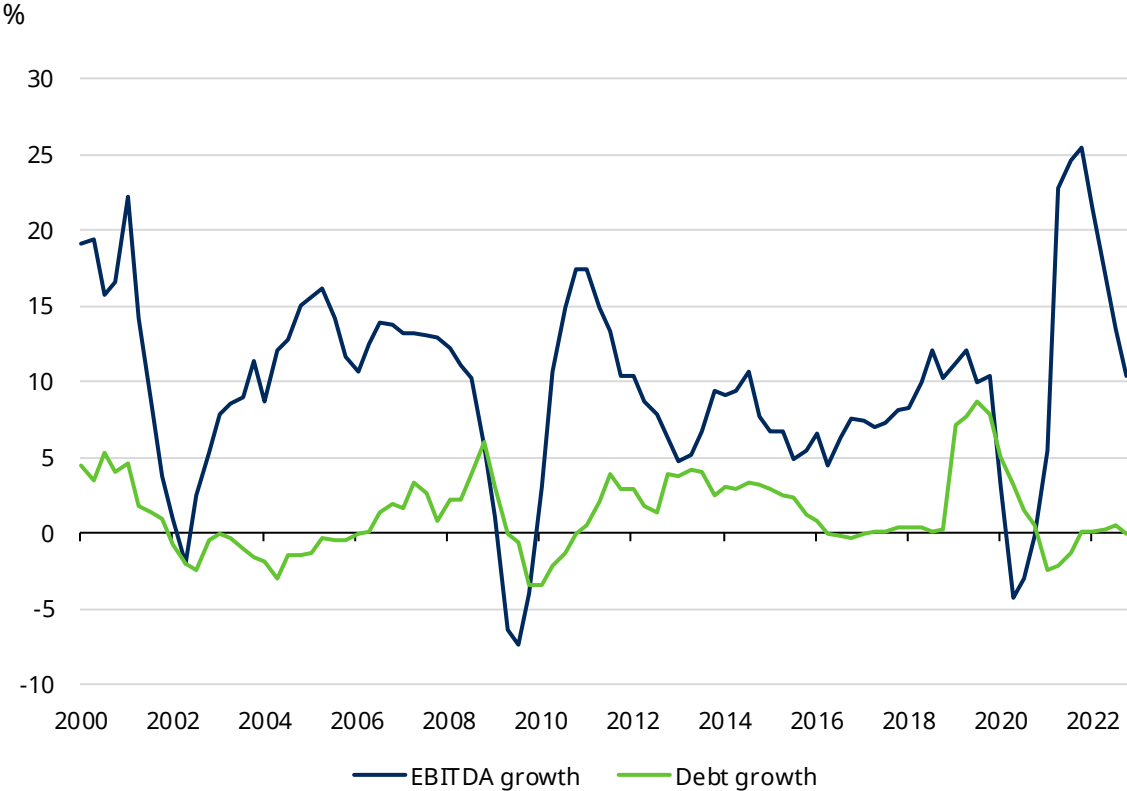


Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q4 2022.

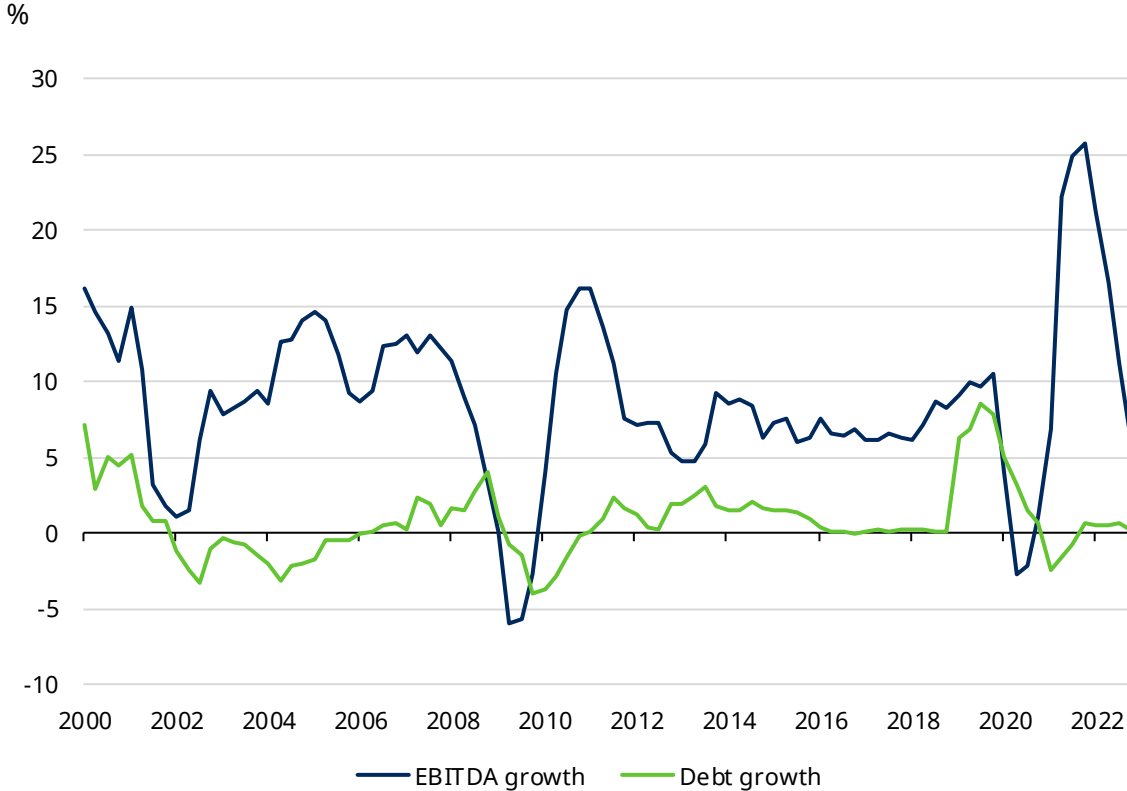
US HY earnings and debt growth

EBITDA growth is cooling fast but debt growth is still close to zero

US HY EBITDA and debt growth (last 12 months)



US HY ex-energy EBITDA and debt growth (last 12m)



Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

US HY interest coverage managed to make a new cyclical high despite rising interest expense growth

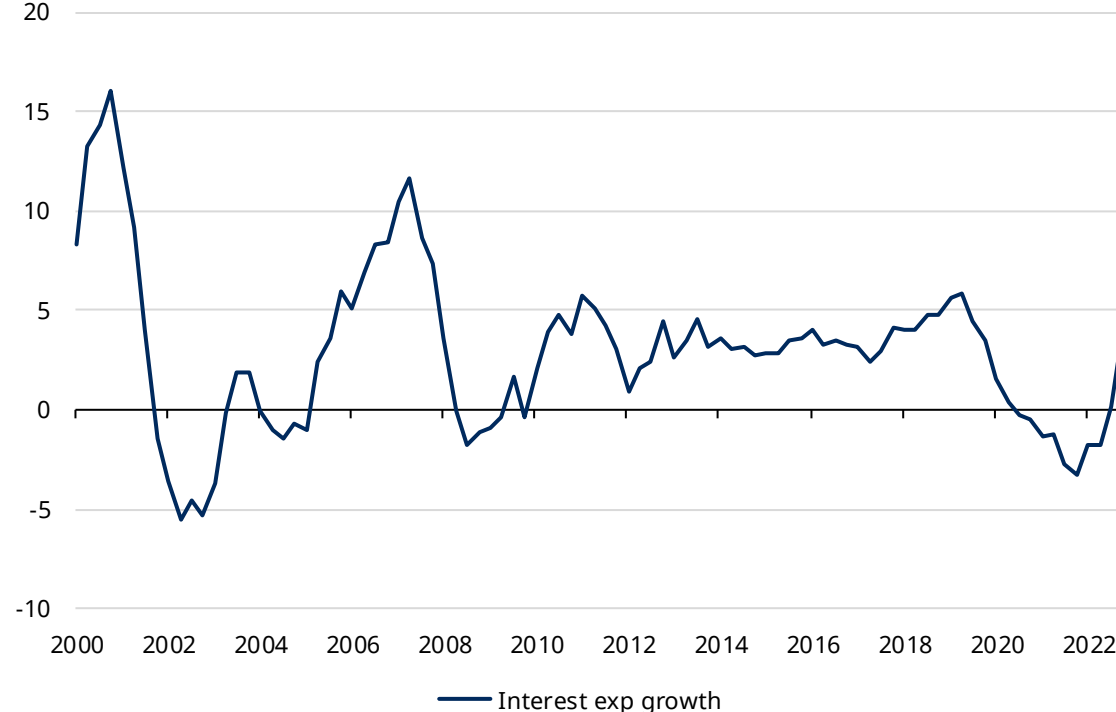
US HY interest coverage ratio

Last 12 months EBITDA to interest expense



US HY annual interest expense growth

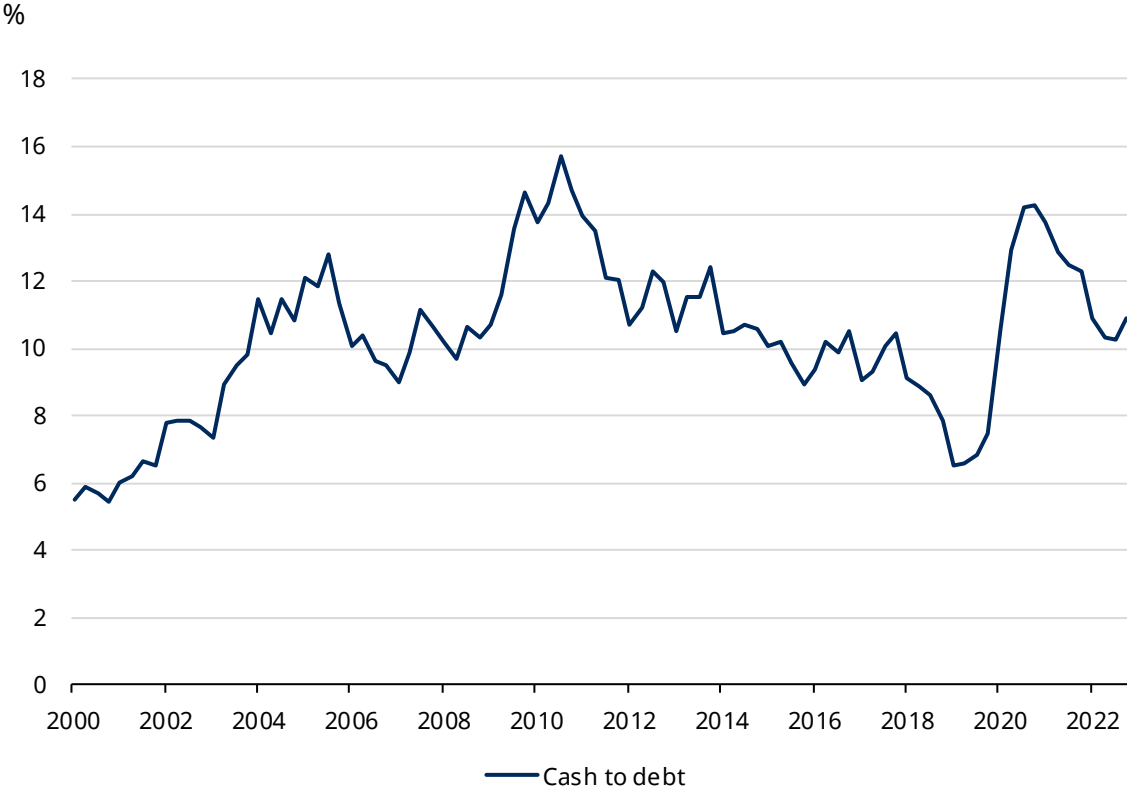
%



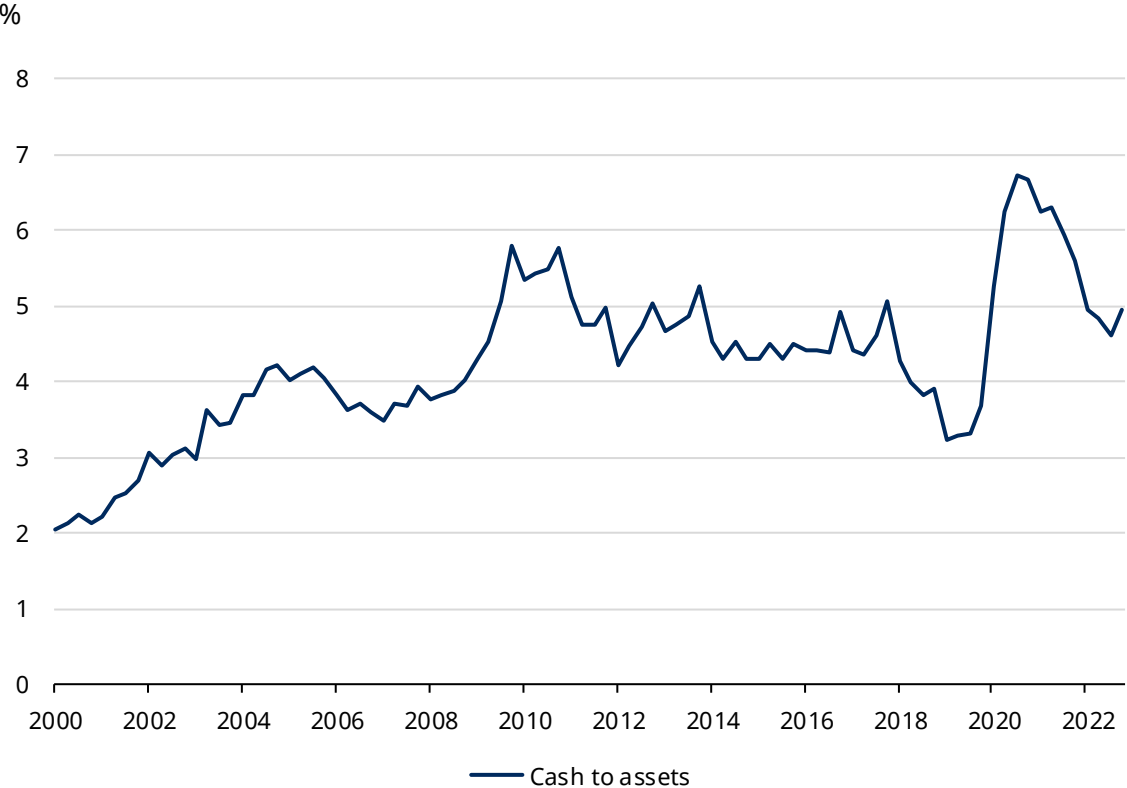
Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

