

Schroders



# Schroders Credit Lens

Perspective of EUR insurance company investor

Strategic Research Unit

June 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 GBP 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 72

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[Corporate credit: technicals](#) (slides 57-70)

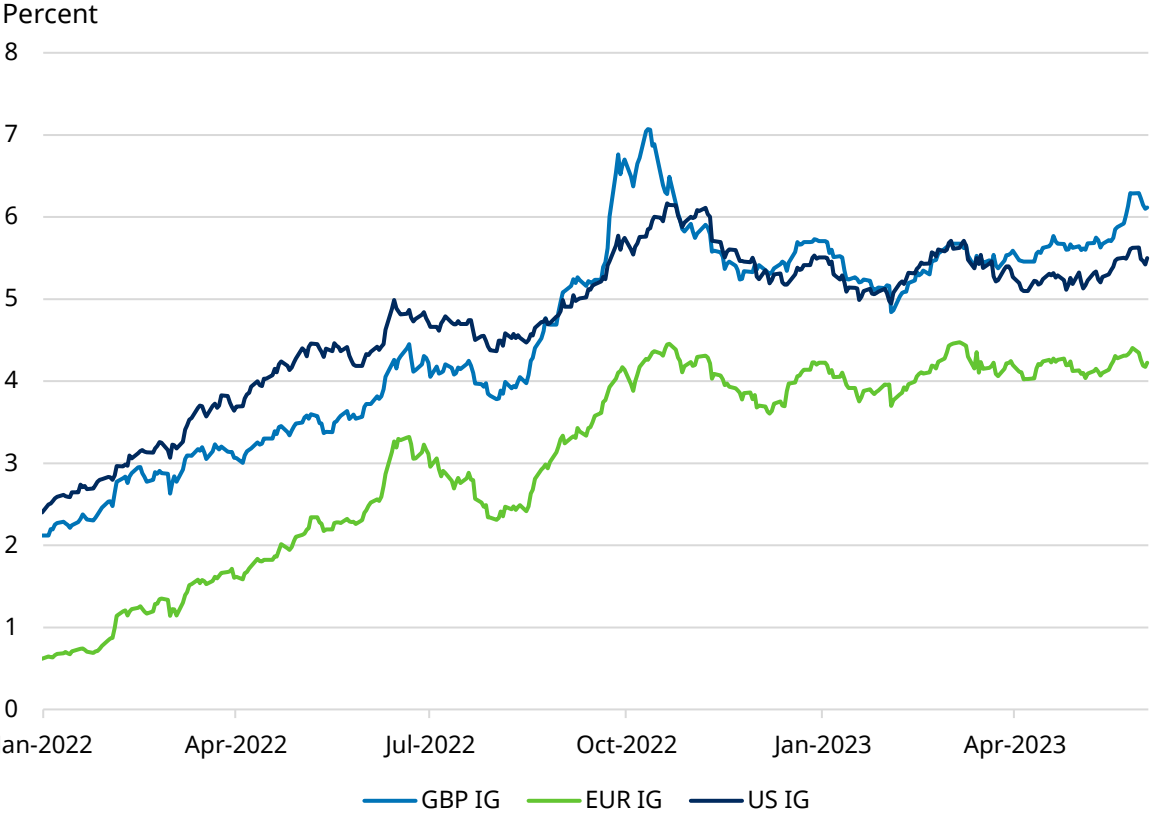
# Summary

- **Corporate bond yields edged up in May, with increases in USD and GBP yields driven by higher risk-free rates, reflecting expectations of tighter-for-longer monetary policy to bring inflation back to target**
- Spreads were little changed on the month despite US debt ceiling concerns. Spreads have been unusually stable in the face of the sharp tightening in Bank lending conditions this year. Historically spreads have widened a lot in such situations
- US high-yield issuance has picked up from very low levels, but the amount outstanding has been contracting over the last year
- Credit curves continue to be very flat, with longer maturity bonds offering little or no yield over shorter maturity bonds
- Default rates in US high-yield are rising. And more elevated distress ratios indicate that defaults could continue to increase

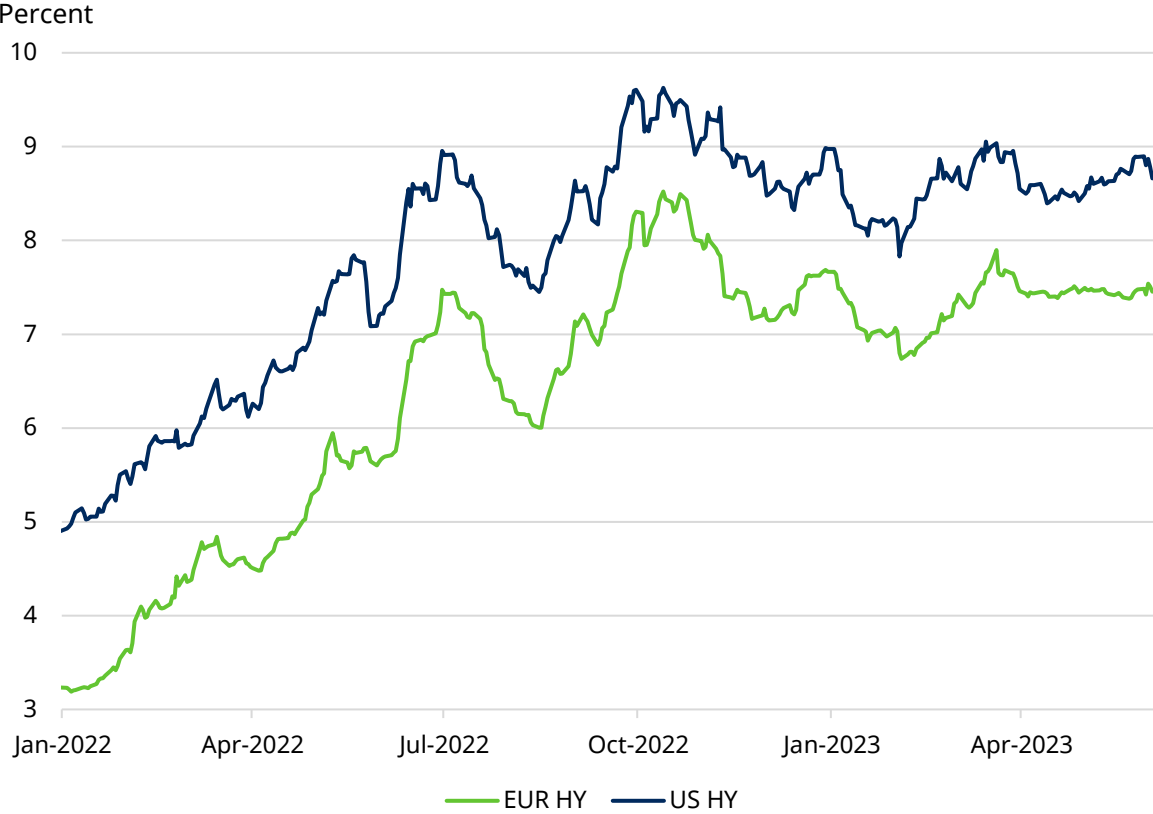
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# Corporate bond yields edged up in May, with increases in USD and GBP yields driven by higher risk-free rates

## IG yield



## HY yield



Source: Refinitiv Datastream. Data as at 2 June 2023. Please see relevant disclaimers on page 73. Charts show local currency yields.

# Spreads were little changed on the month despite US debt ceiling concerns

## IG Spread



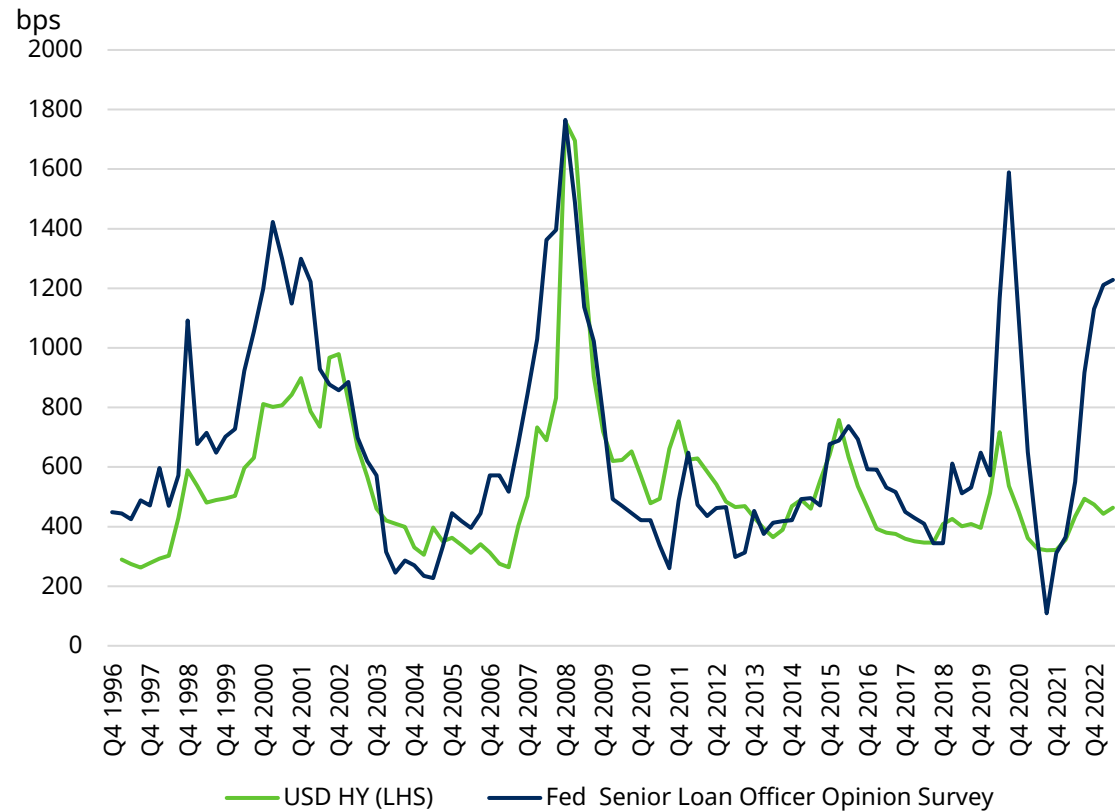
## HY Spread



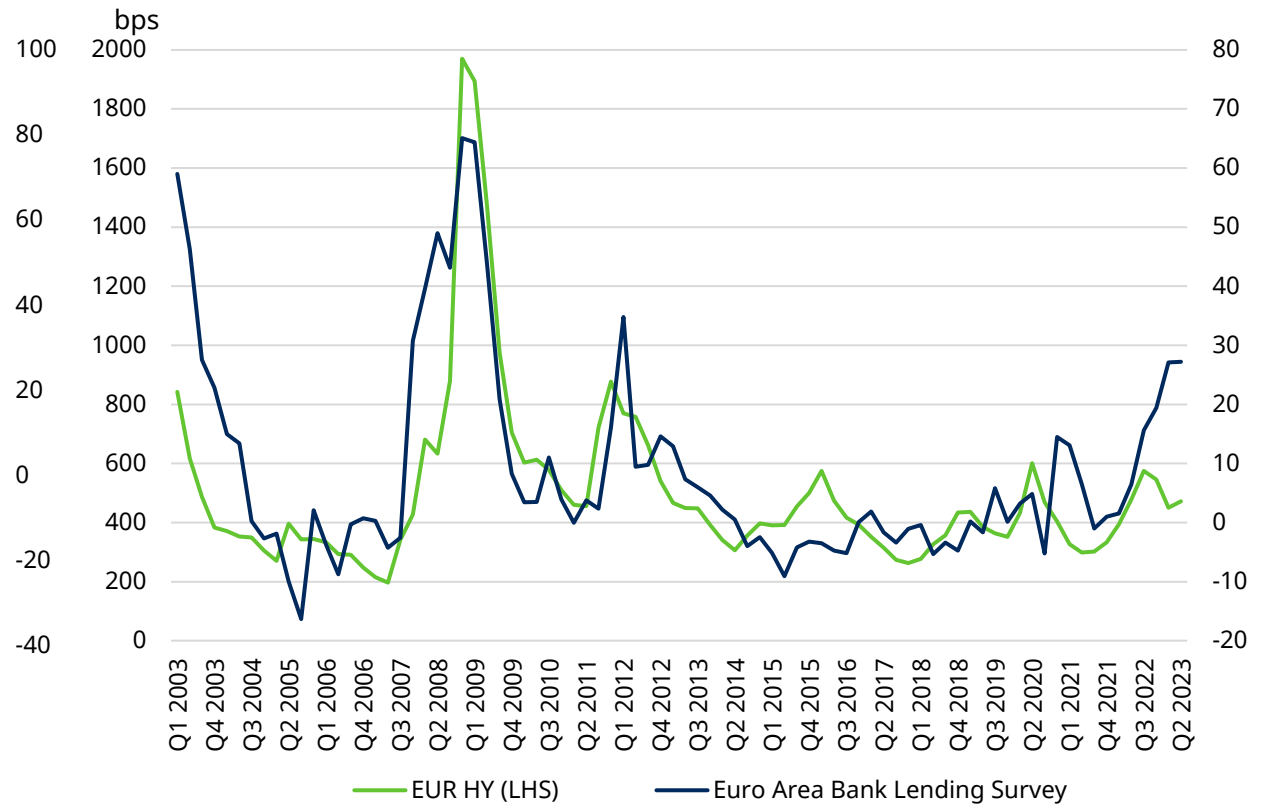
Source: Refinitiv Datastream. Data as at 2 June May 2023. Please see relevant disclaimers on page 73.