US HY cash levels increased in Q4

US HY cash to debt



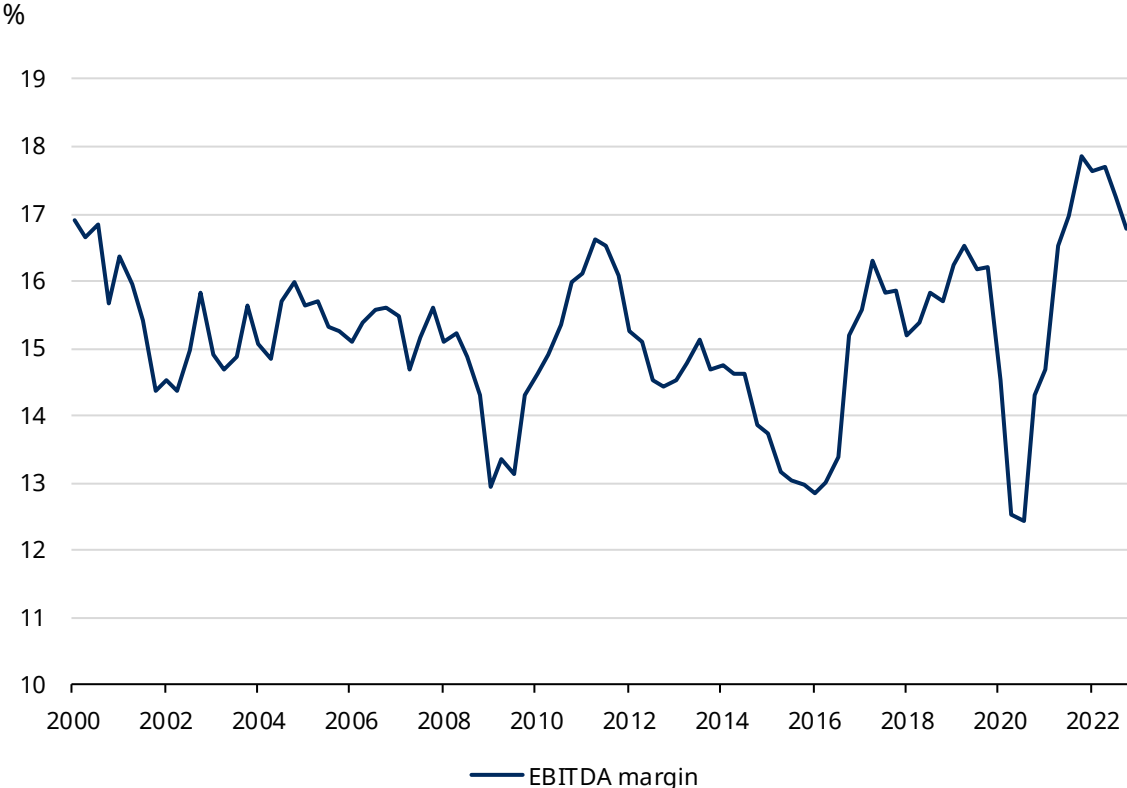
US HY cash to assets



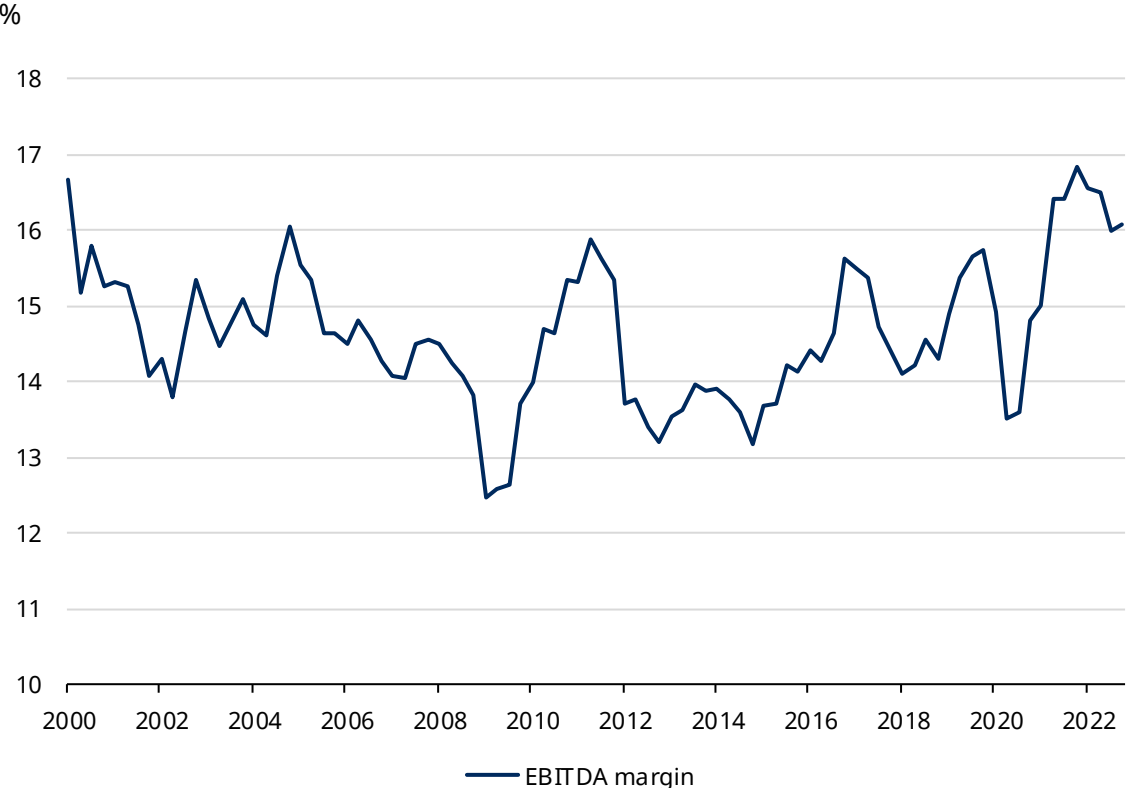
Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

US HY corporate margins are coming off from record highs

US HY EBITDA margin



US HY ex-energy EBITDA margin

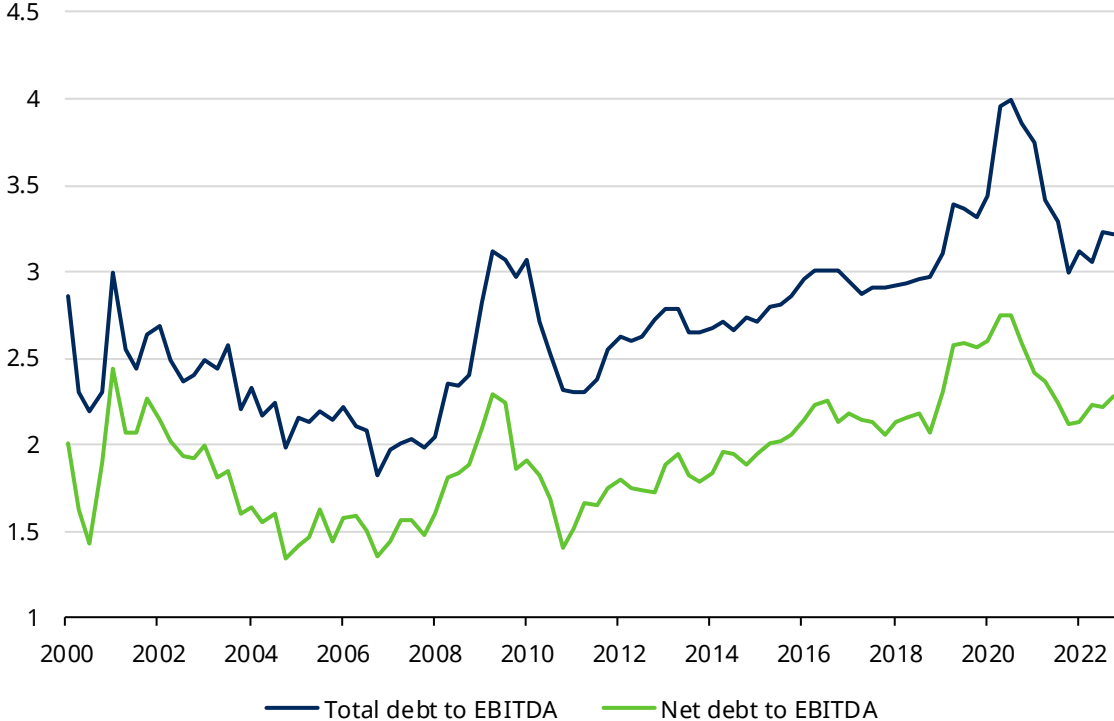


Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

Euro IG leverage has increased slightly over the last four quarters

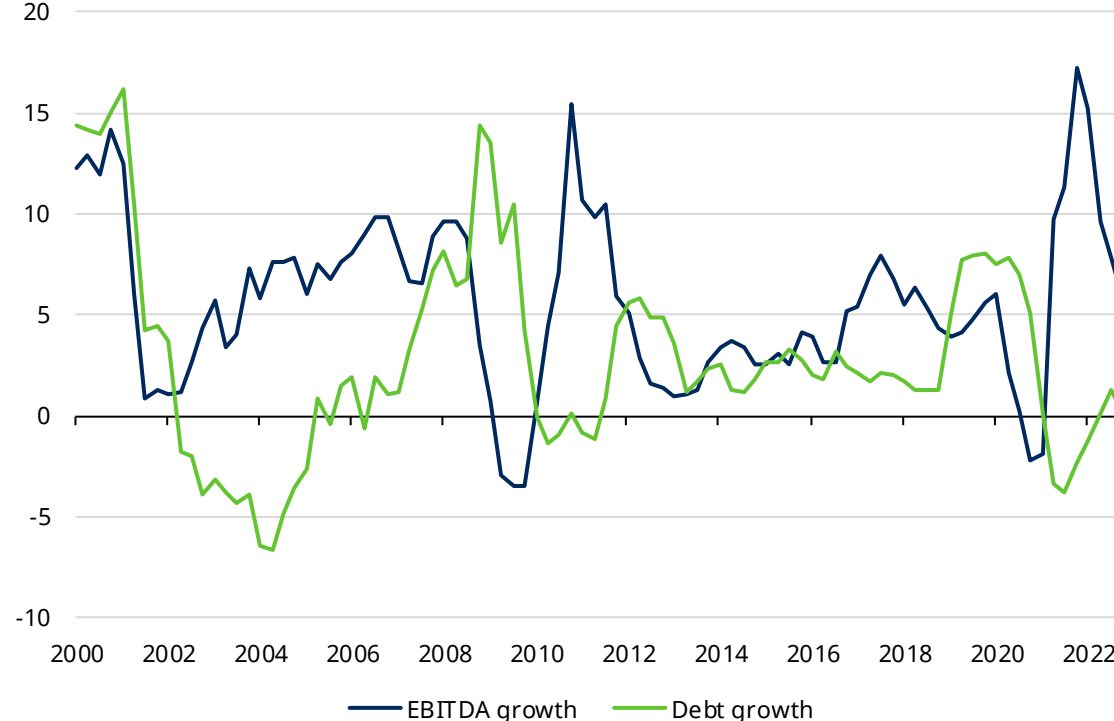
Euro IG leverage

Debt to last 12 months EBITDA



Euro IG EBITDA and debt growth (last 12 months)

%

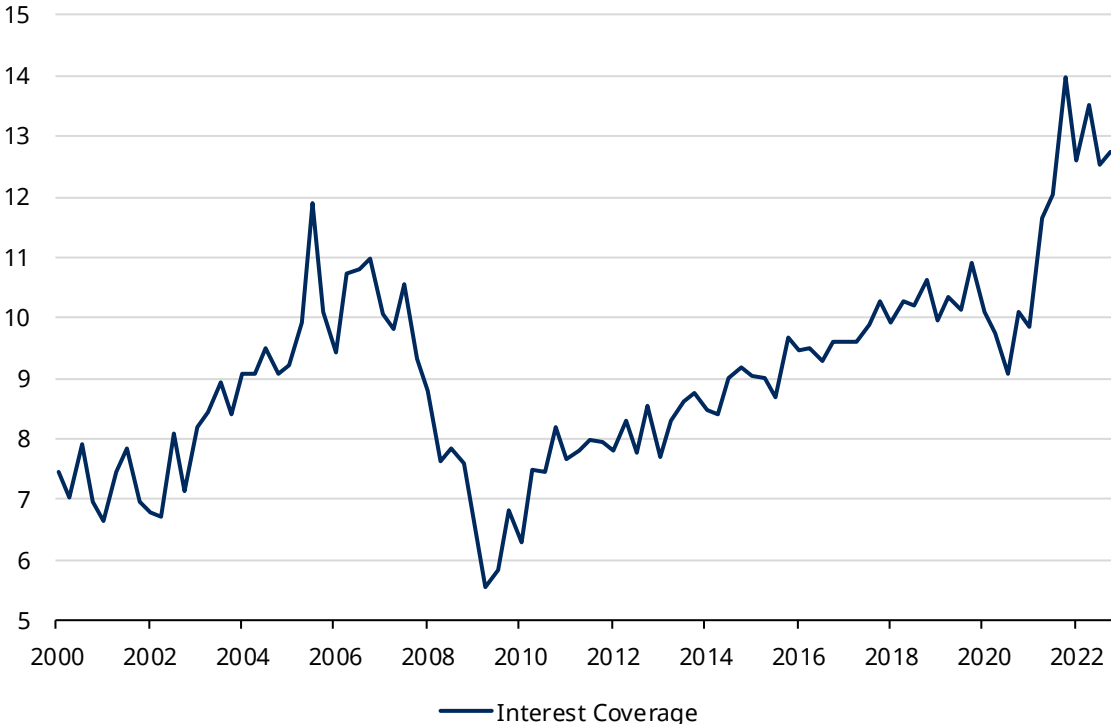


Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

Euro IG interest coverage is very strong despite falling in 2022

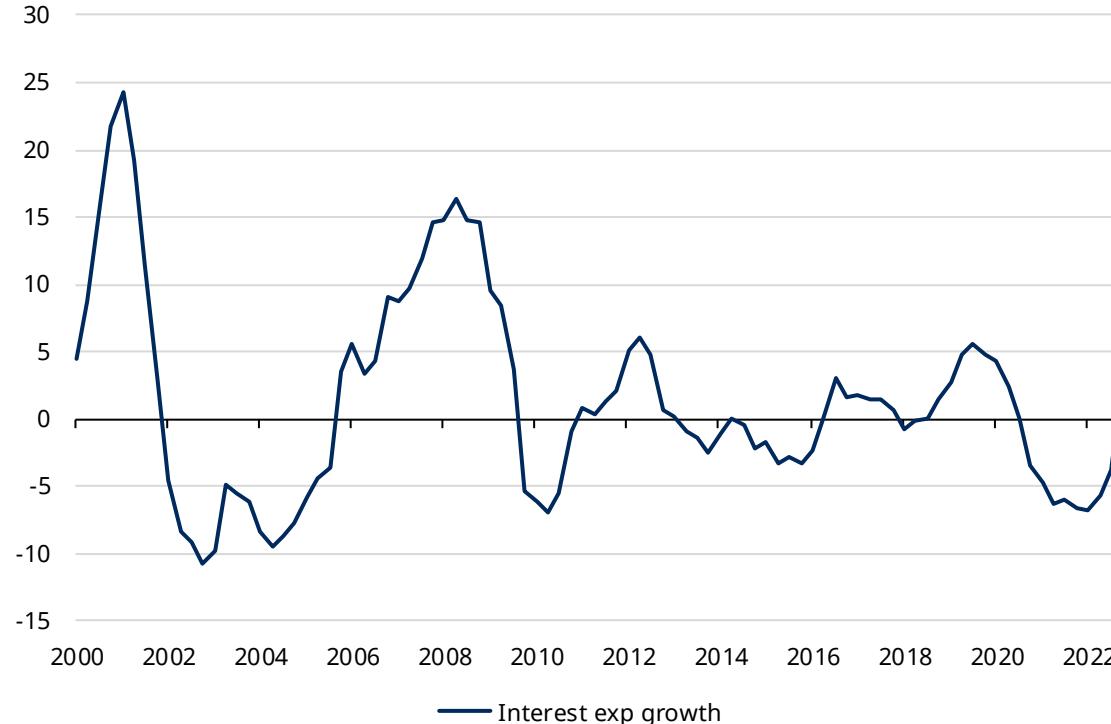
Euro IG interest coverage ratio

Last 12 months EBITDA to interest expense



Euro IG annual interest expense growth

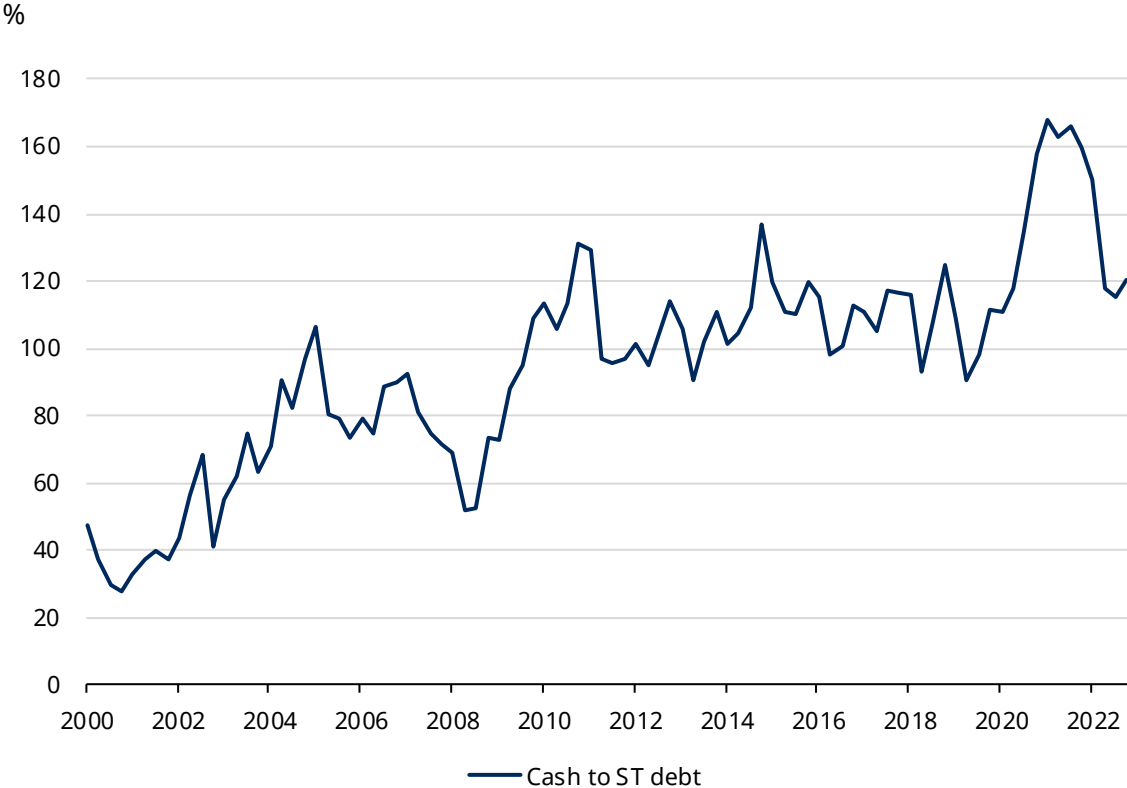
%



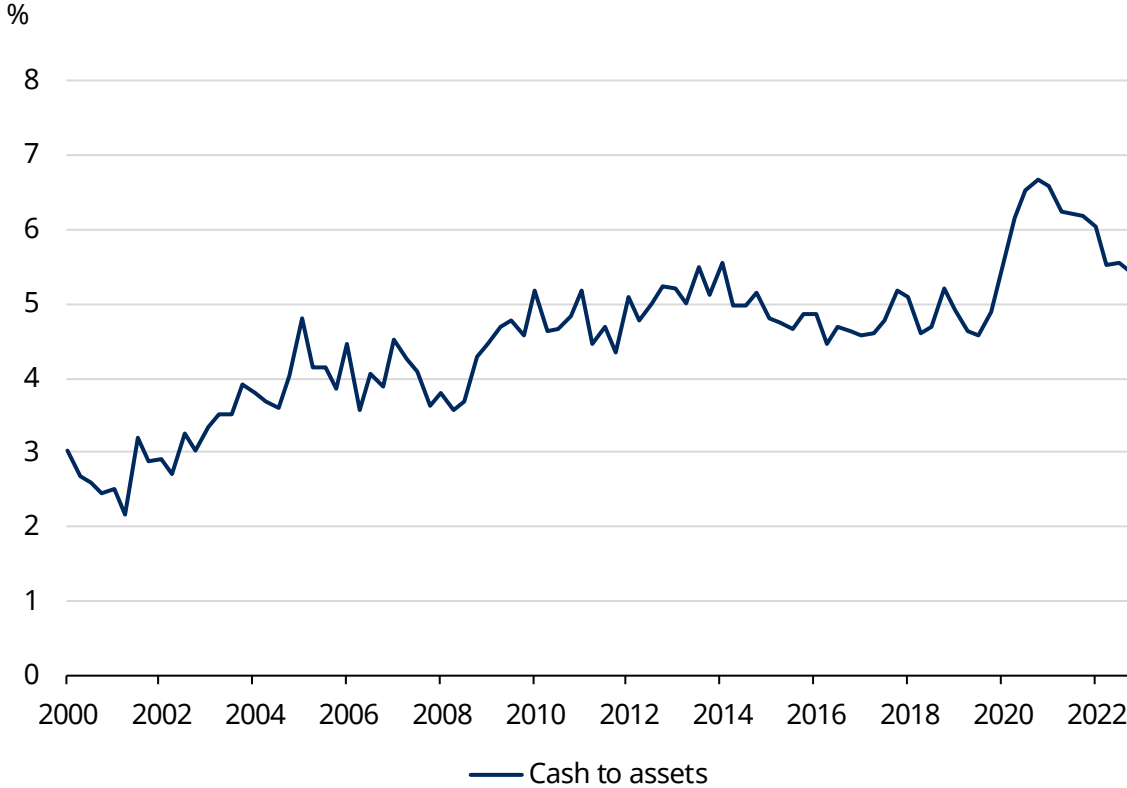
Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

Euro IG cash levels

Euro IG cash to short term debt



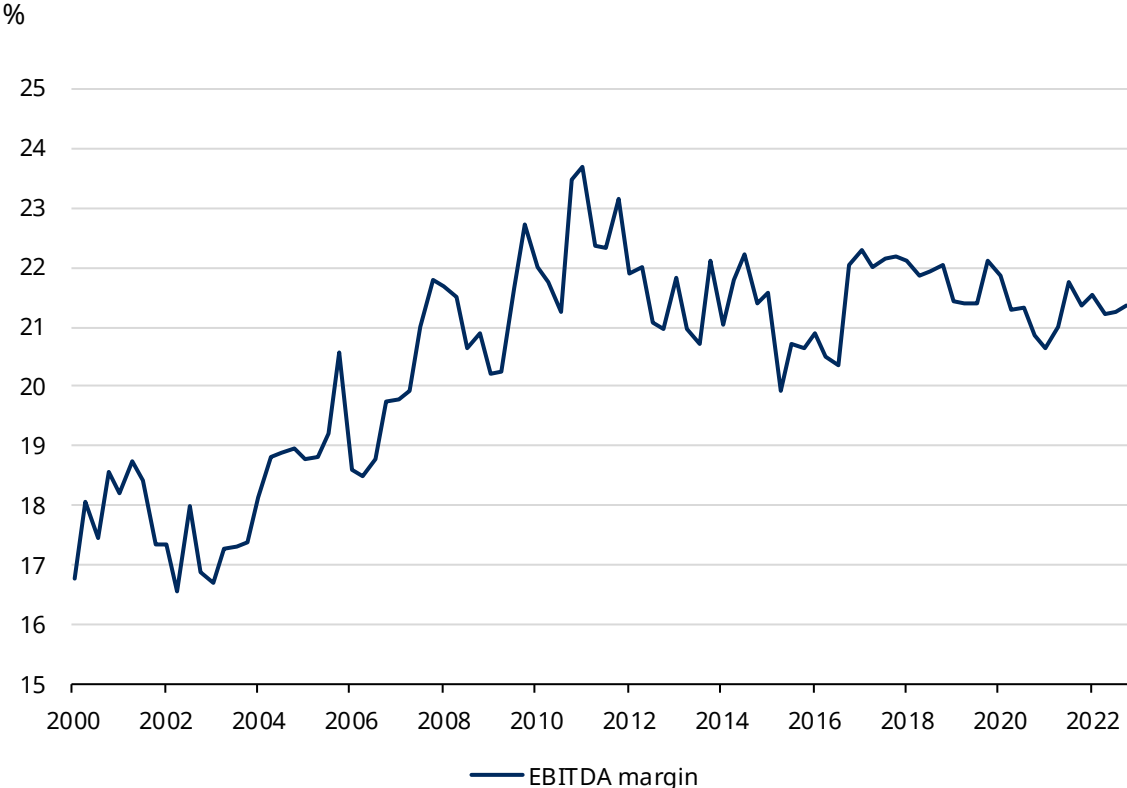
Euro IG cash to assets



Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q4 2022.

Euro IG corporate margins

Euro IG EBITDA margin



Euro IG net profit margin

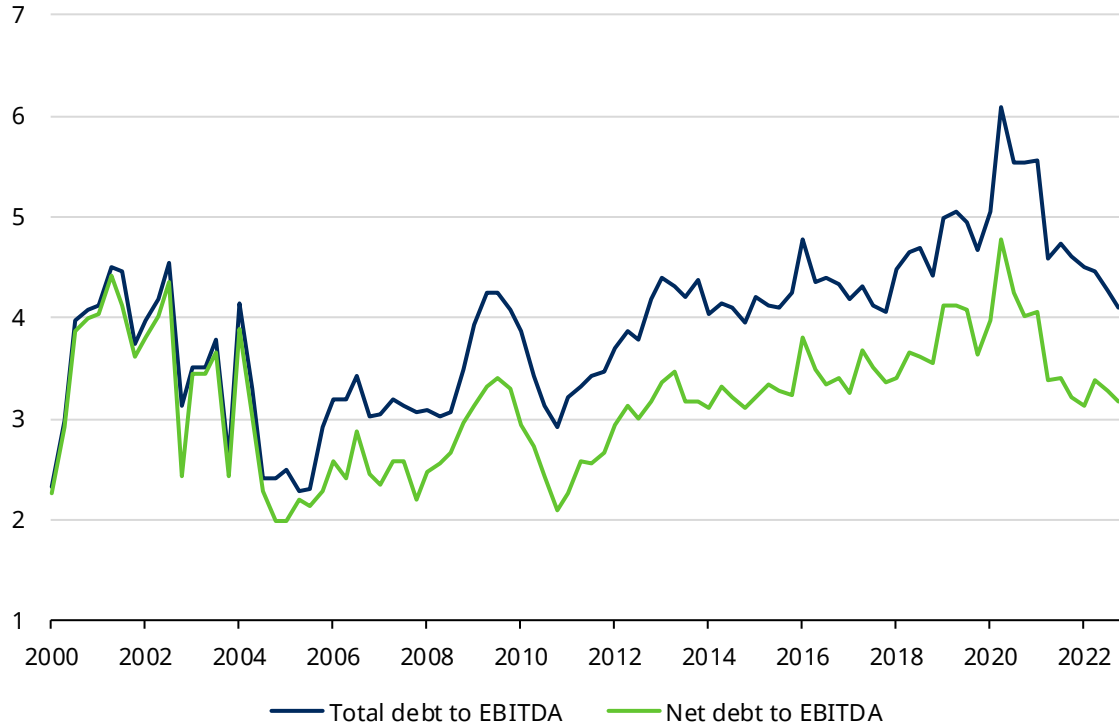


Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

Euro HY leverage is still falling aided by strong EBITDA growth

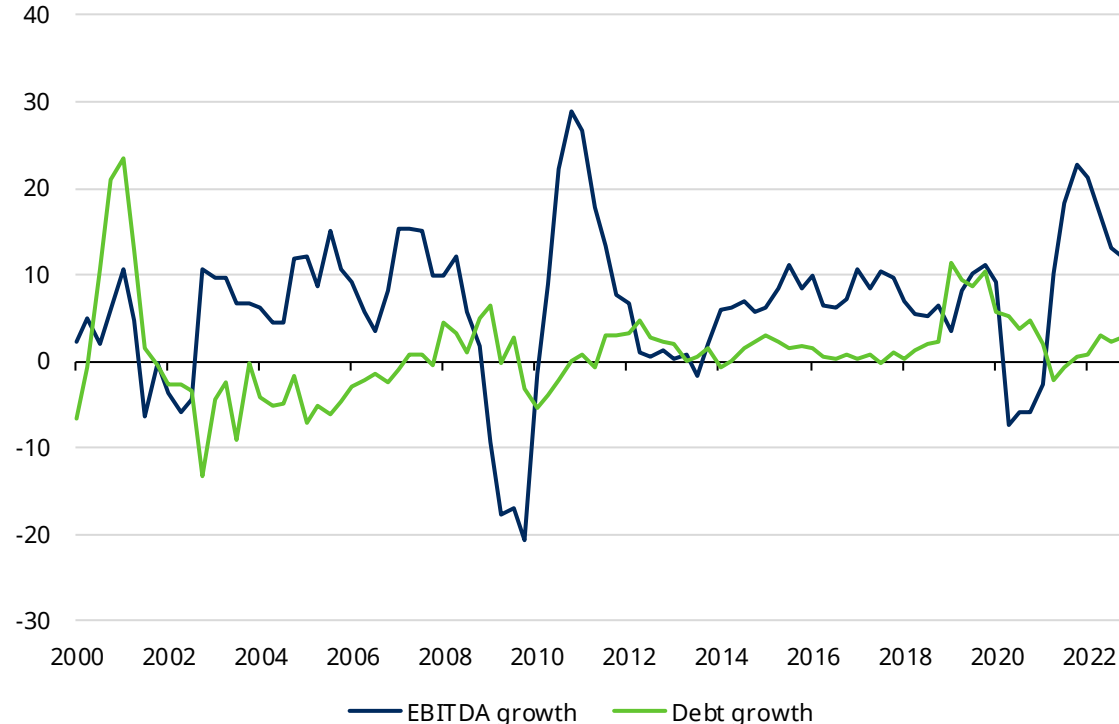
Euro HY leverage

Debt to last 12 months EBITDA



Euro HY EBITDA and debt growth (last 12 months)