# Spreads have been unusually stable in the face of the sharp tightening in Bank lending conditions this year

## USD HY spread v. Fed Senior Loan Officer Opinion Survey\*



## EUR HY spread v. Euro Area Bank Lending Conditions Survey\*

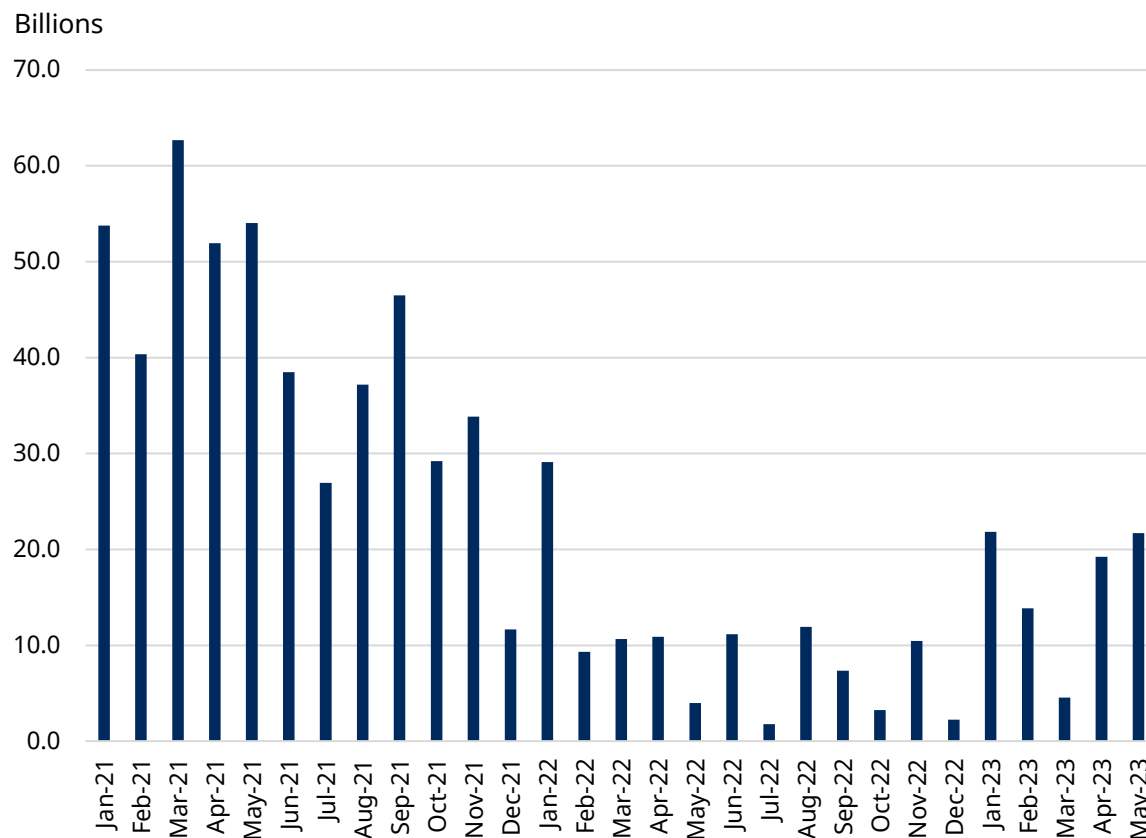


\*Fed survey is lending conditions Commercial and Industrial Loans, Large and Medium. ECB survey is Loans or Credit Lines to Enterprises

Source: Refinitiv Datastream. Data as at 31 May 2023. Quarterly average spreads calculated from daily data. Please see relevant disclaimers on page 73.

# US high-yield issuance has picked up from very low levels, but the amount outstanding has been contracting for some time

## US high-yield gross issuance



## 12-month growth rate of USD high-yield index face value\*



\*The change in face value of bonds outstanding within USD HY index. This figure will also be influenced by upgrades to/downgrades from the investment grade market.

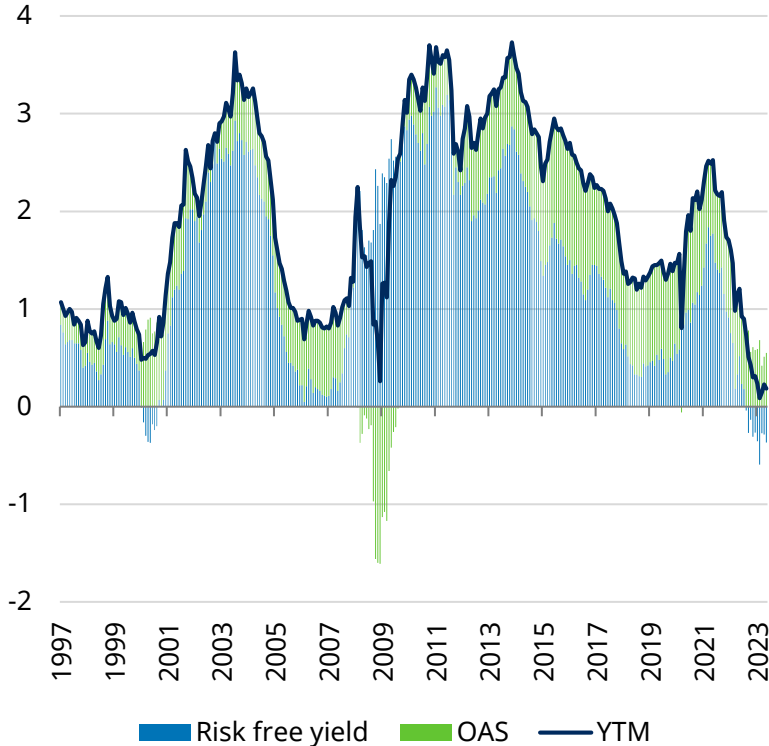
Source: Sifma, ICE Data Indices. Data as at 31 May 2023. Please see relevant disclaimers on page 73.



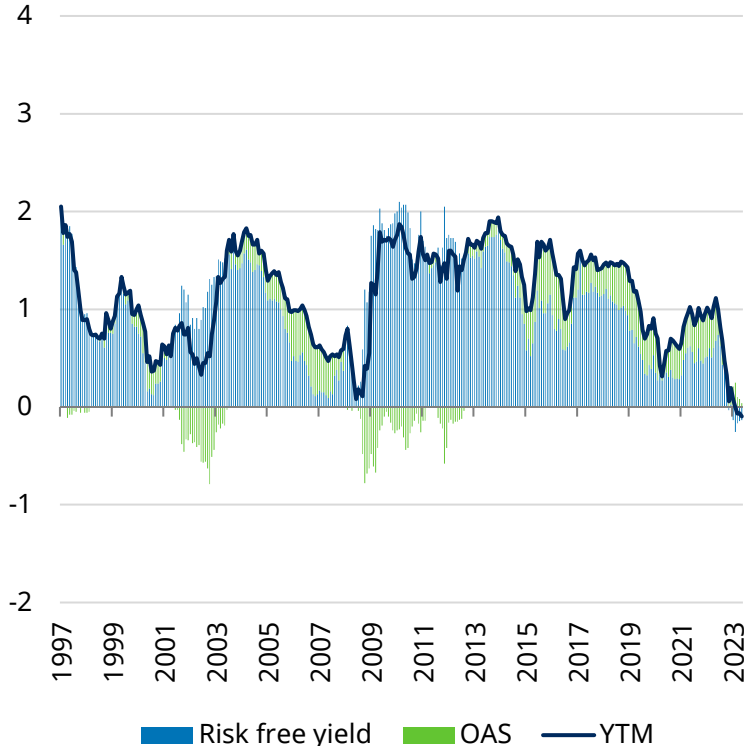
# Credit curves continue to be very flat

Longer maturity bonds offering little or no yield over shorter maturity bonds

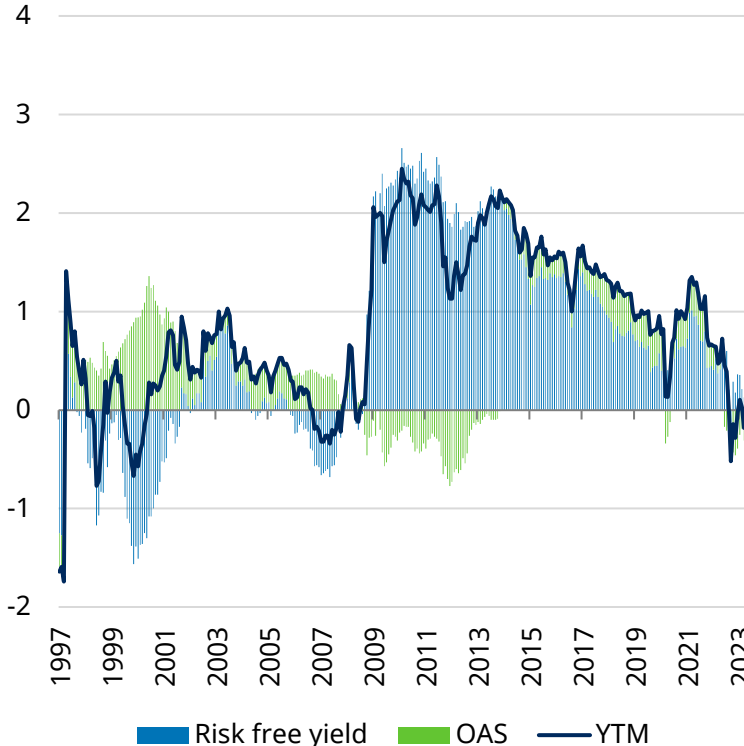
### IG USD 15+ minus 1-5 year index yield (%)



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



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



Source: Refinitiv Datastream. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

# Summary of corporate fundamentals

- **Overall corporate fundamentals remained strong in Q1, but higher interest rates are starting to have an impact. Also, earnings growth and corporate margins are lower than the peak levels seen in recent years**
- Leverage has remained broadly stable in recent quarters, although the high-yield market saw a marginal uptick for in Q1. Leverage continues to be much lower than the pandemic era peaks
- Interest coverage ratios, whilst still elevated, have started to fall, reflecting a significant increase in interest expense which is now growing at rates not seen since the global financial crisis
- In recent quarters, earnings growth has noticeably slowed and corporate margins have started to fall from elevated positions
- See the full corporate fundamentals section slide 35

# Interest coverage is falling from elevated levels

Interest expense growth has picked up significantly, reducing interest coverage

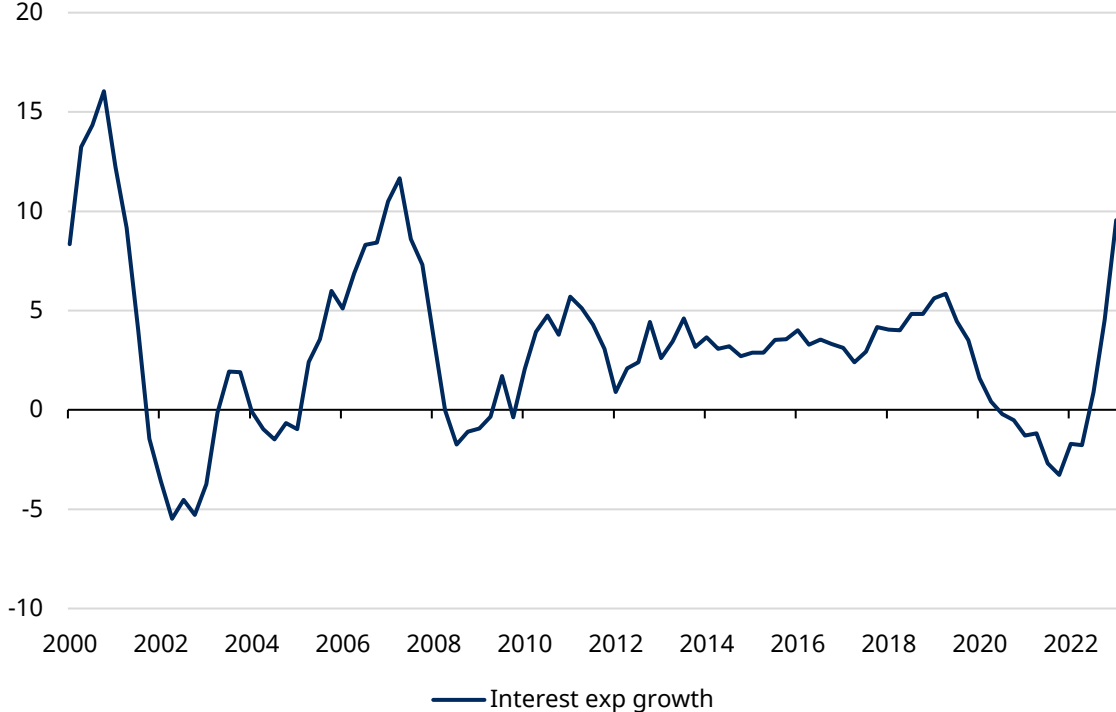
## US HY interest coverage ratio

Last 12 months EBITDA to interest expense



## US HY annual interest expense growth

%



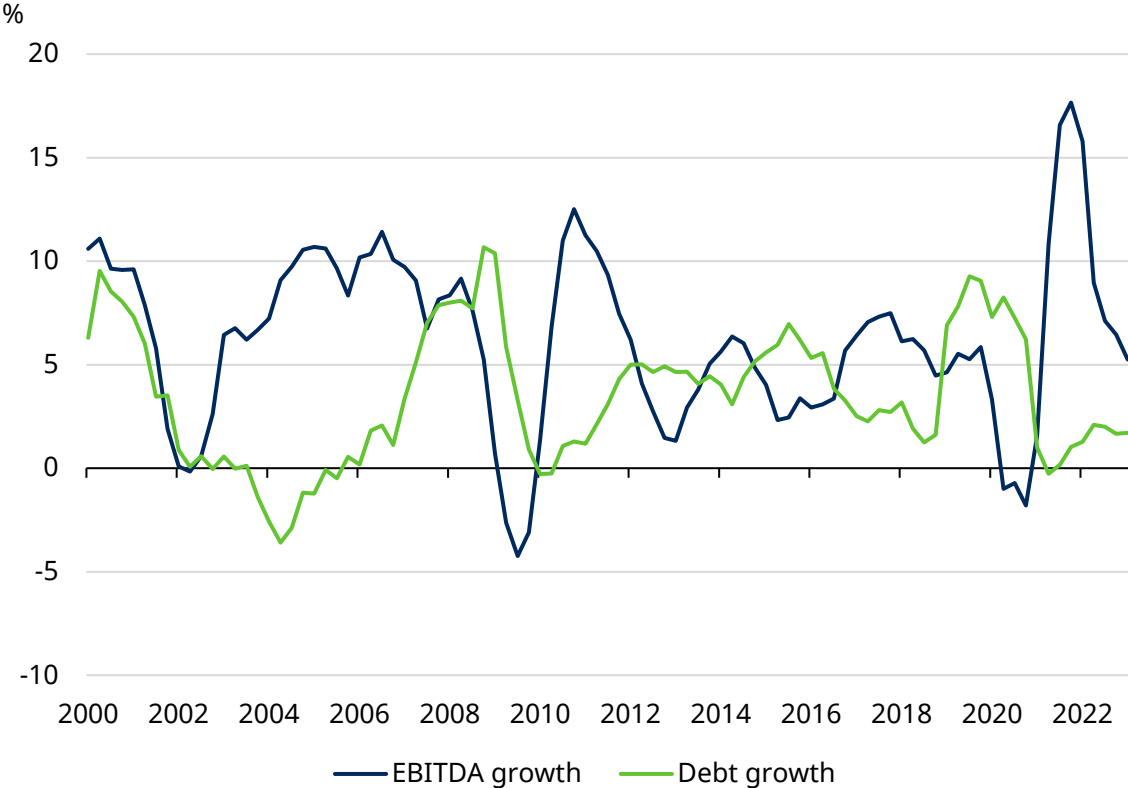
**Interest expense growth is the highest since the global financial crisis, as higher interest rates are starting to have an impact**

Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

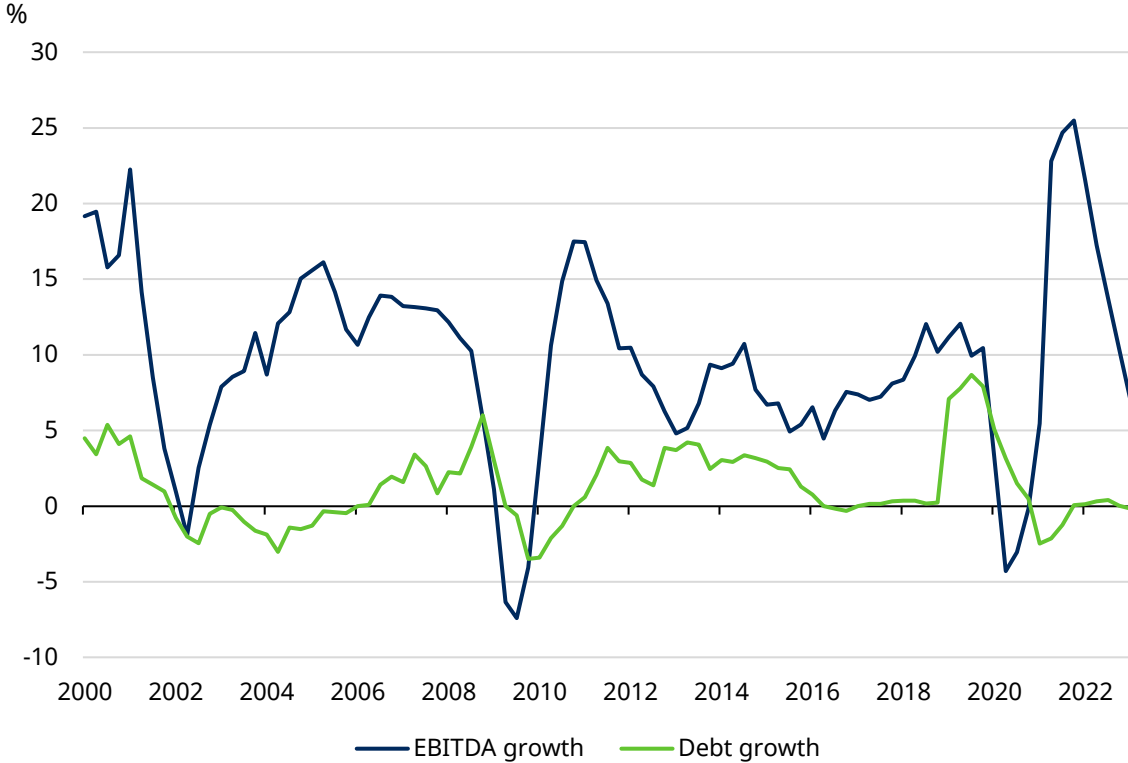
# US IG earnings, sales and debt growth

Earnings growth continued to slow

US IG EBITDA and debt growth (last 12 months)



US HY EBITDA and debt growth (last 12 months)



Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

# Summary table

## Cross-credit overview

Date: 31 May 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	5.8%	6.1%	4.2%	5.4%	10.4%	7.5%	8.8%	8.6%	6.4%	7.4%
Yield to worst (hedged to EUR) <sup>1</sup>	4.3%	4.6%	4.2%	3.2%	8.9%	7.5%	6.6%	6.4%	-	5.2%
Spread (bps)	145	175	169	142	589	483	469	477	265	347
Spread (percentile) <sup>2</sup>	67%	67%	77%	55%	72%	63%	52%	71%	11%	59%
Risk premium (bps) <sup>3</sup>	112	137	131	104	403	312	246	348	210	236
Duration	5.9	6.5	4.8	7.1	3.2	3.3	4.3	6.7	5.0	4.2
MV (billion \$)	753	561	2,907	7,796	52	394	1,202	626	1,363	506
Rating	A1	A3	A3	A3	BB3	BB3	B1	BBB3	BBB2	BBB3
Nr. of issues/countries	1,319	1,110	4,147	10,001	99	733	1,876	67	20	1,920
<b>Since Jan 1997 or inception</b>										
Annualised return <sup>4</sup>	3.7%	3.9%	3.7%	3.9%	7.1%	4.7%	4.9%	5.6%	4.9%	4.9%
Annualised volatility	5.8%	6.5%	4.0%	5.9%	10.5%	11.5%	9.1%	10.7%	8.9%	7.8%
Return/volatility	0.6	0.6	0.9	0.7	0.7	0.4	0.5	0.5	0.6	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 31 May 2023. Please see relevant disclaimers on page 73.

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

<sup>2</sup>Percentile 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.

<sup>3</sup>Spread minus average historical default and downgrade losses (see slide 28).

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

# Summary table (alternatives)

## Cross-credit overview

Date: 31 May 2023

	US Agency MBS	US ABS	US CMBS	US leveraged loans	EUR leveraged loans	Cat Bonds
Yield <sup>1</sup>	4.6%	5.9%	6.5%	10.3%	9.1%	-
Yield (hedged to EUR) <sup>2</sup>	2.5%	3.7%	4.3%	8.1%	9.1%	-
Spread (bps) <sup>3</sup>	85	139	270	629	587	-
Risk premium (bps)	-	-	-	-	-	-
Duration	6.0	2.2	3.9	0.0	0.0	-
Market size (billion \$)	7,291	404	443	1,354	278	-
Rating	AAA	AAA	AAA	-	-	-
<b>Since Jan 1997 or inception</b>						
Annualised return <sup>4</sup>	3.1%	2.6%	3.6%	3.7%	4.2%	6.2%
Annualised volatility	3.4%	2.3%	6.1%	6.0%	6.6%	4.3%
Return/volatility	0.9	1.1	0.6	0.6	0.6	1.4
Max drawdown	-18.4%	-8.6%	-26.1%	-29.6%	-31.9%	-9.7%
Correlation with MSCI EMU	0.0	0.1	0.2	0.5	0.5	0.1
Correlation with MSCI World €	0.0	0.0	0.1	0.5	0.4	0.1
Correlation with Euro Gov	0.7	0.4	0.3	0.0	0.0	0.2

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

Source: Schroders, Refinitiv Datastream, Bloomberg, Credit Suisse. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

<sup>1</sup>USD yield. Leveraged loans is yield (3-year life)