%

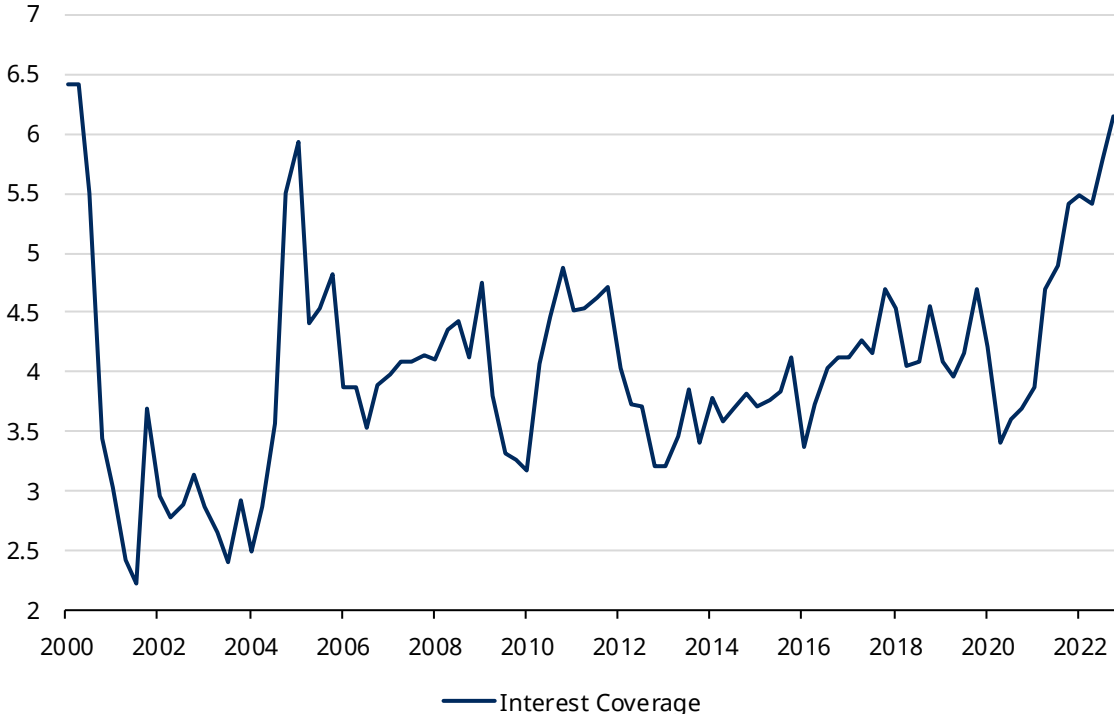


Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

Euro HY interest coverage

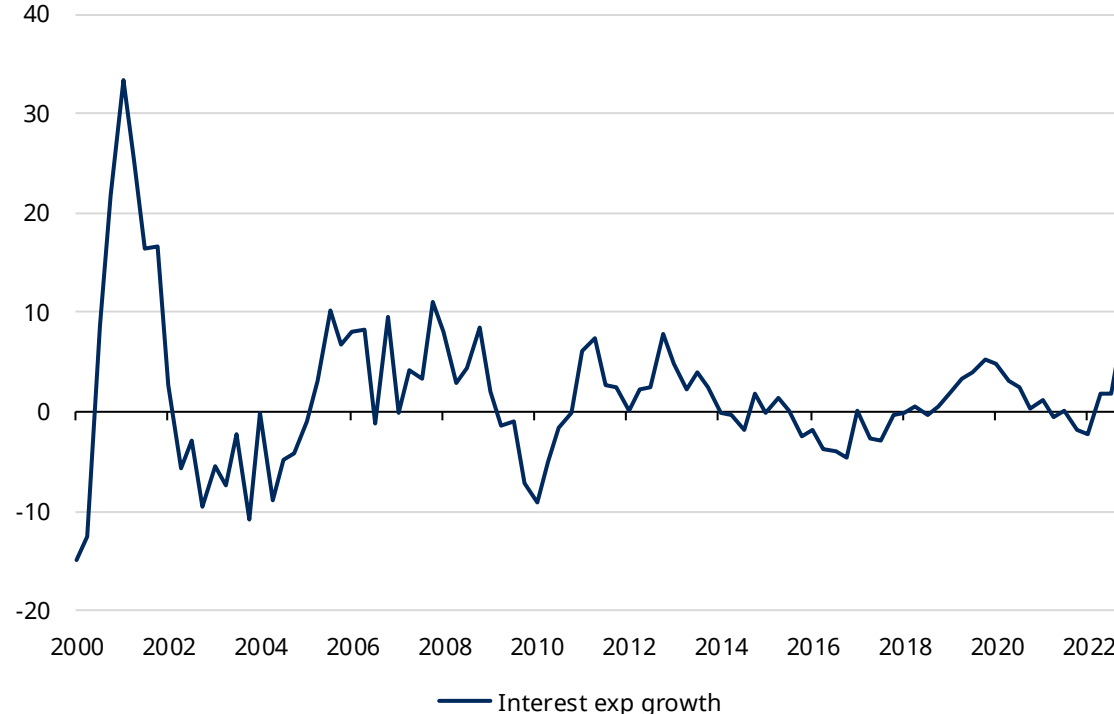
Euro HY interest coverage ratio

Last 12 months EBITDA to interest expense



Euro HY annual interest expense growth

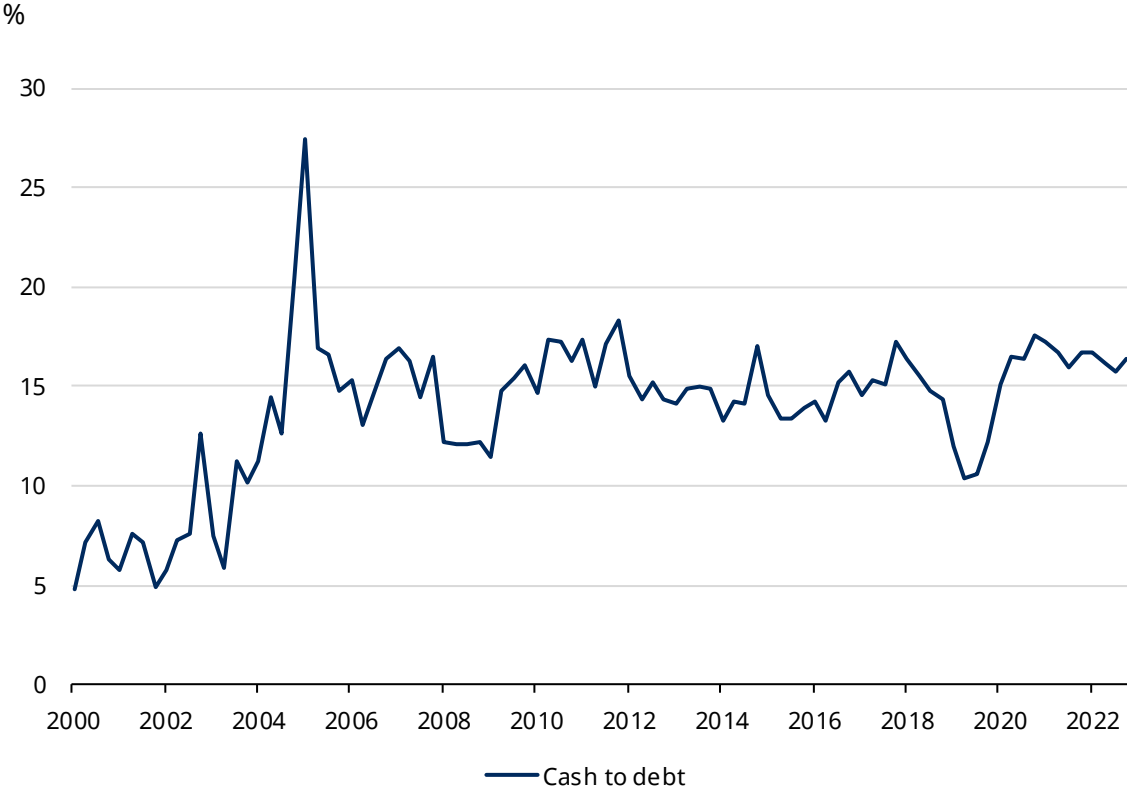
%



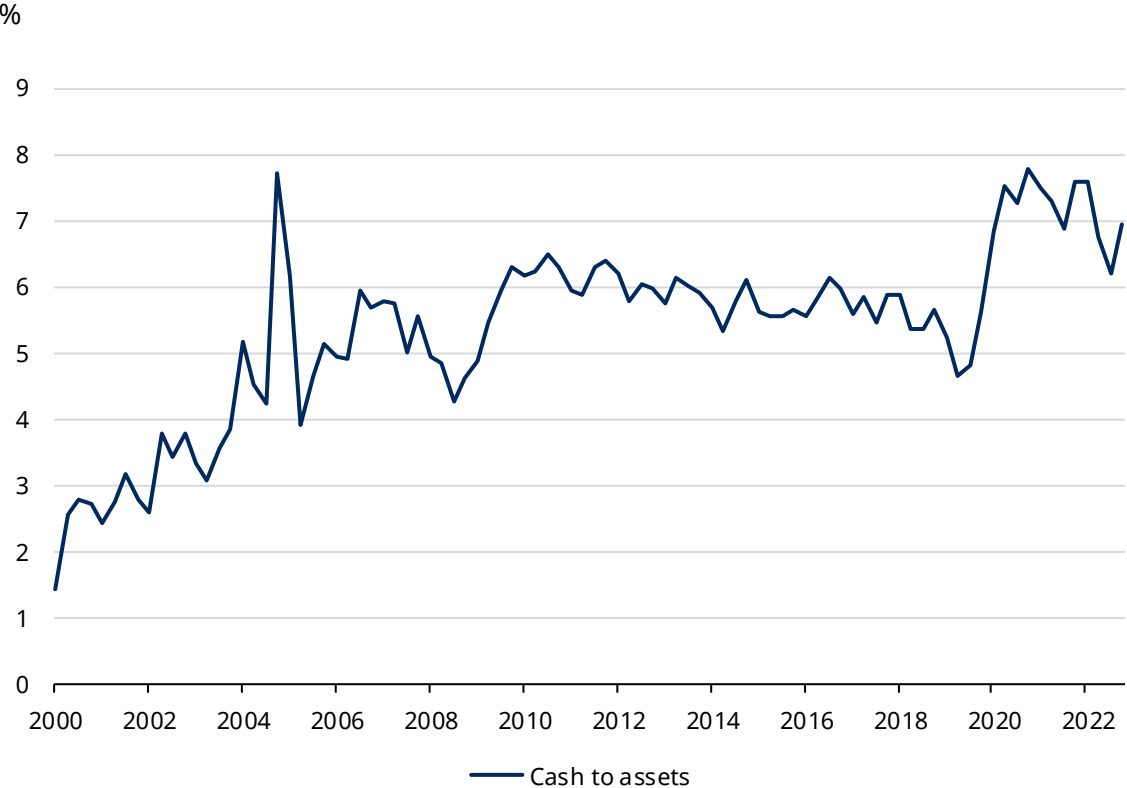
Source: Schrodgers, Bloomberg, Median issuer ex-Financials. Data as of Q4 2022.

Euro HY cash levels

Euro HY cash to debt



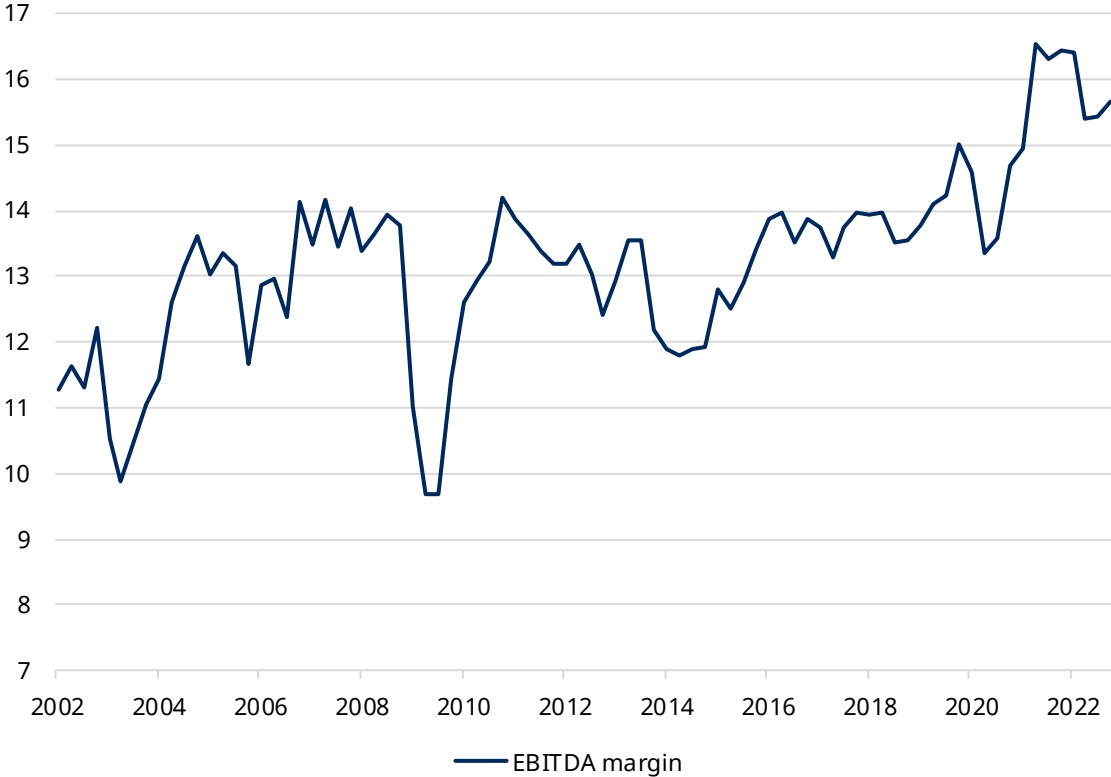
Euro HY cash to assets



Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q4 2022.

Euro HY corporate margins

Euro HY EBITDA margin



Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q4 2022.

Schroders

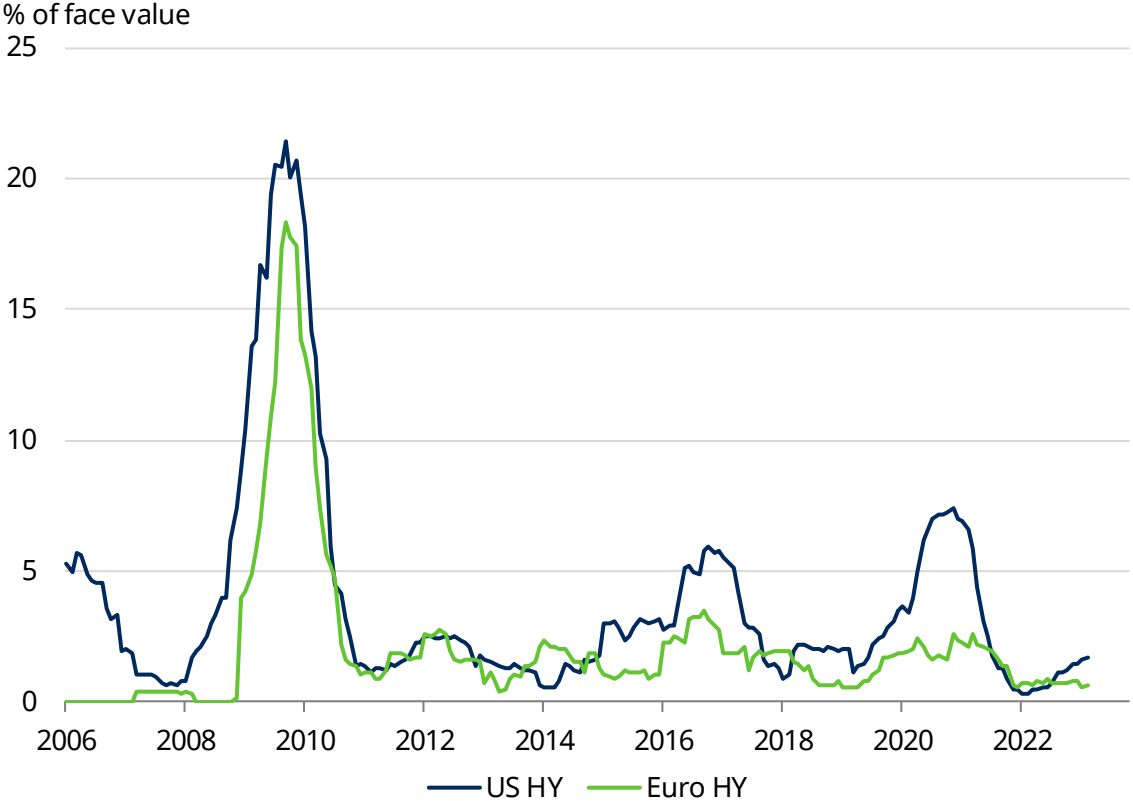


Corporate credit

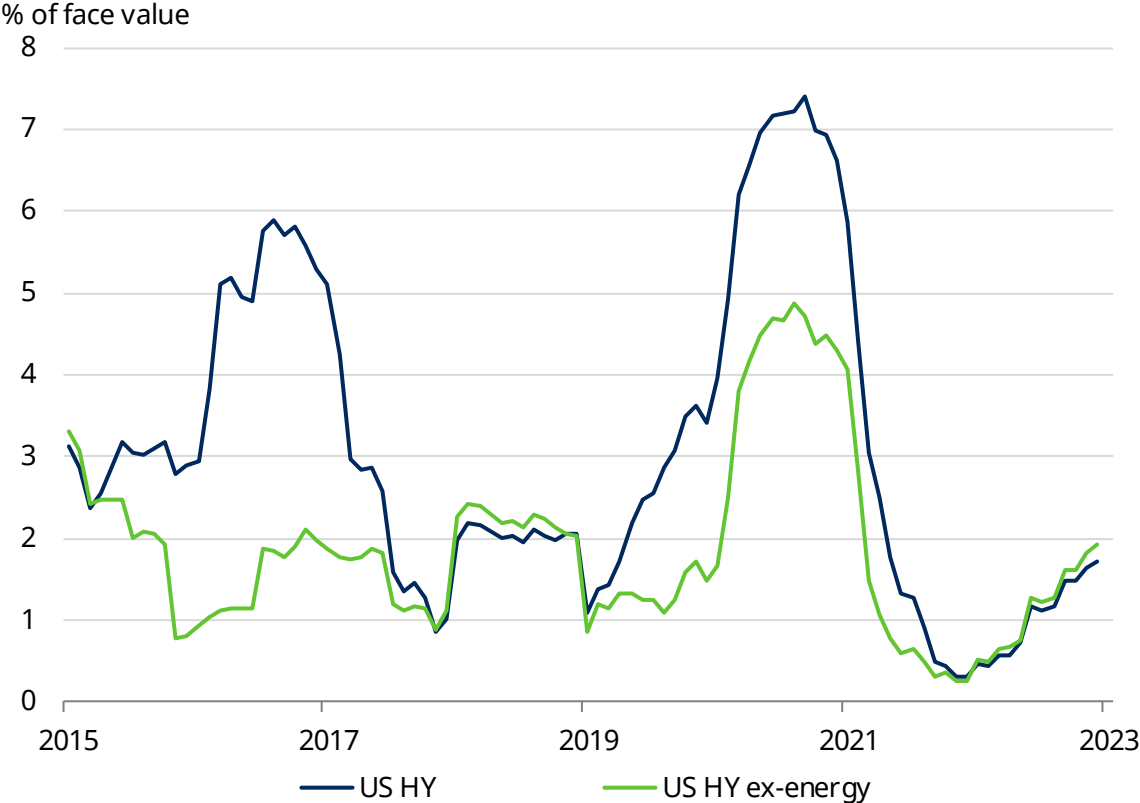
Technicals

HY default rates are rising from low levels

HY par default rate (last twelve months)