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

<sup>3</sup>Leveraged loans spread is 3-year discount margin

<sup>4</sup>All returns EUR hedged returns

# Performance table

## Cross-credit overview

Date: 31 May 2023

	IG GBP non-gilts	IG GBP corporates	IG Euro	IG USD	HY GBP	HY Euro	HY USD	Hard EMD	Local EMD	Corp. EMD
<b>Return (local)<sup>1</sup></b>										
1 month return	-2.2%	-2.4%	0.2%	-1.3%	0.3%	0.6%	-0.9%	-0.6%	-1.6%	-0.6%
YTD return	0.2%	0.2%	2.5%	2.9%	4.6%	3.8%	3.7%	1.8%	4.4%	2.5%
1 year return	-8.5%	-9.0%	-3.0%	-1.3%	0.0%	0.7%	-0.2%	-1.5%	3.1%	1.3%
<b>Return (EUR hedged)<sup>2</sup></b>										
1 month return	-2.3%	-2.6%	0.2%	-1.6%	0.2%	0.6%	-1.2%	-0.8%	1.9%	-0.8%
YTD return	-0.5%	-0.4%	2.5%	1.7%	1.0%	3.8%	2.6%	0.7%	4.5%	1.5%
1 year return	-9.5%	-10.0%	-3.0%	-4.2%	-1.2%	0.7%	-3.0%	-4.5%	3.6%	-1.6%
<b>Spread</b>										
1 month OAS change	1	3	9	2	-32	11	19	-6	-38	7
YTD OAS change	-16	-19	3	4	-74	-11	-10	25	-24	25
1 year OAS change	8	7	9	2	29	9	47	29	-129	17
Latest OAS	145	175	169	142	589	483	469	477	265	347

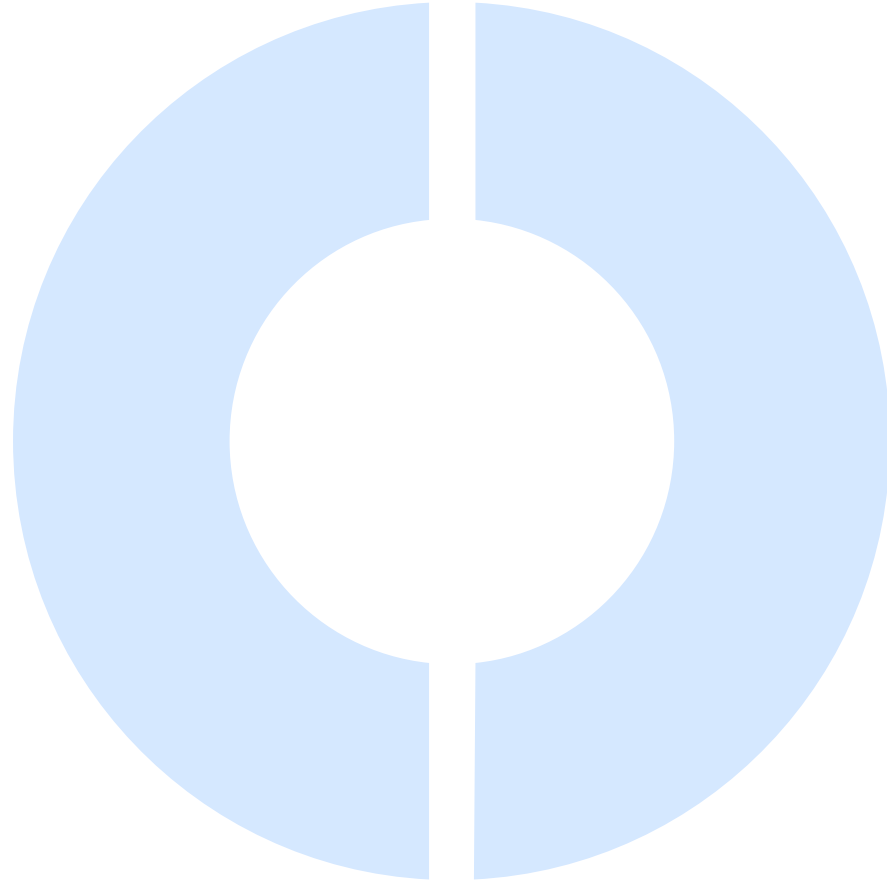
**Past performance is not a guide to future performance and may not be repeated.**

Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

<sup>1</sup>Local EMD is USD return.

<sup>2</sup>Local EMD is USD return in EUR.

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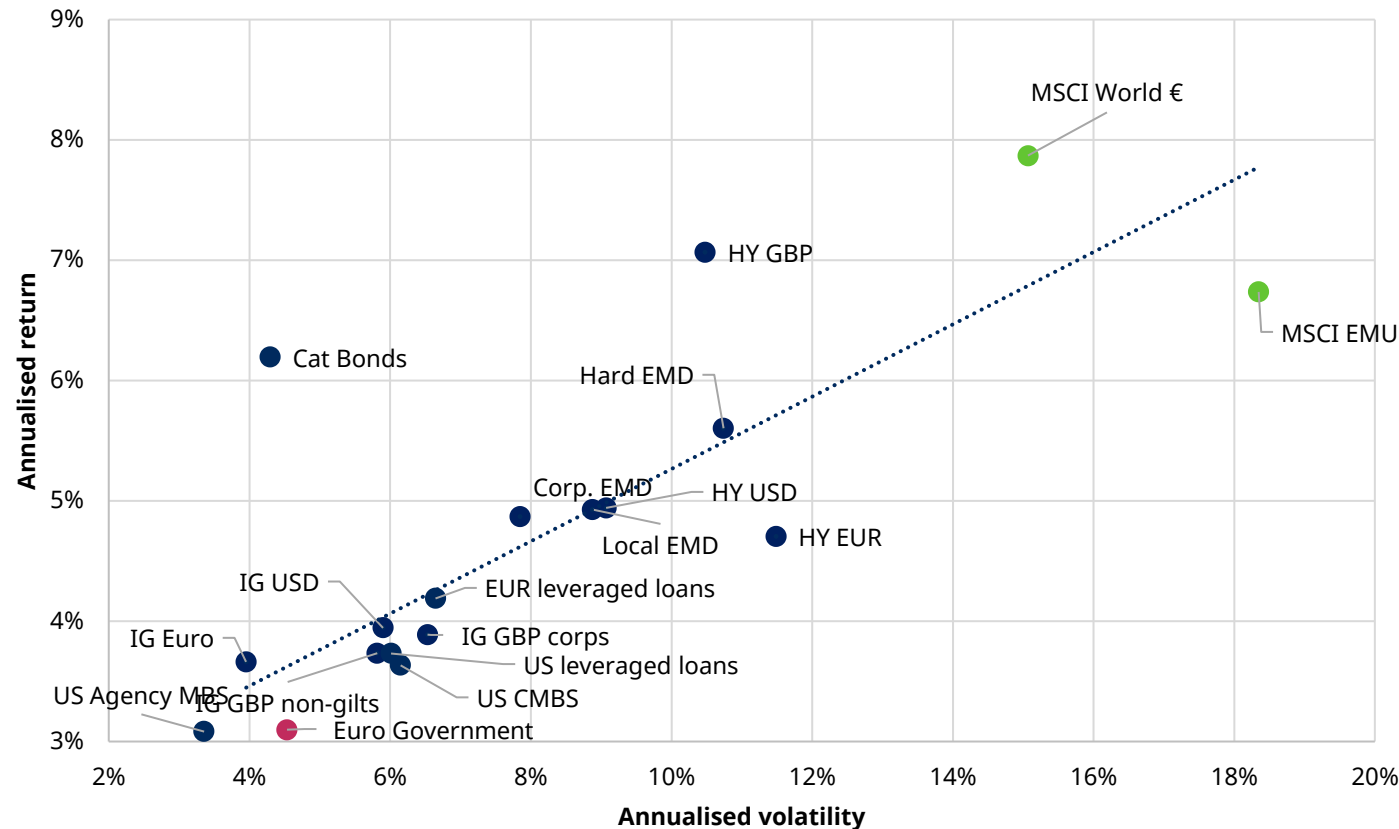


**Cross-credit analysis**



# 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

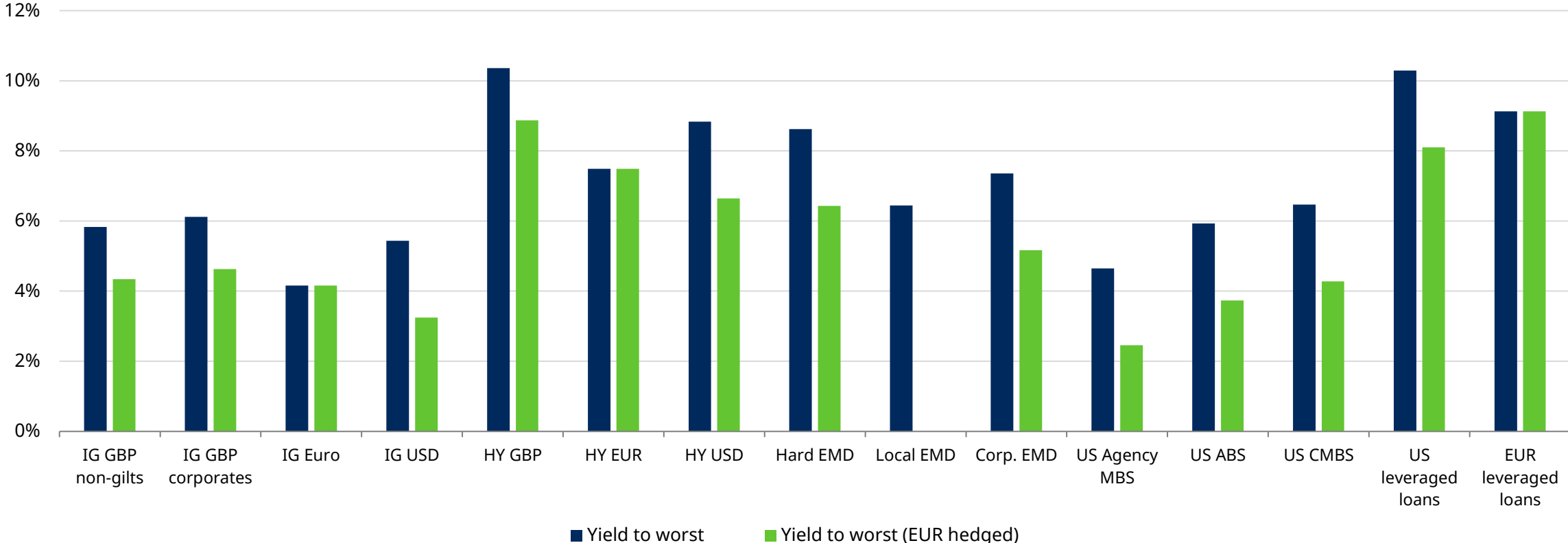
**Past performance is not a guide to future performance and may not be repeated.**

Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan, Barclays, Credit Suisse. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

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<sup>(1)</sup>



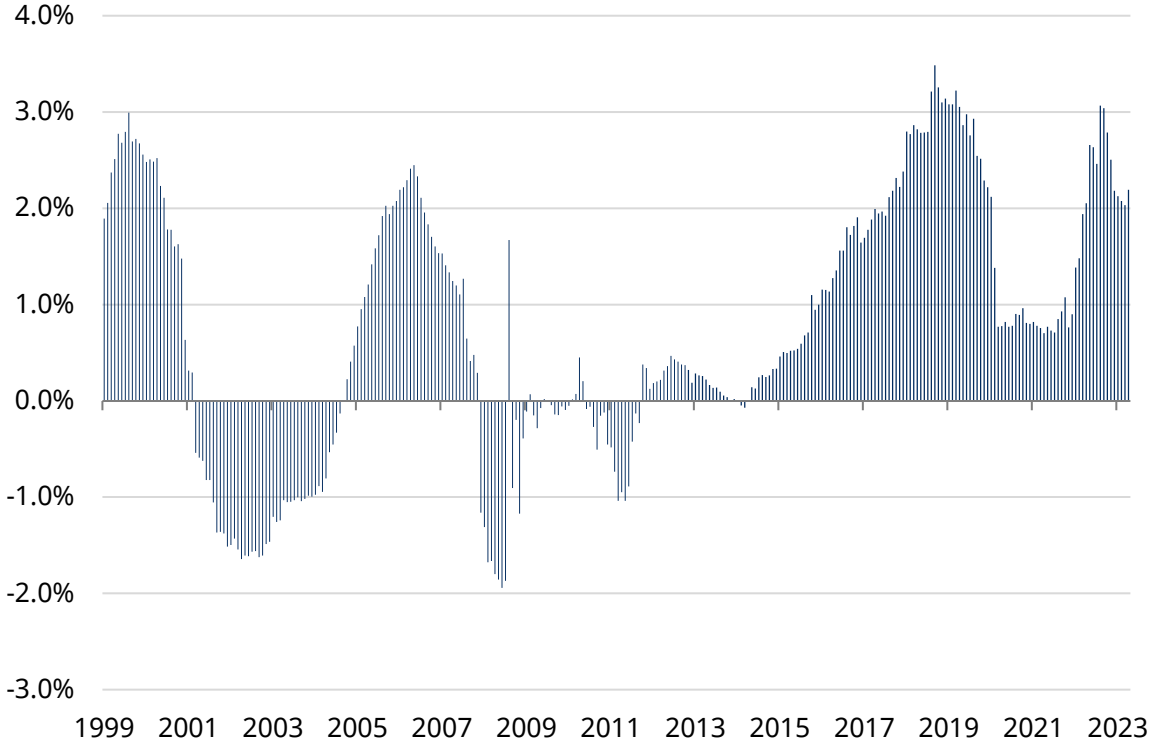
## Currency-hedged USD corporates yield less than GBP and EUR equivalents

Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan, Bloomberg, Credit Suisse. Data as at 31 May 2023. Please see relevant disclaimers on page 73.  
 (1) Hedged yield is local currency yield minus annualised 3-month FX hedging cost/return (see next slide). Leveraged loans is yield (3-year life).