US HY par default rate (last twelve months)

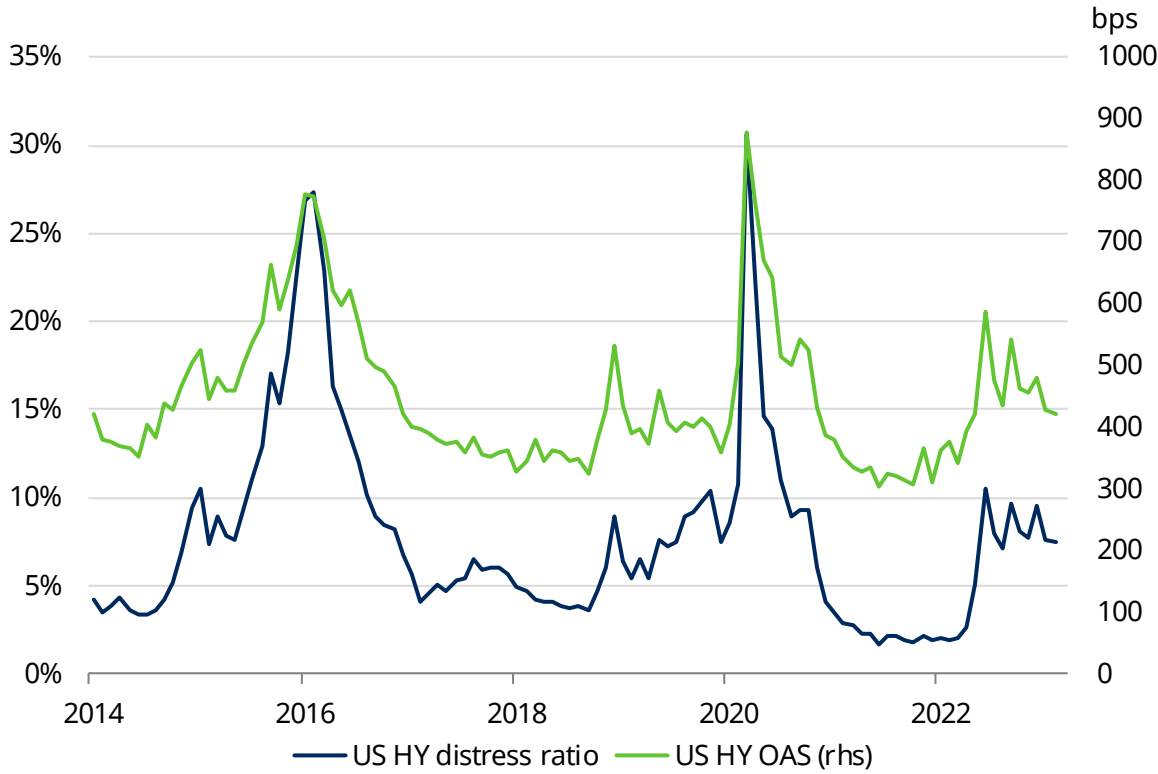


Source: Schroders, BofA Global Research, Moody's. Data as at 28 February 2023.

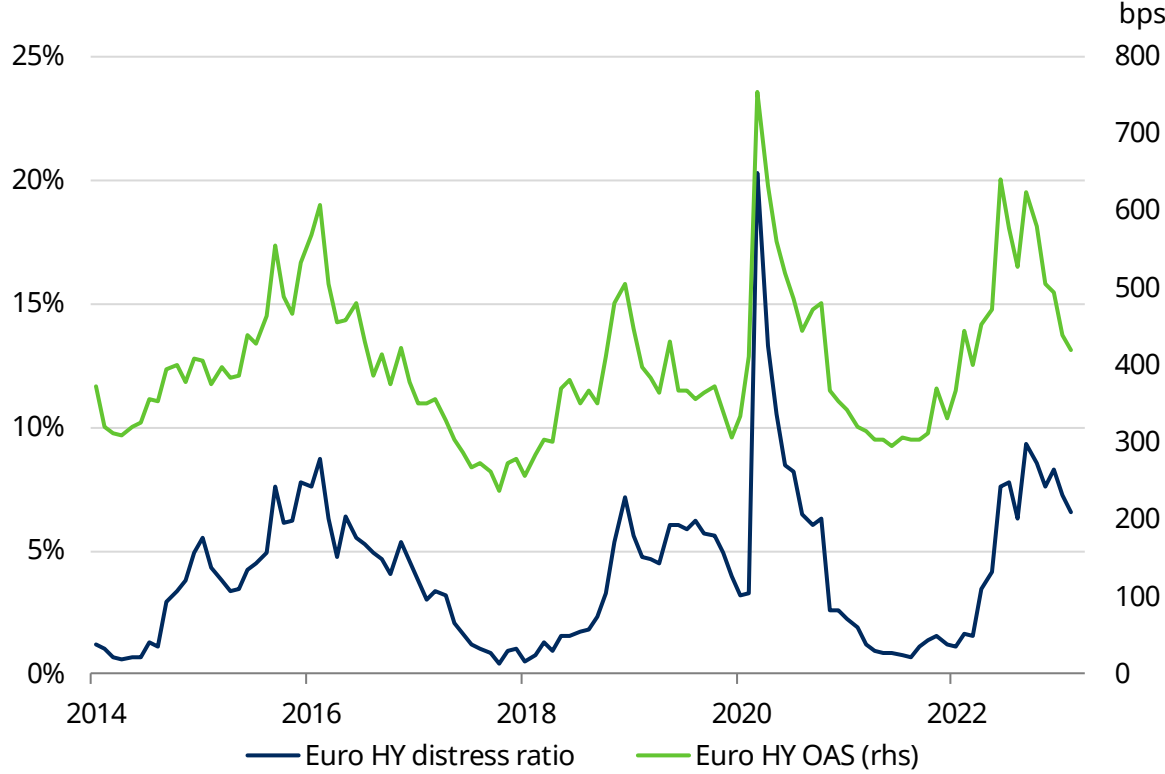
HY distress ratios

Higher distress is usually a harbinger of defaults

US HY distress ratio¹



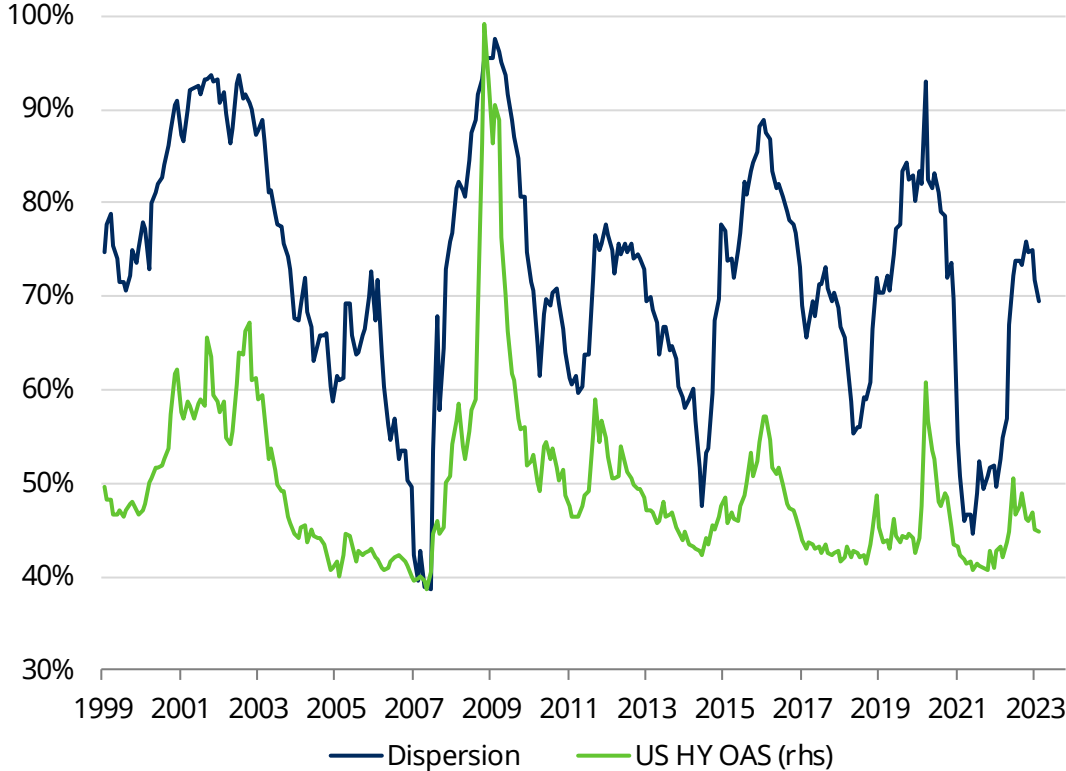
Euro HY distress ratio¹



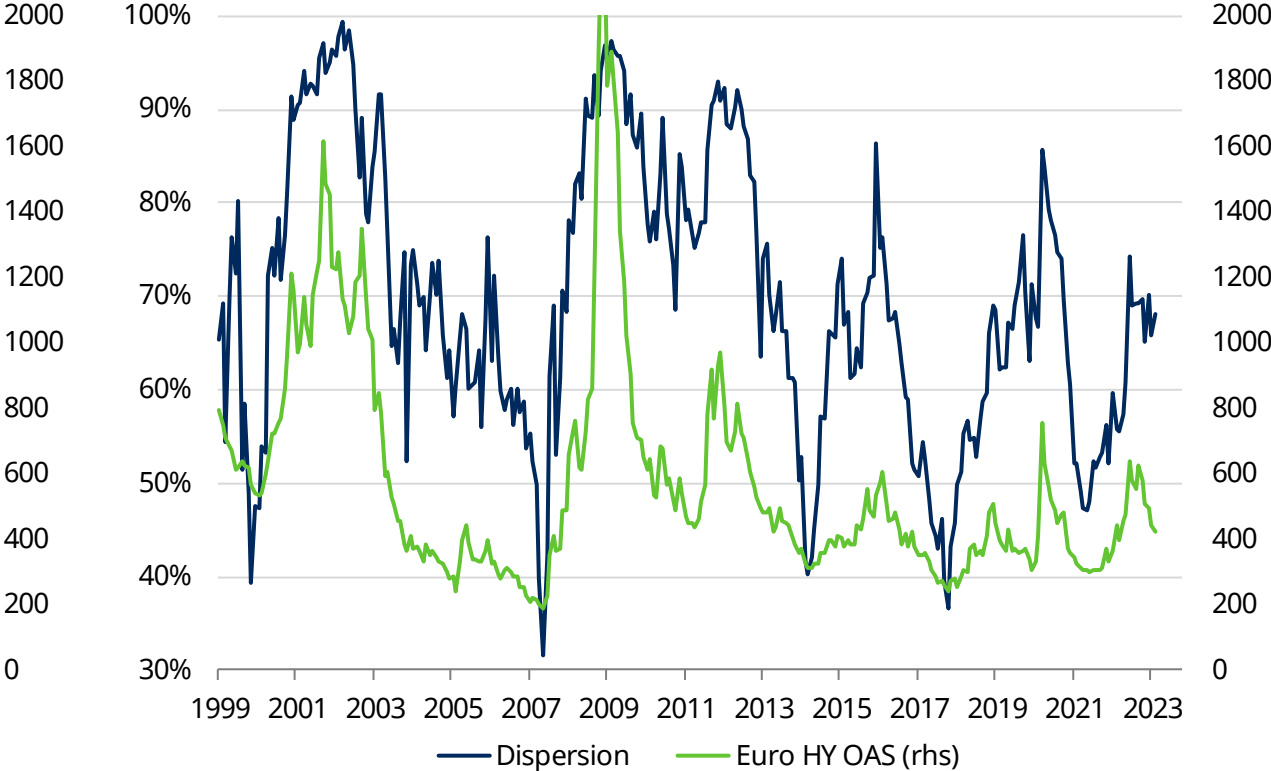
Source: Schroders, BofA Global Research, Moody's. Data as at 28 February 2023. ¹HY distress is defined as percentage of issues in the index trading with spreads > 1,000bp.

HY spread dispersion has fallen slightly

US HY dispersion¹ vs US HY spread



Euro HY dispersion¹ vs Euro HY spread



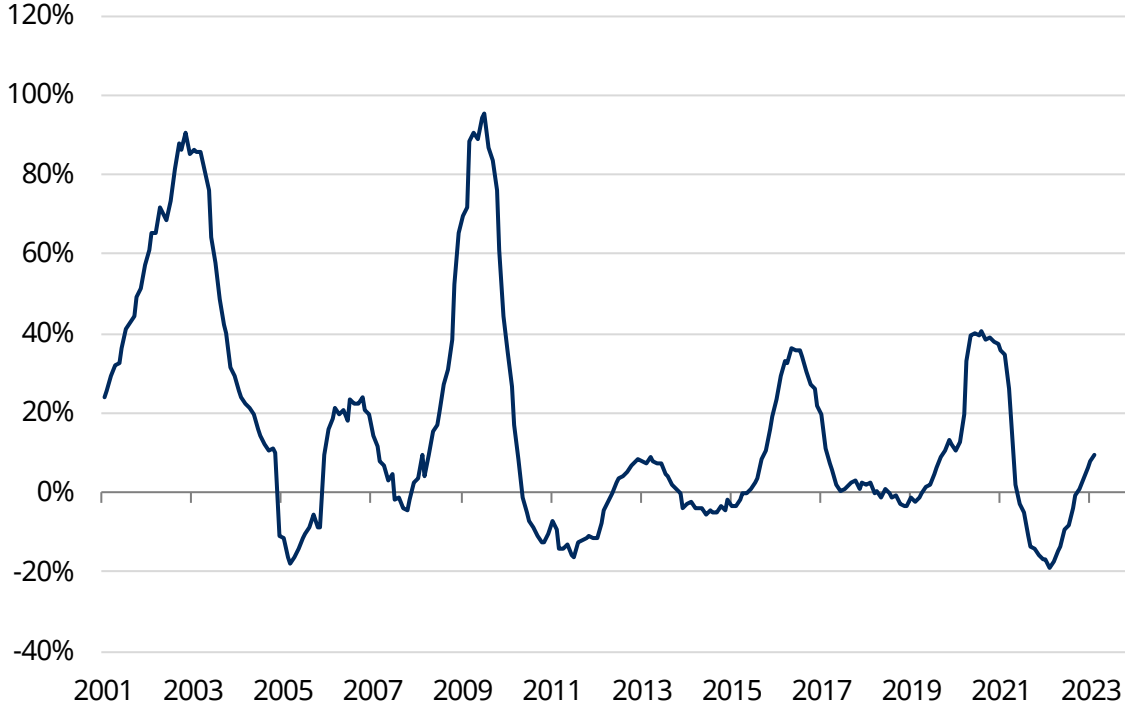
Source: Schroders, BofA Global Research. Data as at 28 February 2023. ¹ Proportion of face value in index marked outside +/-100bps of overall index level.

US HY ratings migration (net downgrades)

Indicator of changes in credit quality

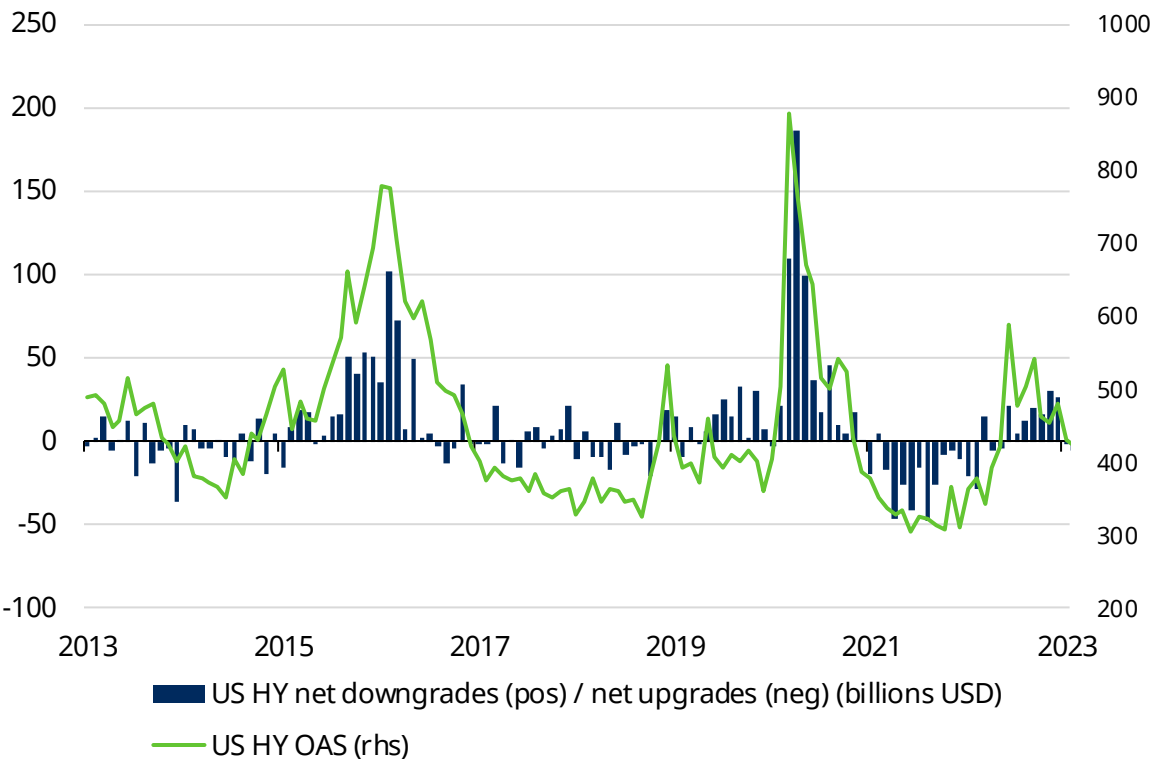
US HY net downgrades¹

Percentage of the HY index, last 12 months



US HY monthly net downgrades

Billions USD



Downgrades have started to outpace upgrades, a trend that's likely to continue

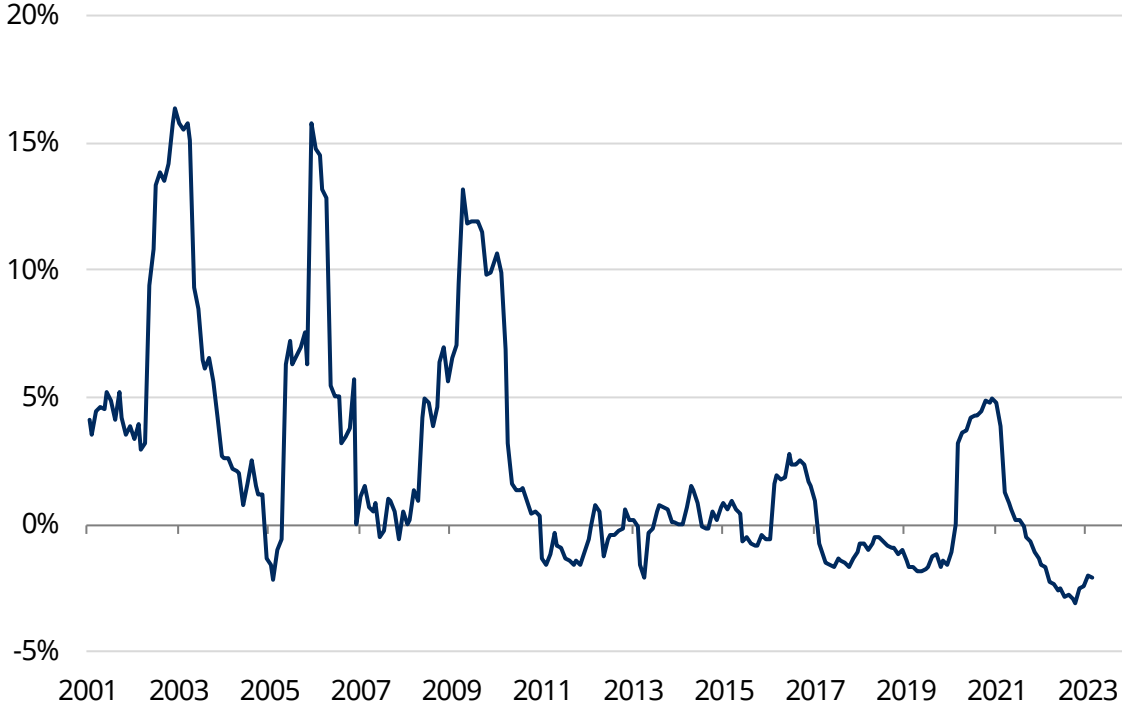
Source: BofA Global Research, Refinitiv Datastream. Data as at 28 February 2023. ¹Face value of downgraded HY bonds minus face value of upgraded bonds divided by face value of the index. Excludes upgrades from HY to IG.

US IG fallen angels/rising stars

Bonds downgraded from IG to HY

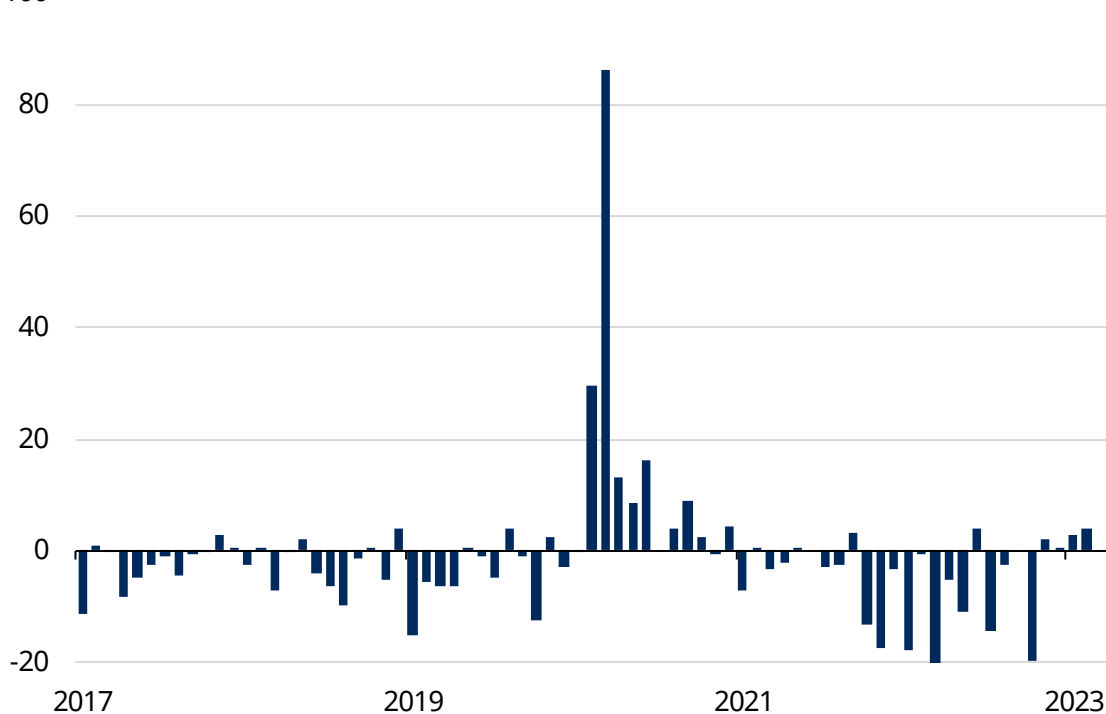
US IG net fallen angels¹

Percentage of the BBB index, last 12 months



US IG monthly net fallen angels

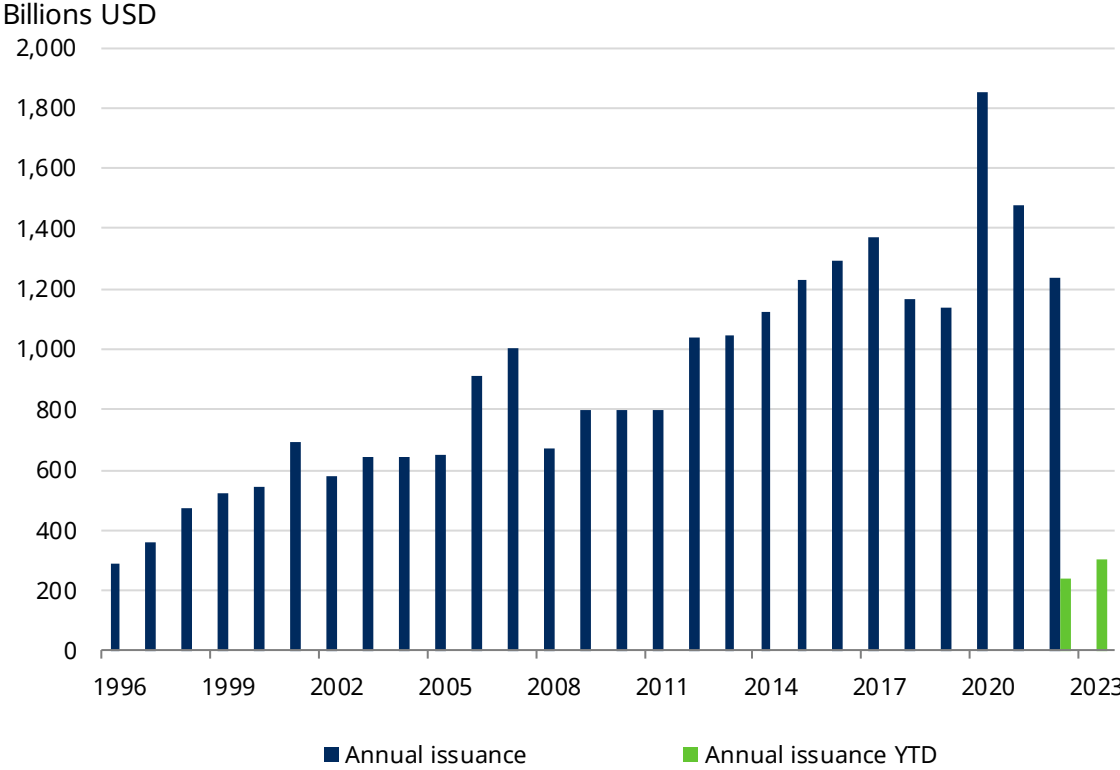
Billions USD



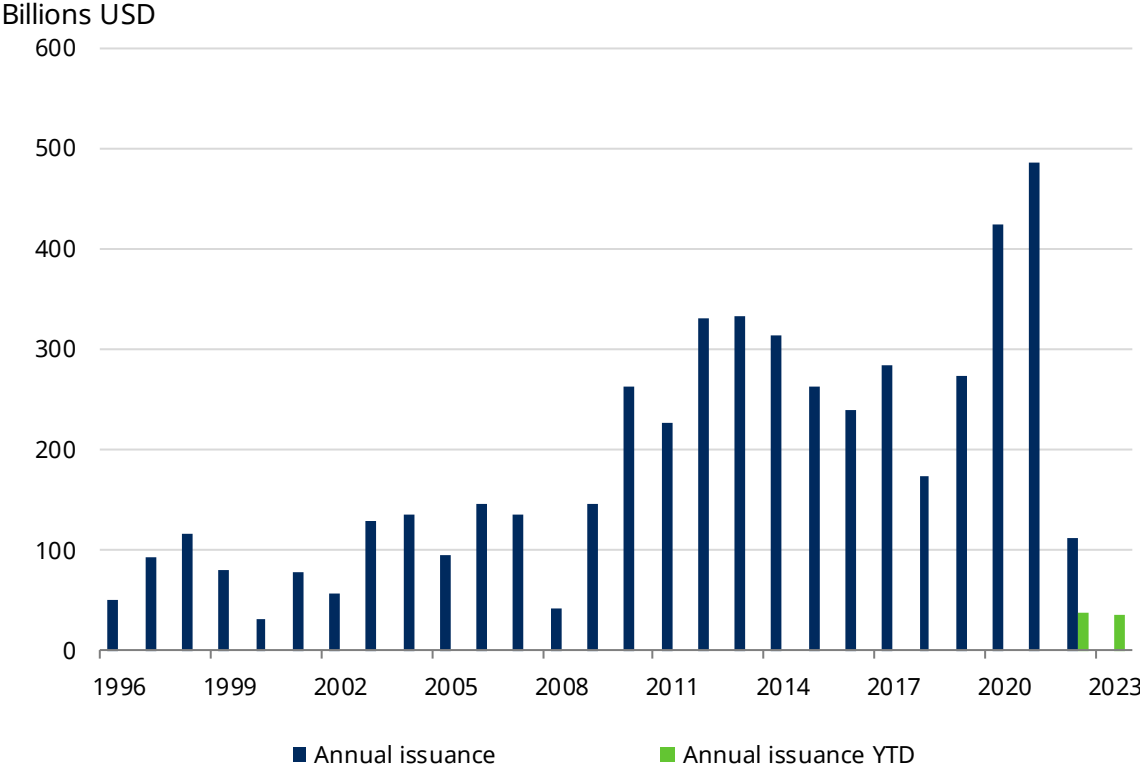
Source: BofA Global Research. Data as at 28 February 2023. ¹Face value of downgrades from IG to HY minus face value of upgrades from HY to IG, divided by face value of the BBB index

US IG and HY gross issuance

US IG gross issuance



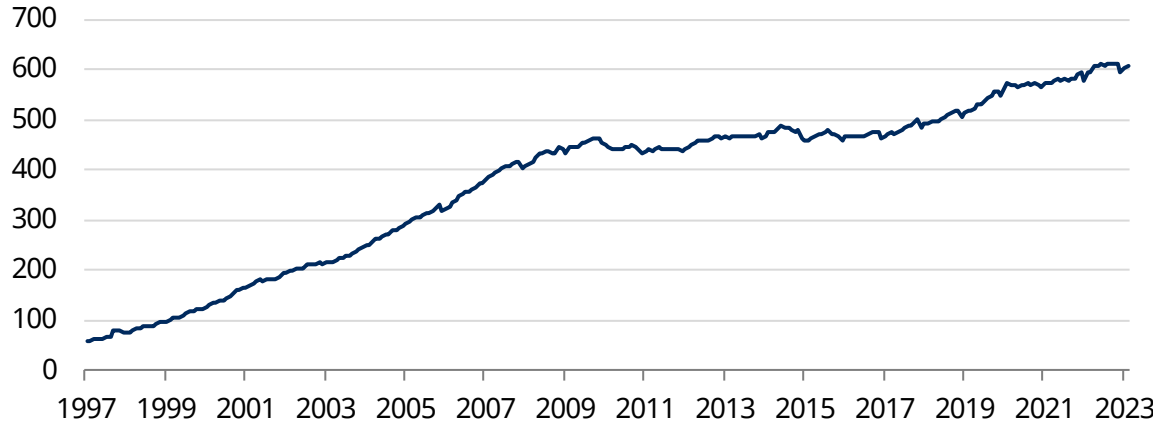
US HY gross issuance



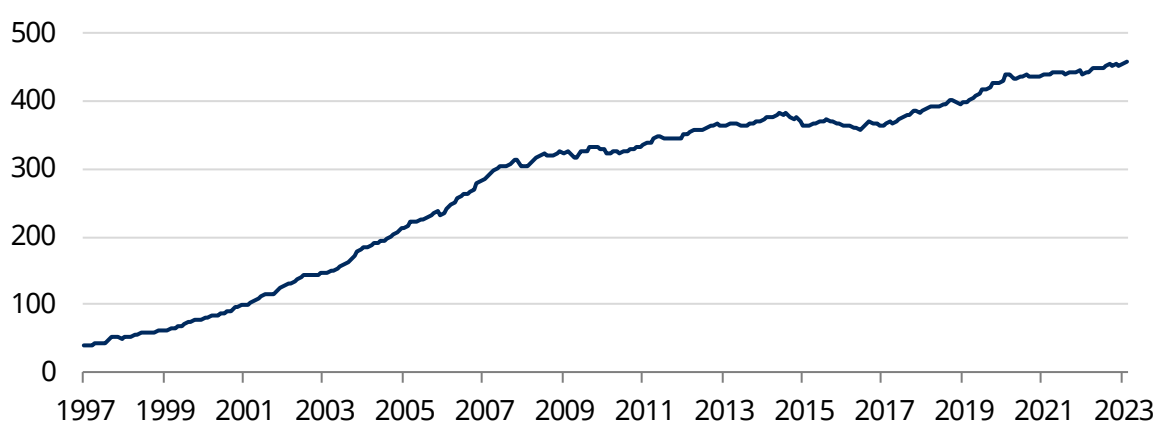
Source: Sifma. Data as at 28 February 2023.