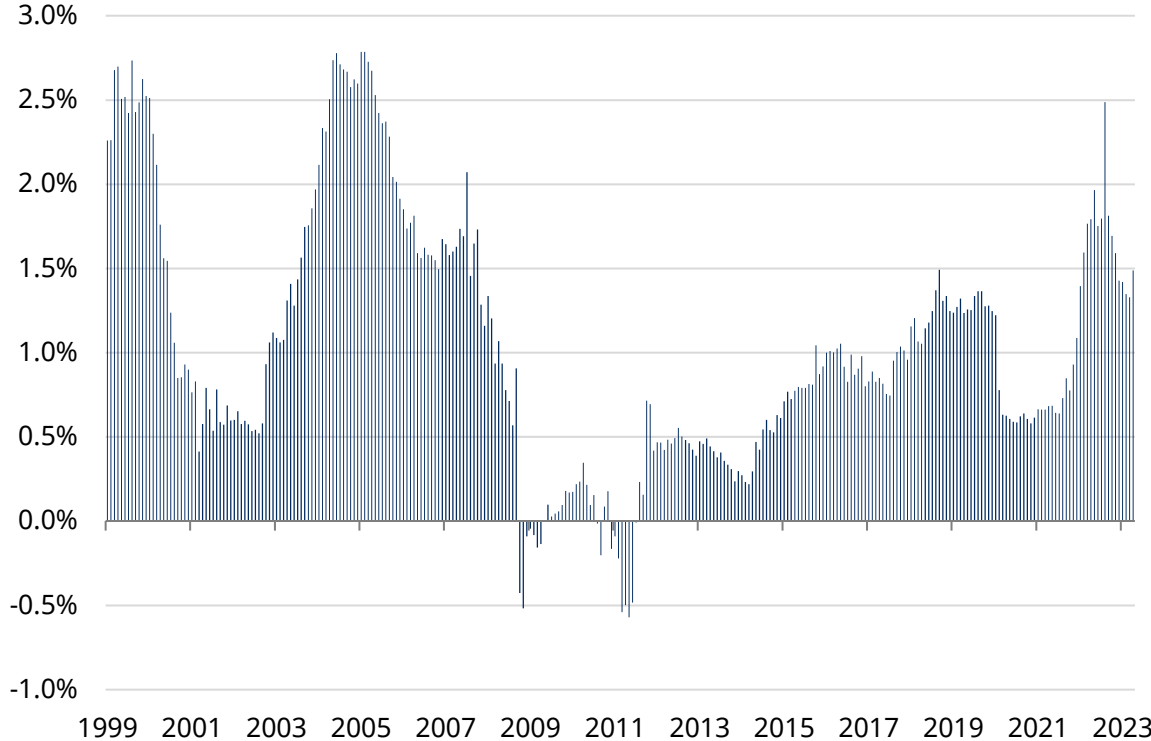
# FX hedging cost or return

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)



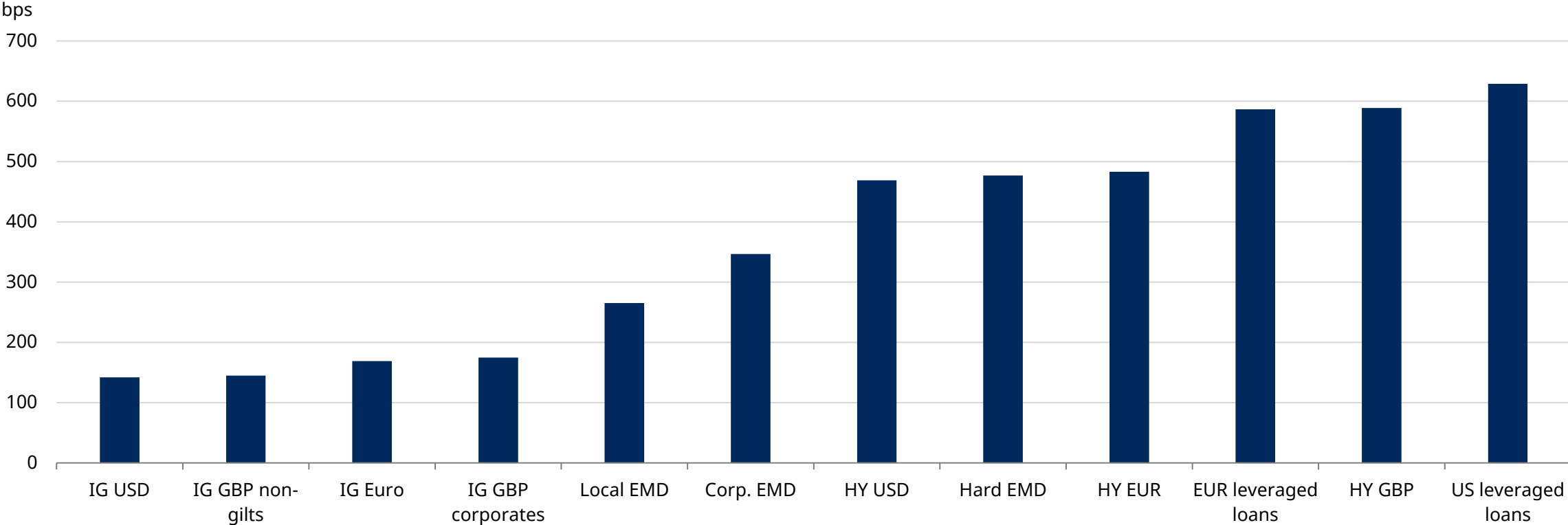
**USD yields will be 2.2 lower in EUR once hedging taken account**

**GBP yields will be 1.5% lower in EUR once hedging taken account**

Source: Refinitiv Datastream. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

# Cross-credit spread

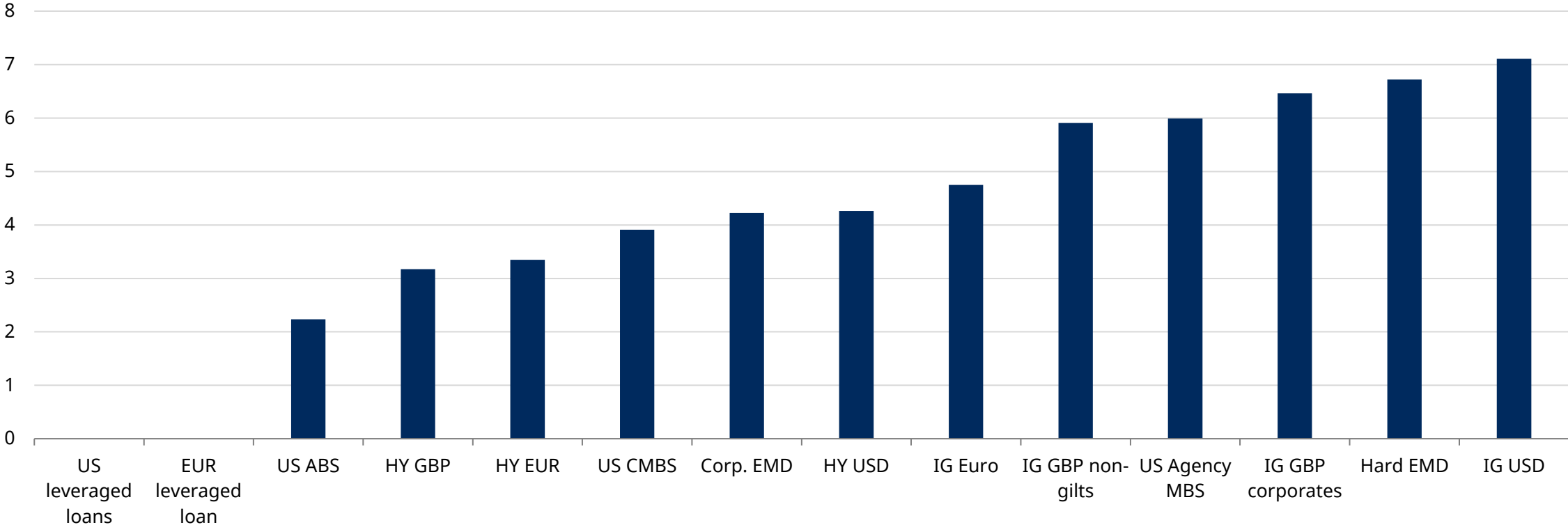
## Spread



Source: Refinitiv Datastream, ICE Data Indices, J.P. Morgan, Bloomberg, Credit Suisse. Data as at 31 May 2023. Local EMD has been estimated as a spread over Treasuries of similar maturity. Leveraged loan spread is Discount Margin (3-year life). Please see relevant disclaimers on page 73.

# Cross-credit duration

## Modified duration

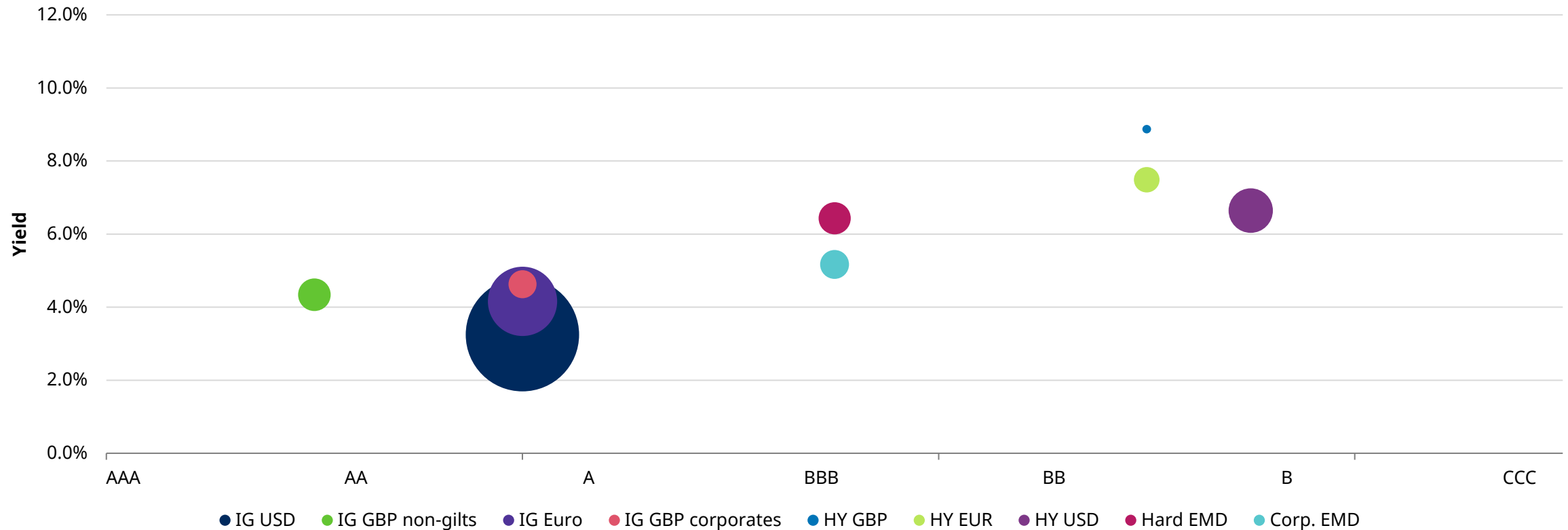


Source: Refinitiv Datastream, ICE Data Indices, J.P. Morgan, Bloomberg. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