IG bonds outstanding

IG GBP non-gilts amount outstanding (bn GBP)



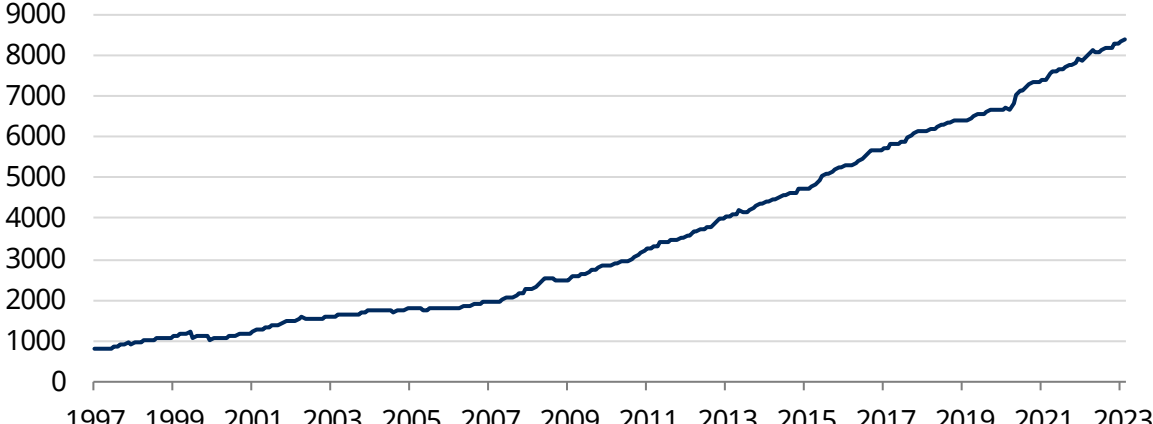
IG GBP corporates amount outstanding (bn GBP)



IG EUR amount outstanding (bn EUR)



IG USD amount outstanding (bn USD)



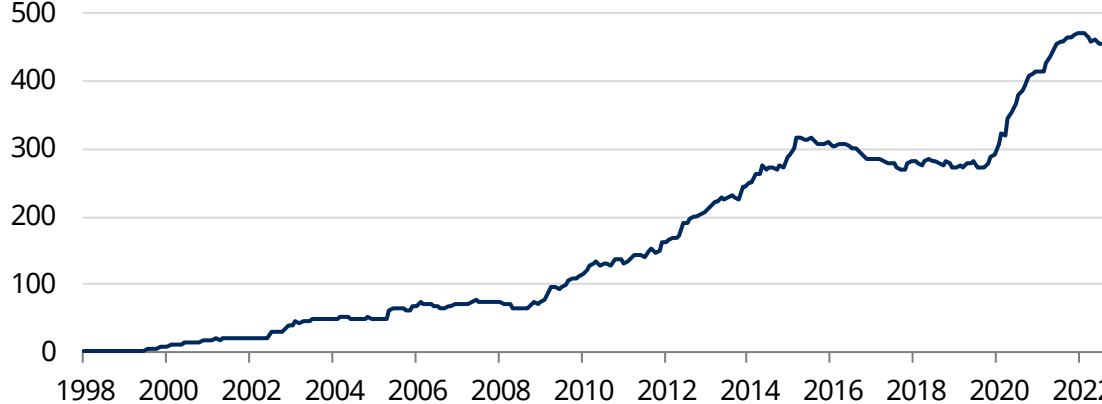
Source: Schroders, ICE Data Indices. Data as at 28 February 2023.

HY bonds outstanding

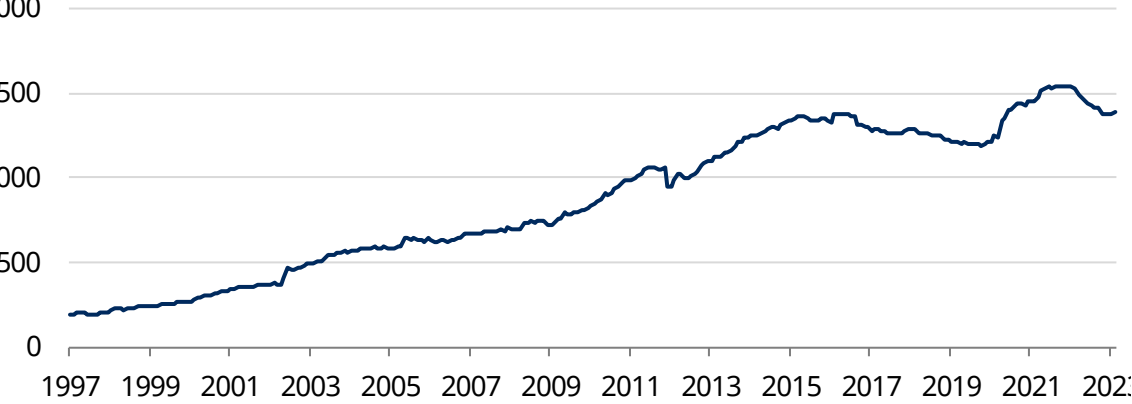
HY GBP amount outstanding (bn GBP)



HY EUR amount outstanding (bn EUR)



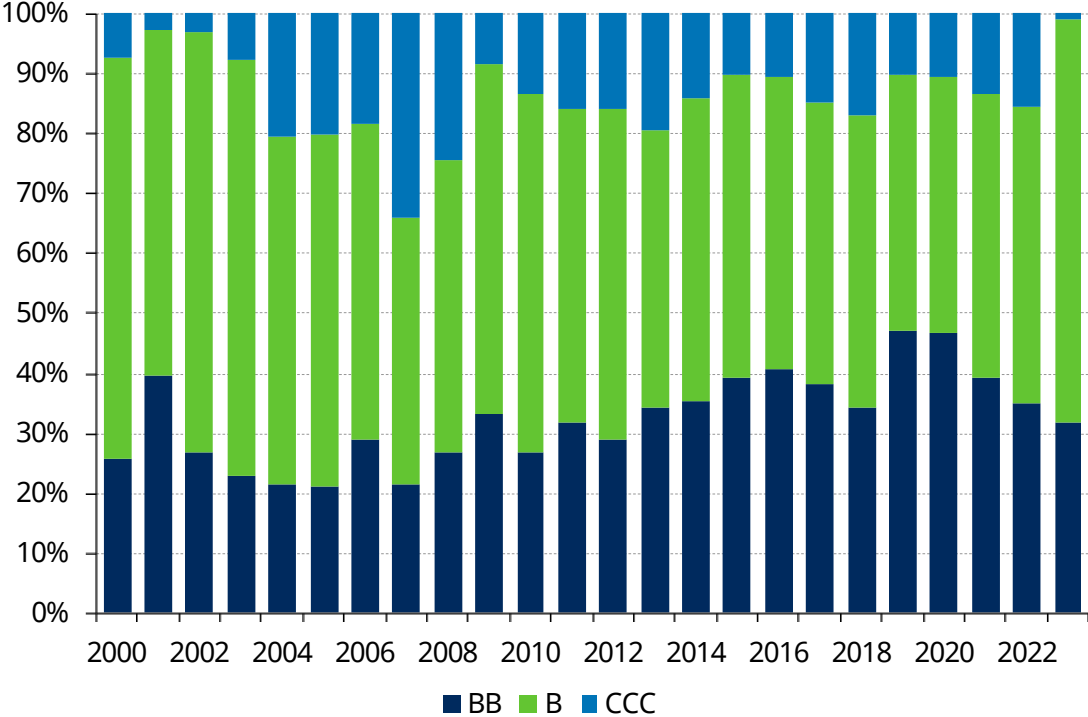
HY USD amount outstanding (bn USD)



Source: Schroders, ICE Data Indices. Data as at 28 February 2023.

Global HY issuance details

Issuance by rating (percentage of issuance)

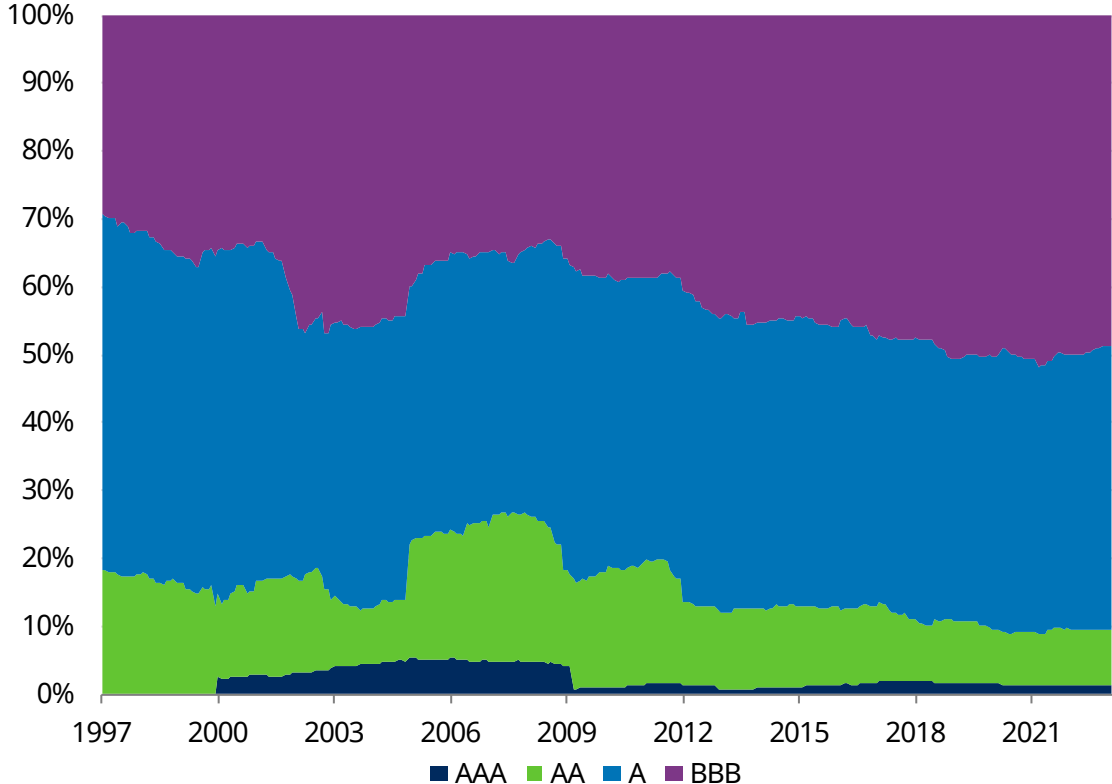


Source: Schroders, BofA Global Research, Moody's. Data as at 28 February 2023.

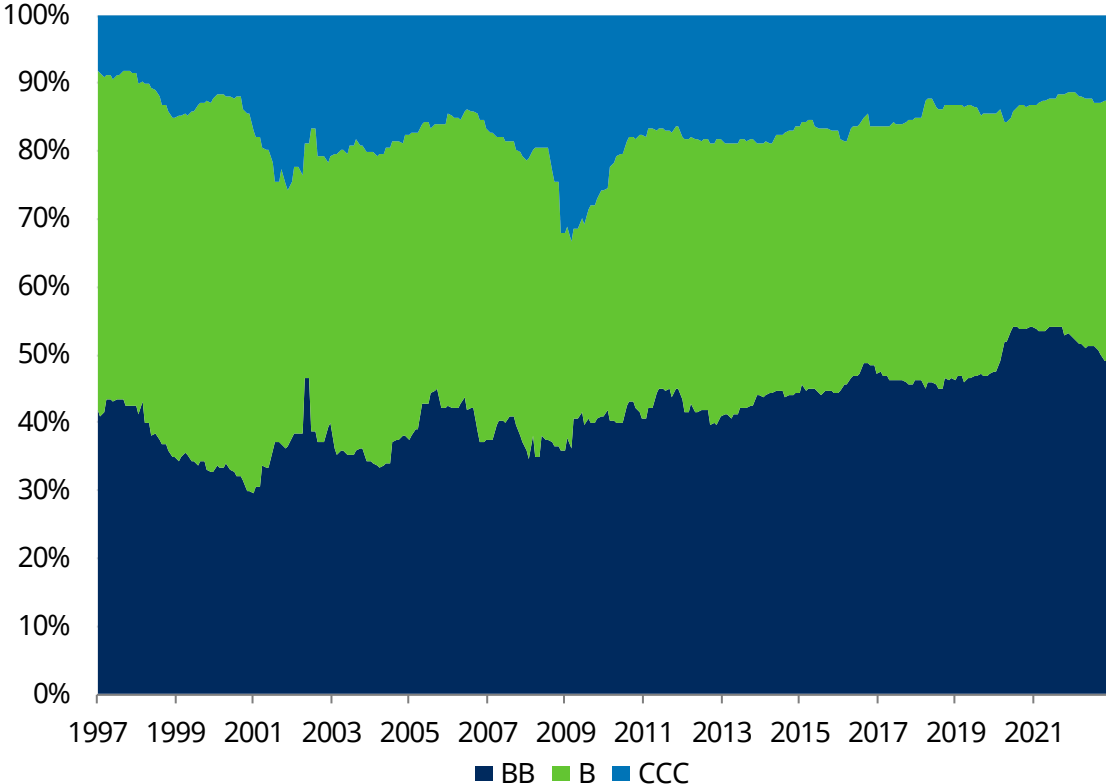
US dollar credit historical ratings split

Significant changes in credit quality over time

US IG ratings split



US HY ratings split



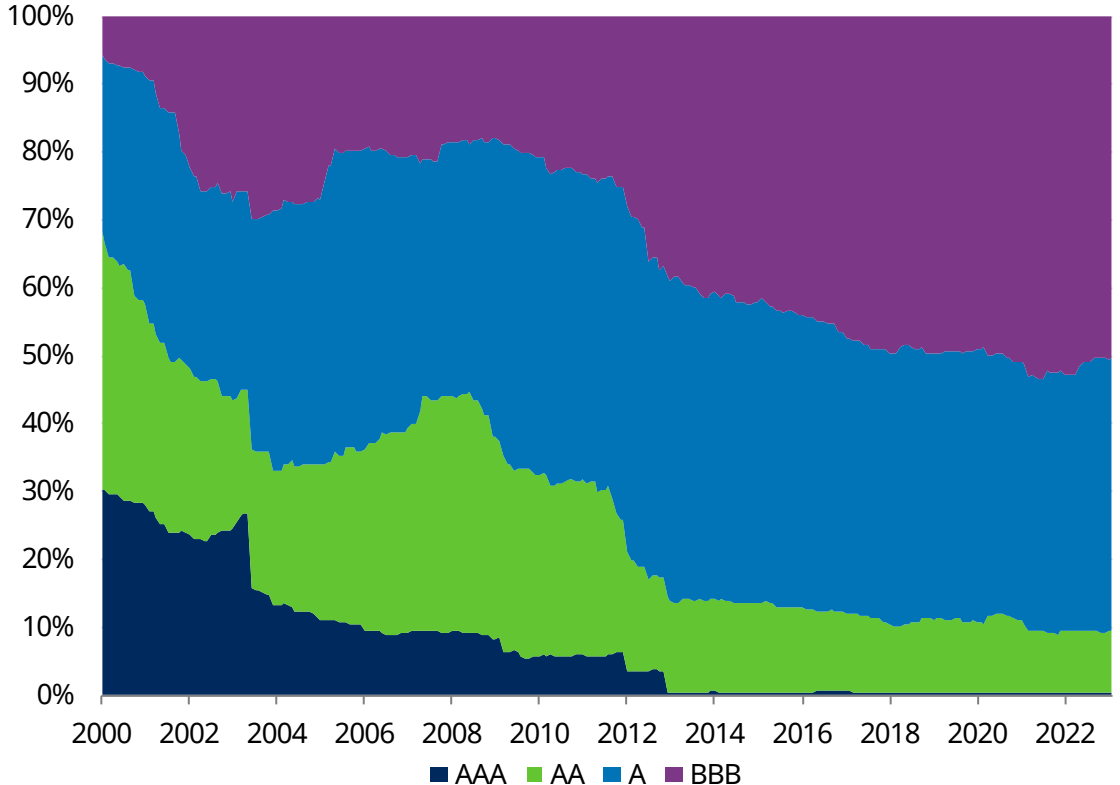
HY credit quality has started to worsen as rising stars, issuers upgraded from HY to IG, are exiting the HY index

Source: Schroders, Refinitiv Datastream. Data as at 28 February 2023.