# 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

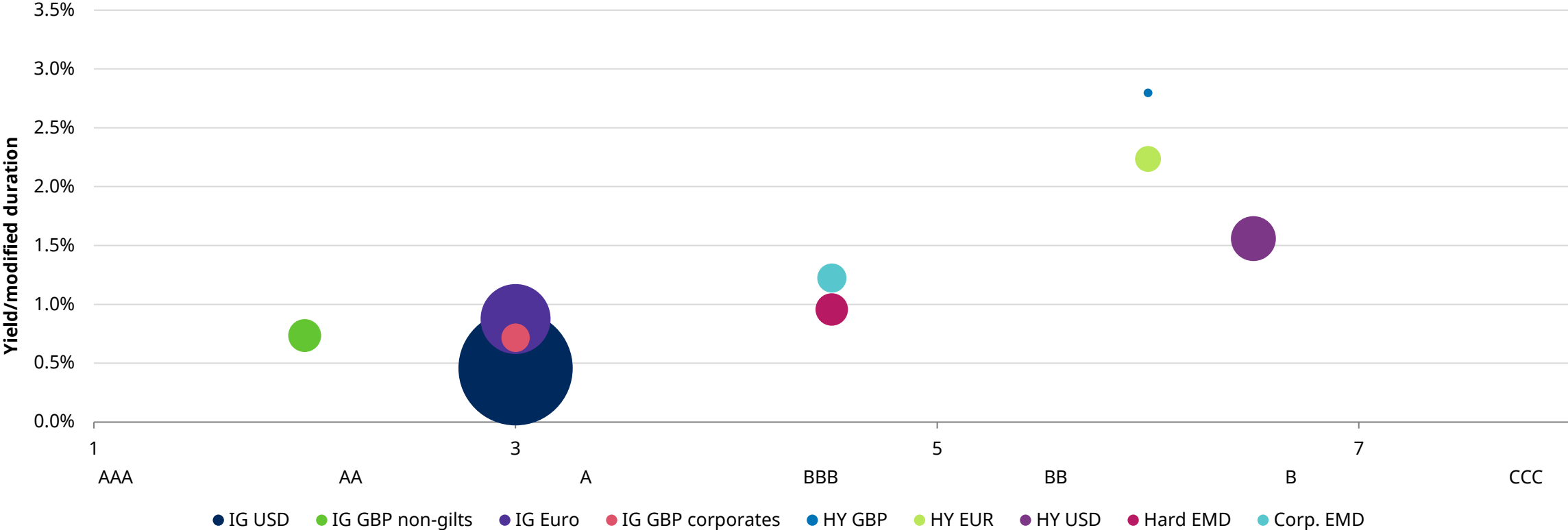


Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

# 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

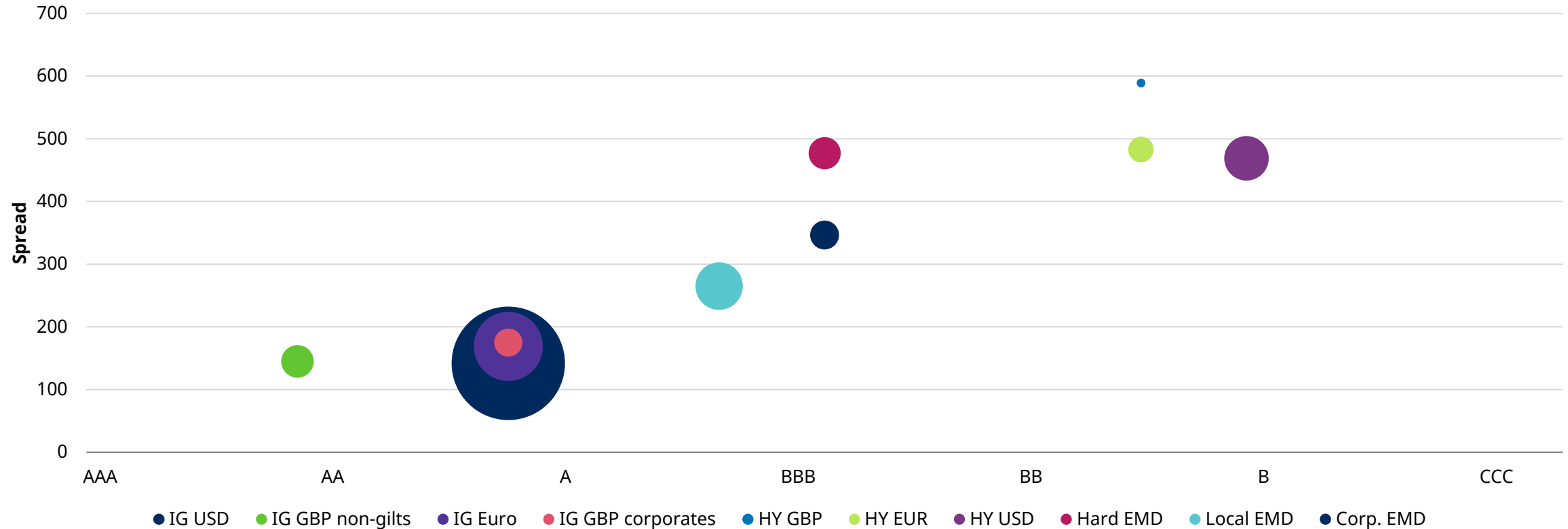


Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

# 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



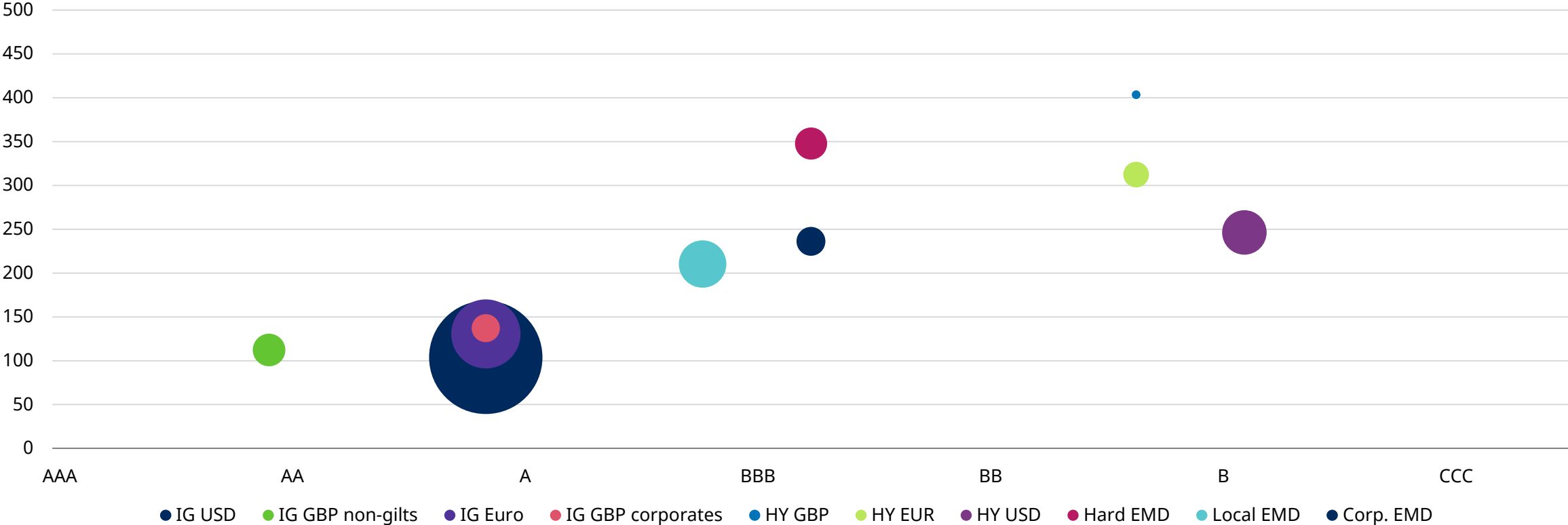
Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 31 May 2023. Please see relevant disclaimers on page 73.



# Risk premium vs. credit rating vs. market size

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

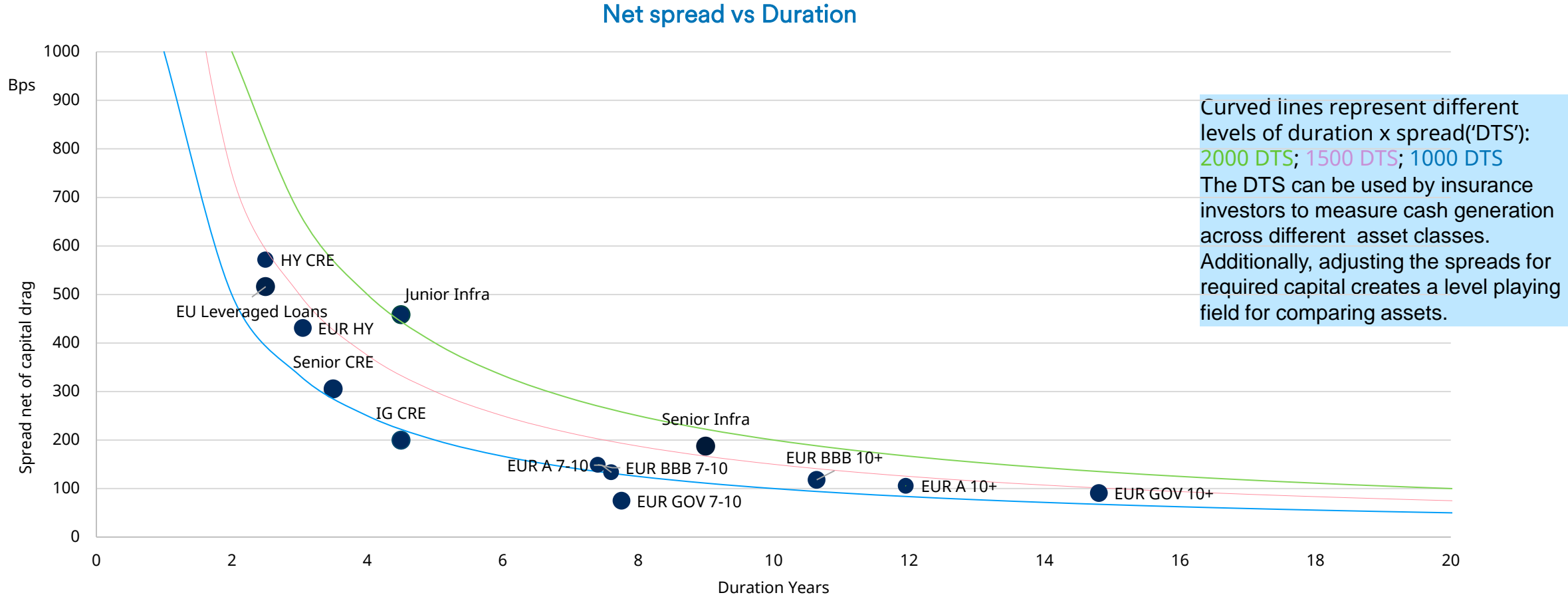
## Risk premium vs credit rating vs market size



Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 31 May 2023. Please see relevant disclaimers on page 73. Local EMD returns are driven by rates and currency movements rather than defaults

# Duration times spread analysis for insurance investors

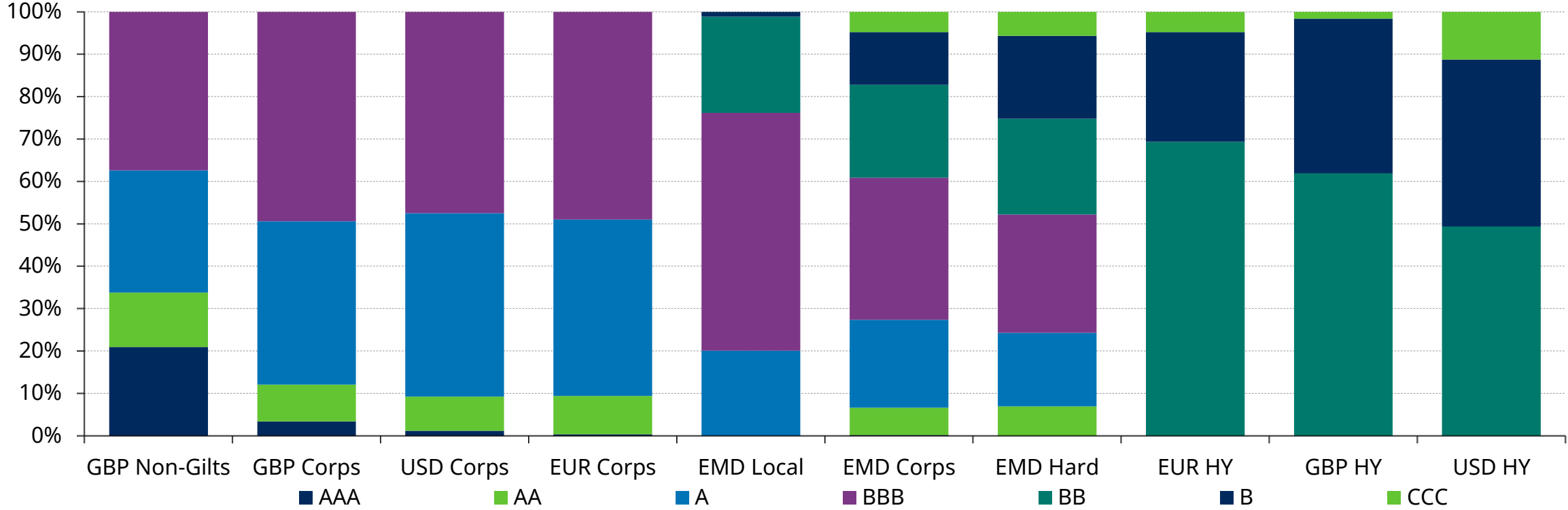
## Consistent framework for analysing assets for insurance investors



**NB: The selection of assets shown in the above chart differs from the rest of the document**

Source: ICE indices and internally sourced data from May 31 2023. Capital drag assumes 150% SCR ratio and 6% cost of capital and diversification of 42%

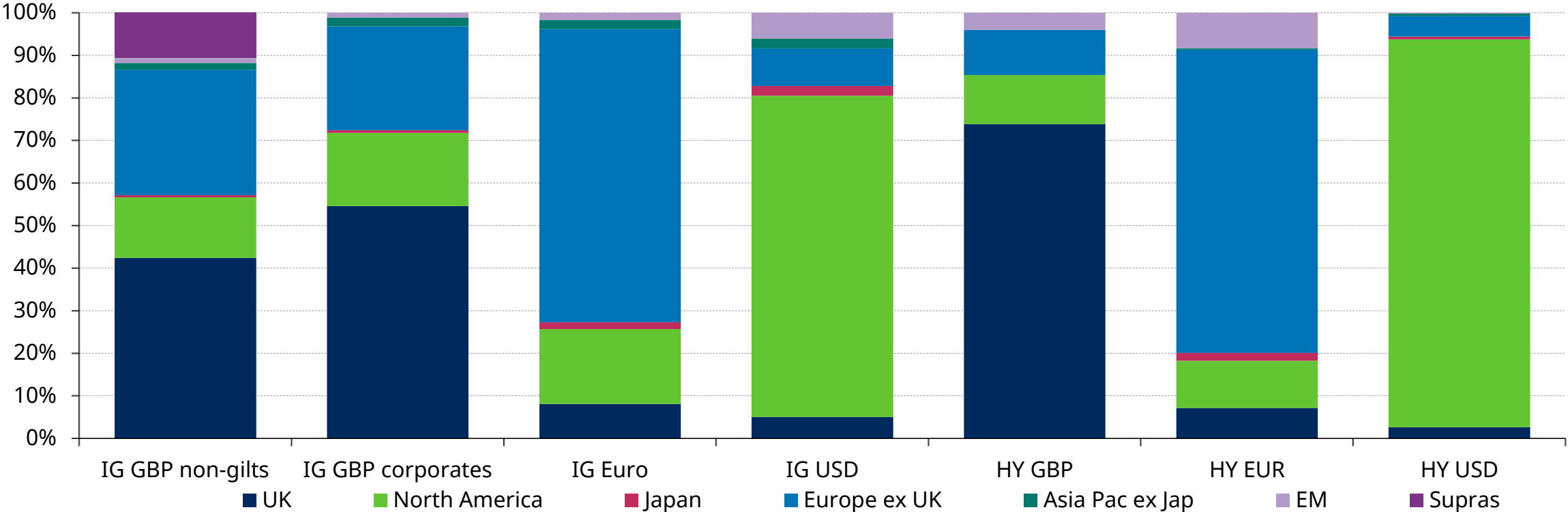
# Cross-credit ratings split



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 31 May 2023. Please see relevant disclaimers on page 73.

# Currency of issue vs country of issuer

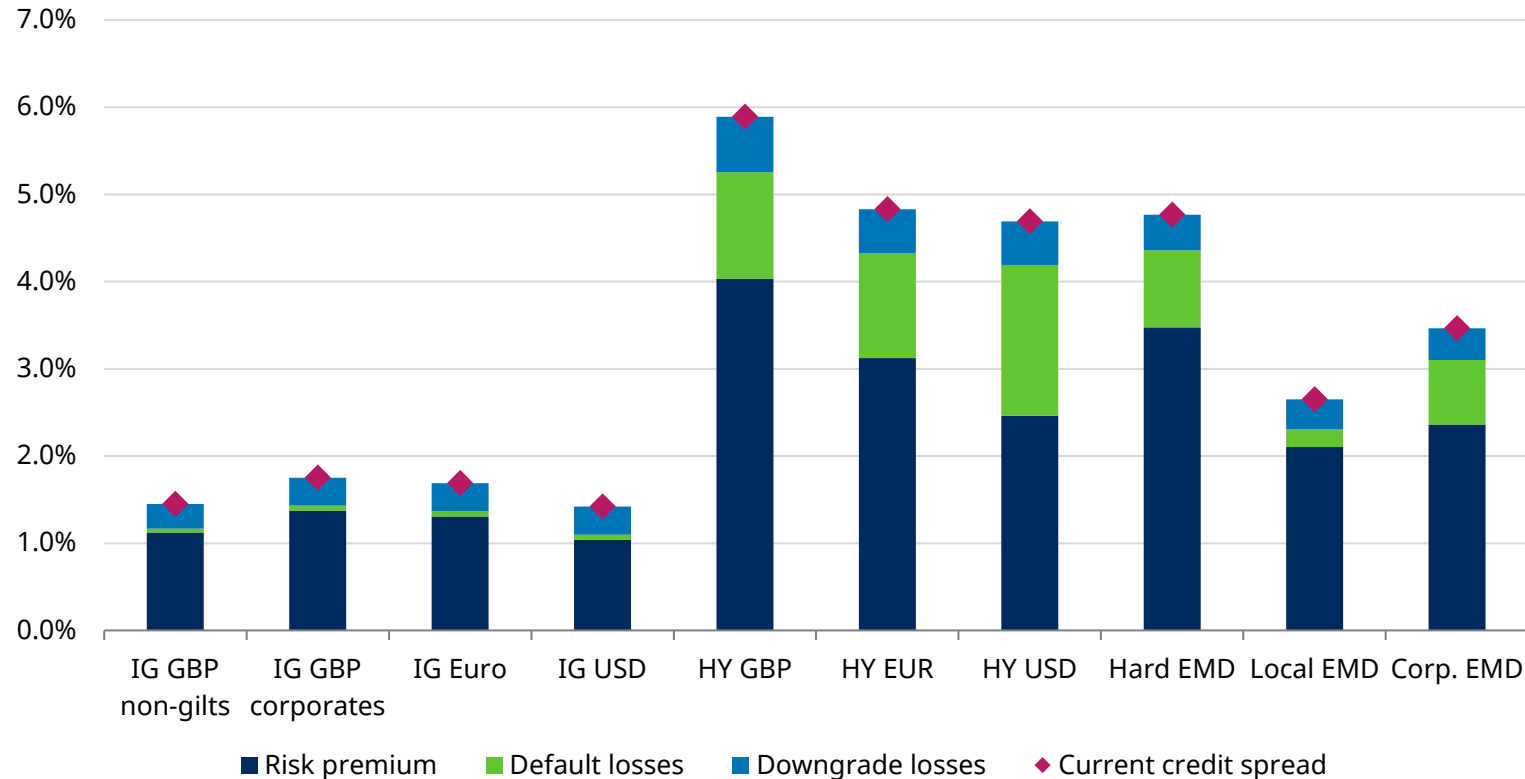


Almost half of GBP IG issuers are not based in the UK

Source: Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

# 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 31 May 2023. Please see relevant disclaimers on page 73.

# Risk premium

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

	Expected default rate <sup>1</sup>	Default losses <sup>2</sup>	Downgrade losses	Current credit spread	Risk premium <sup>3</sup>
IG GBP non-gilts	0.1%	0.0%	0.3%	1.5%	1.1%
IG GBP corporates	0.1%	0.1%	0.3%	1.8%	1.4%
IG Euro	0.1%	0.1%	0.3%	1.7%	1.3%
IG USD	0.1%	0.1%	0.3%	1.4%	1.0%
HY GBP	1.9%	1.2%	0.6%	5.9%	4.0%
HY EUR	1.8%	1.2%	0.5%	4.8%	3.1%
HY USD	2.7%	1.7%	0.5%	4.7%	2.5%
Hard EMD	1.4%	0.9%	0.4%	4.8%	3.5%
Local EMD	0.3%	0.2%	0.3%	2.7%	2.1%
Corp. EMD	1.1%	0.7%	0.4%	3.5%	2.4%

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

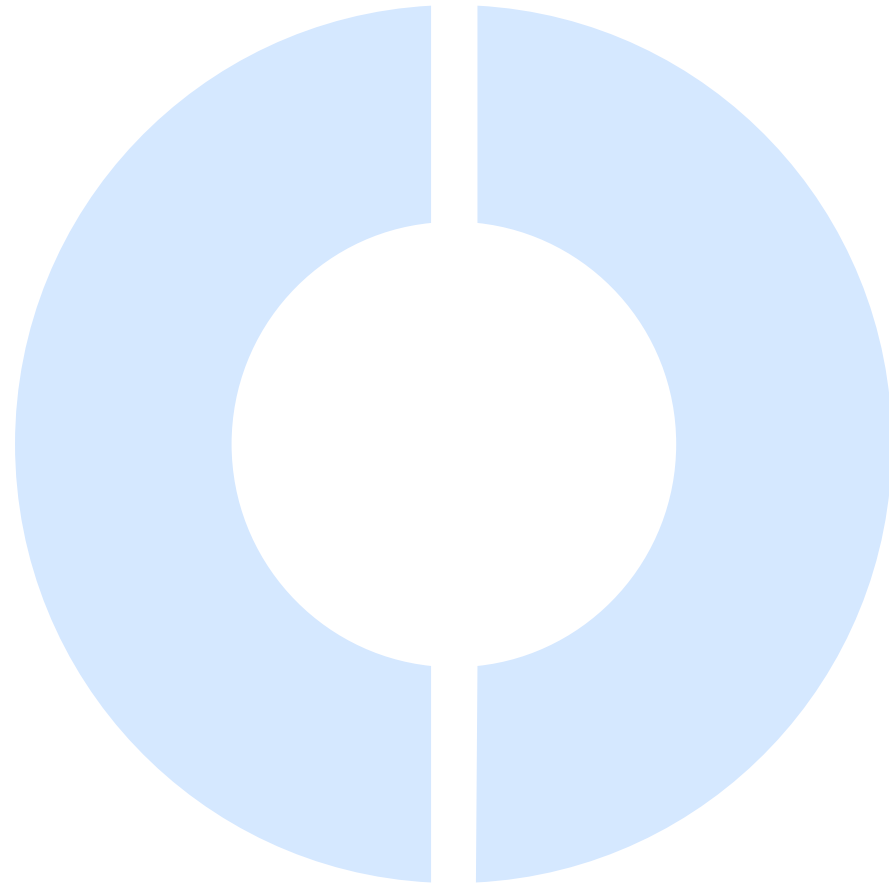
Source: Schroders, Moody's default and recovery study 2022, ICE Data Indices, J.P.Morgan. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

<sup>1</sup>Based on average historical default rate

<sup>2</sup>Default rate \* (1-recovery rate)