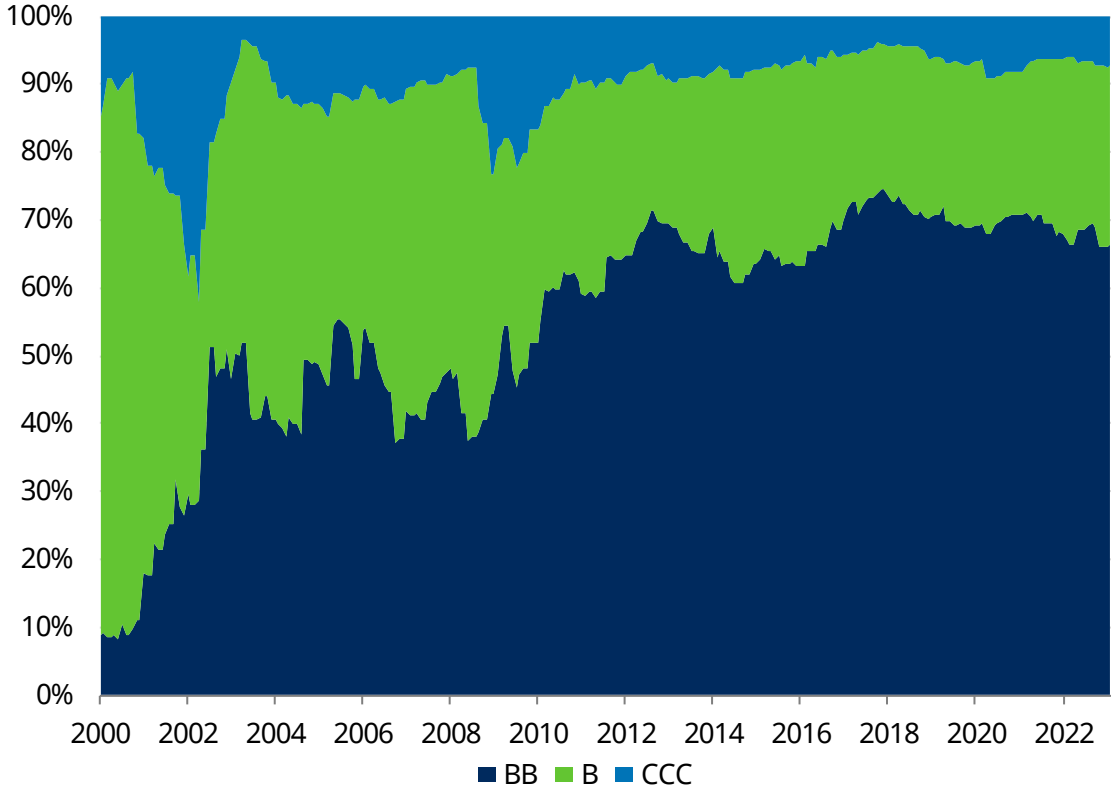
Euro credit historical ratings split

Significant changes in credit quality over time

Euro IG ratings split



Euro HY ratings split



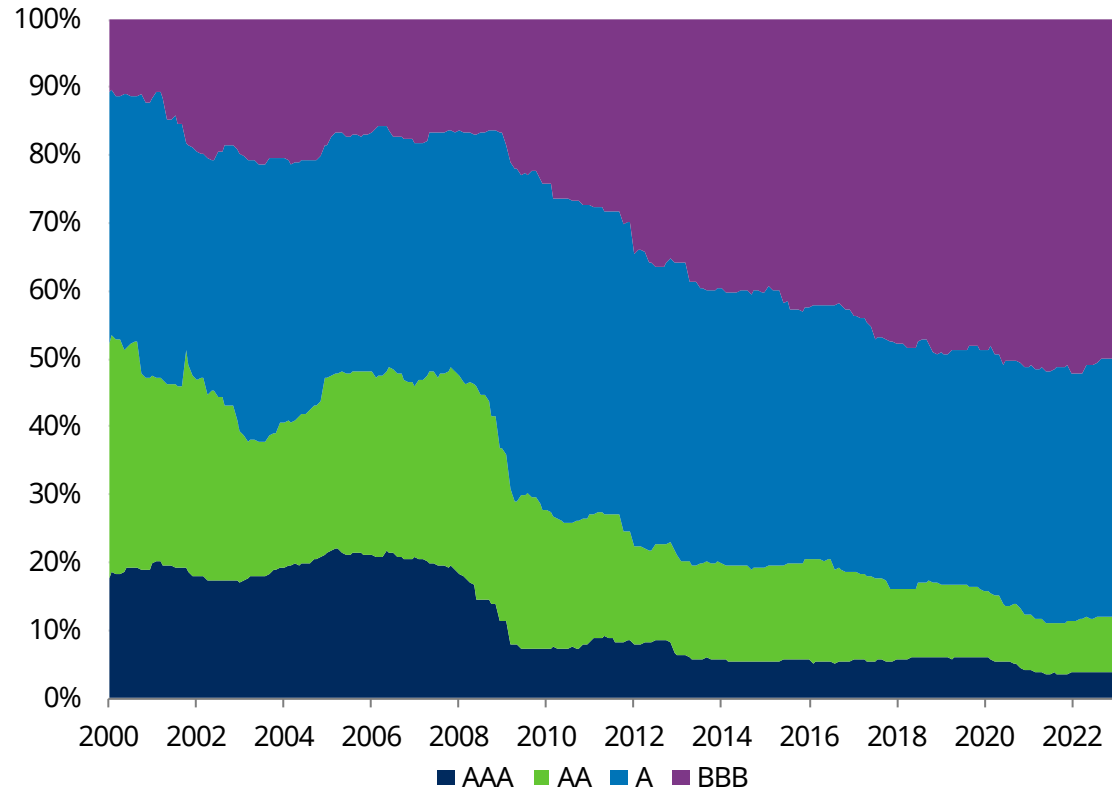
Credit quality was stable in 2022

Source: Schroders, Refinitiv Datastream. Data as at 28 February 2023.

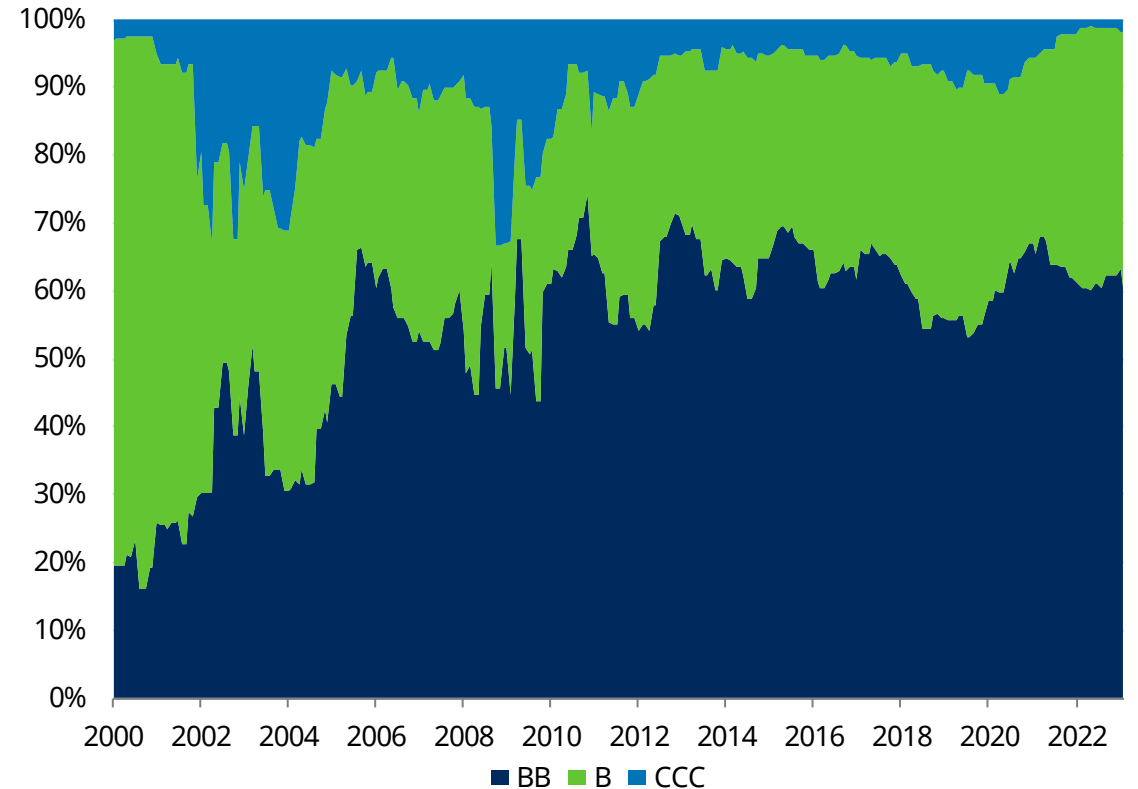
Sterling credit historical ratings split

Significant changes in credit quality over time

GBP IG ratings split

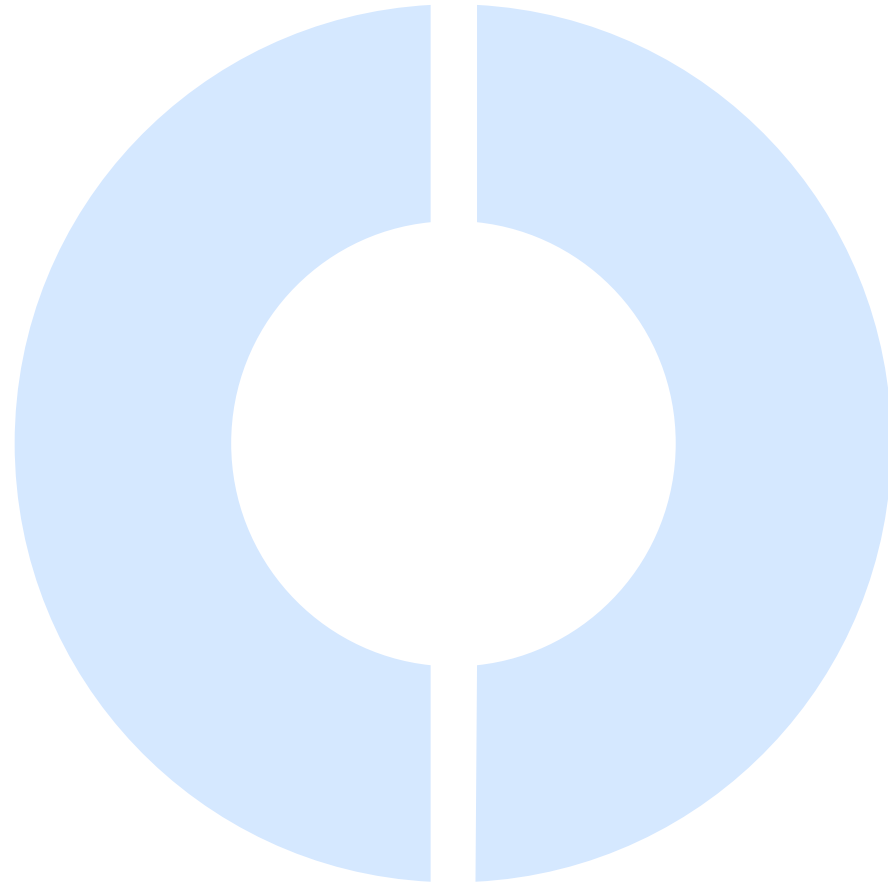


GBP HY ratings split



Source: Schroders, Refinitiv Datastream. Data as at 28 February 2023.

Schroders



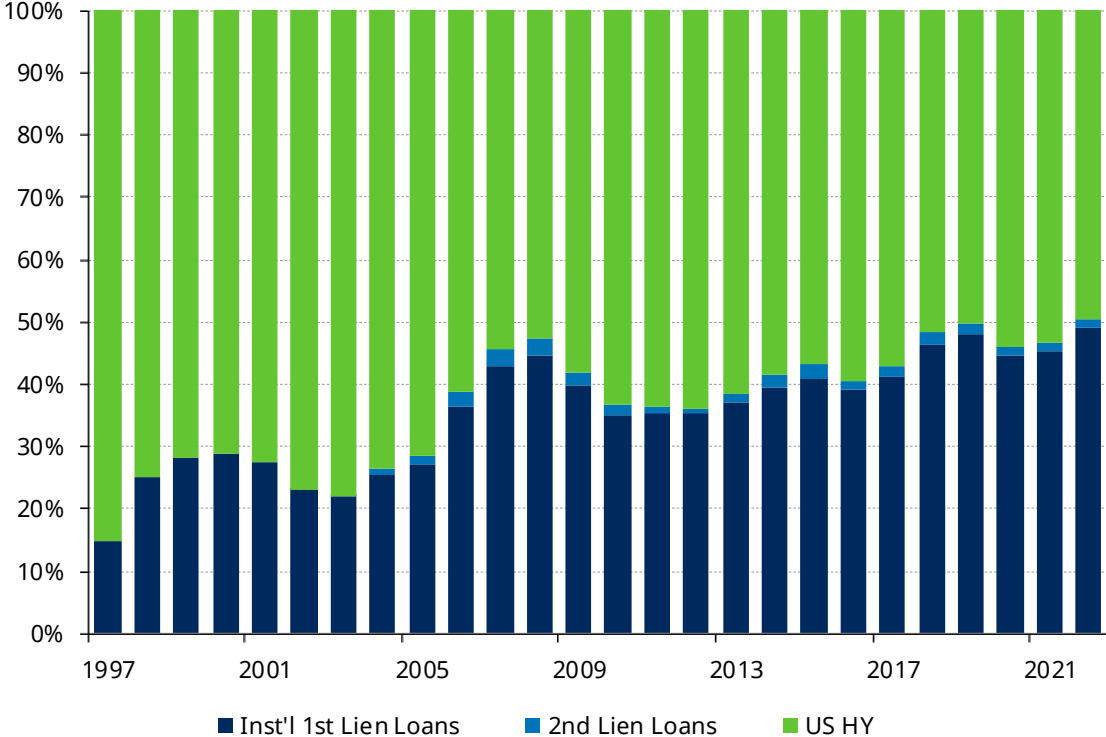
Appendix: Alternatives

US leveraged loans

US leveraged loan spread over 3-month LIBOR¹



Loans as a percentage of US leveraged finance market



Source: Schroders, BofA Global Research. Data as at 28 February 2023. ¹Based on the yield of S&P/LSTA U.S. Leveraged Loan 100 Index

List of indices

- **IG GBP non-gilts** - The ICE Data Indices Sterling Non-Gilt Index
- **IG GBP corporates** - The ICE Data Indices Sterling Corporate & Collateralized Index
- **IG Euro** - The ICE Data Indices Euro Corporate Index
- **IG USD** - The ICE Data Indices US Corporate Index

- **HY GBP** - The ICE Data Indices Sterling High Yield Index
- **HY Euro** - The ICE Data Indices Euro High Yield Index
- **HY USD** - The ICE Data Indices US High Yield Index

- **Hard EMD** - The JPM EMBI Global Diversified Index
- **Local EMD** - The JPM GBI-EM GLOBAL Divers Index
- **Corp. EMD** - The JPM CEMBI Broad Diversified Index

Important information (1 of 3)

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