<sup>3</sup>Credit spread – default losses – downgrade losses

**Schroders**

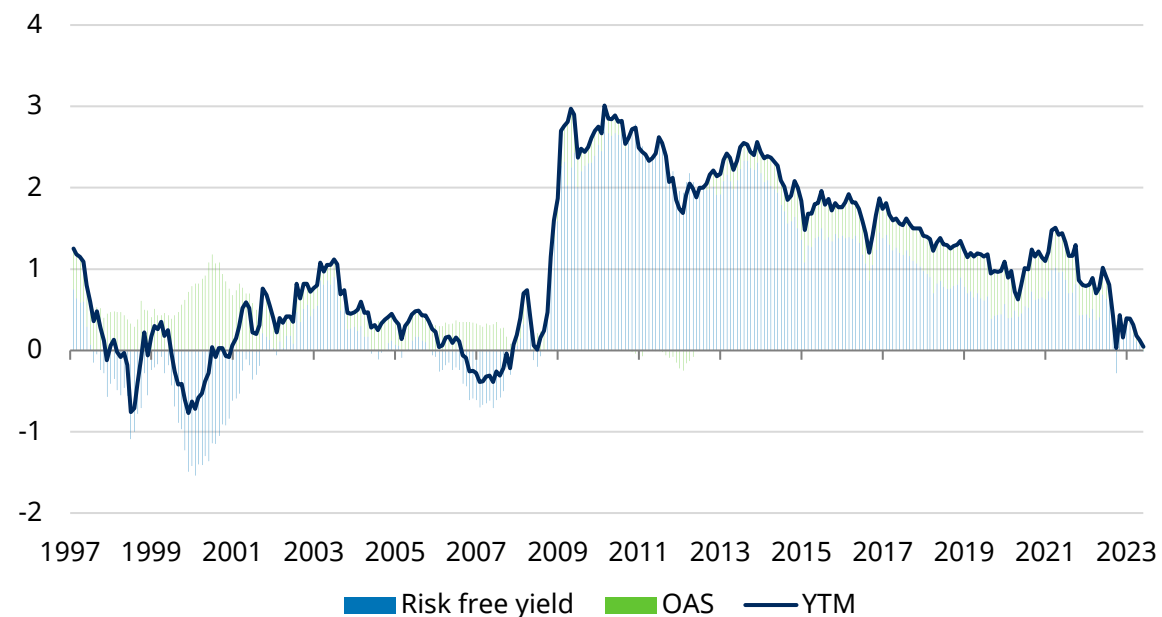


**IG long vs short**

Shape of the curve

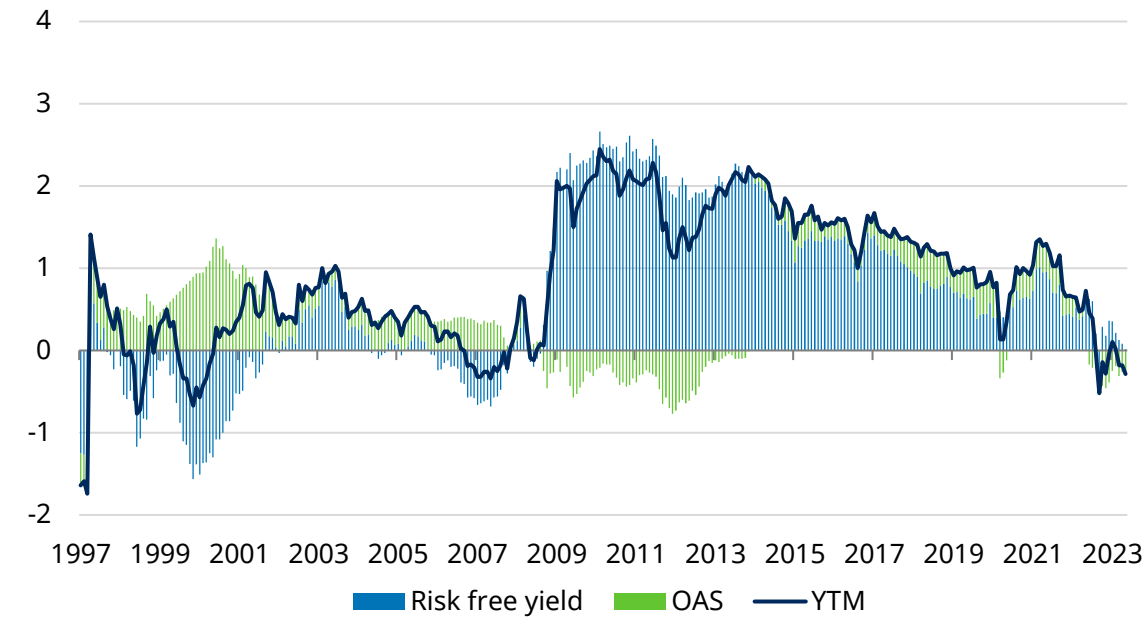
# Shape of GBP IG curves

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



	YTW	OAS	Duration
IG GBP non-gilts 1-5 year	5.8%	136	2.7
IG GBP non-gilts Index	5.8%	145	5.9
IG GBP non-gilts 10+	5.9%	142	11.5

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



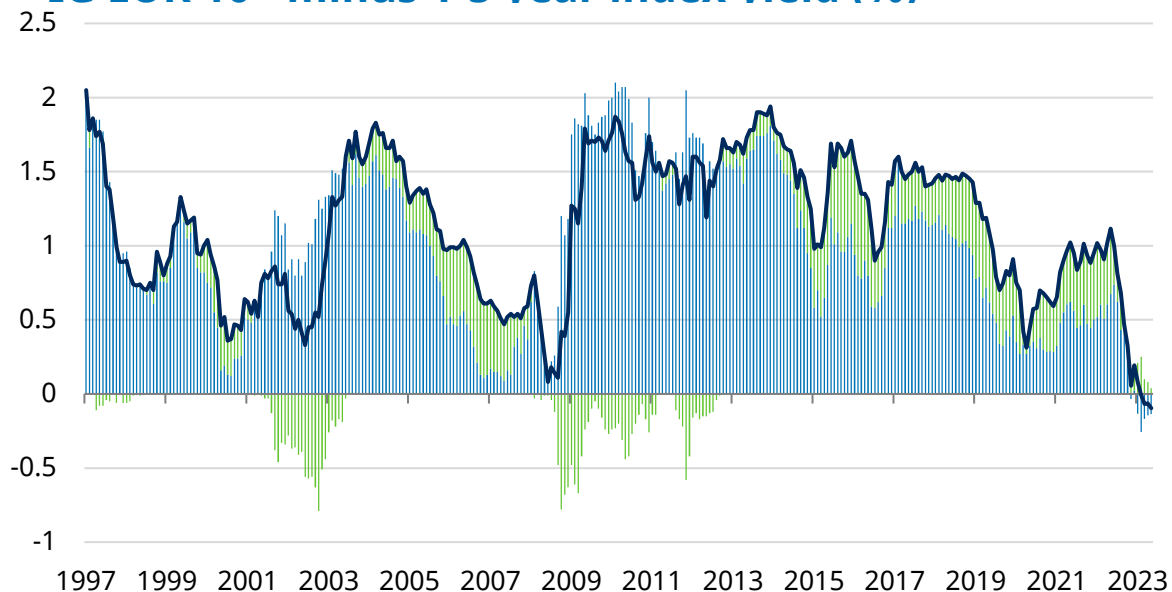
	YTW	OAS	Duration
IG GBP corporates 1-5 year	6.2%	182	2.9
IG GBP corporates Index	6.1%	175	6.5
IG GBP corporates 10+	6.0%	152	11.3

Source: Refinitiv Datastream. Data as at 31 May 2023. Please see relevant disclaimers on page 73.



# Shape of EUR and USD IG curves

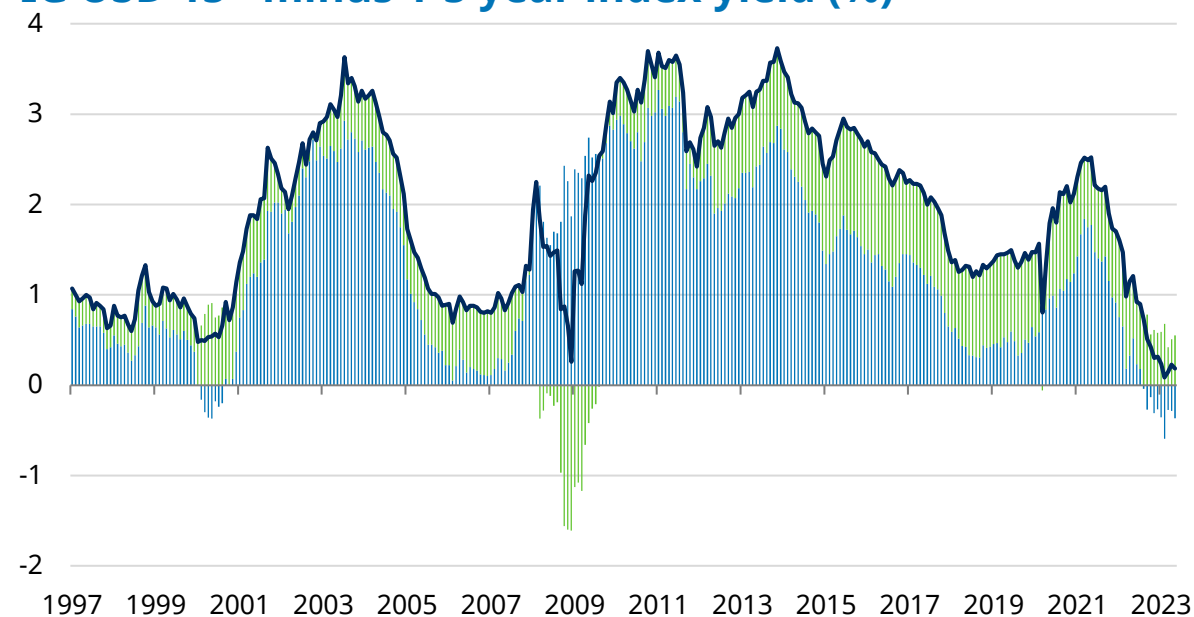
## IG EUR 10+ minus 1-5 year index yield (%)



■ Risk free yield ■ OAS — YTM

	YTW	OAS	Duration
IG Euro 1-5 year	4.2%	160	2.9
IG Euro Index	4.2%	169	4.8
IG Euro 10+	4.1%	164	11.8

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



■ Risk free yield ■ OAS — YTM

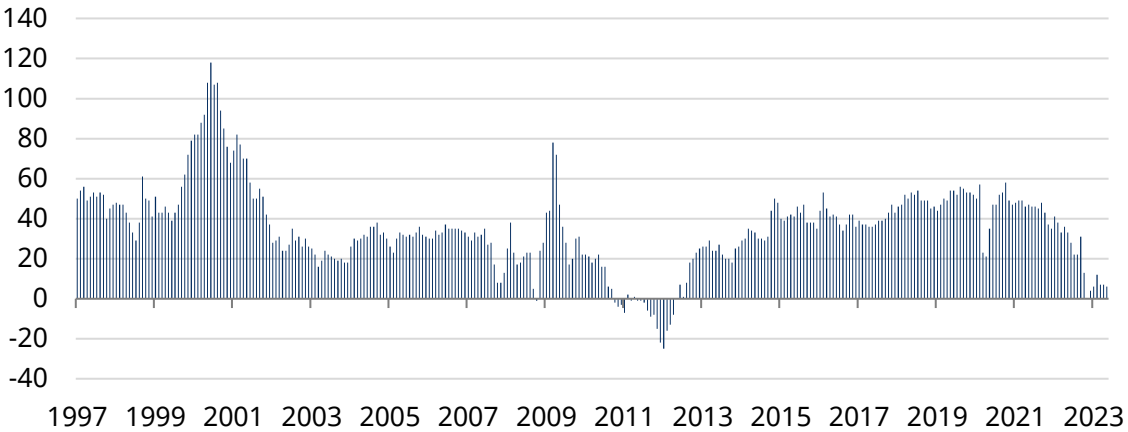
	YTW	OAS	Duration
IG USD 1-5 year	5.4%	109	2.8
IG USD Index	5.4%	142	7.1
IG USD 10+	5.6%	164	14.0

Source: Refinitiv Datastream. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

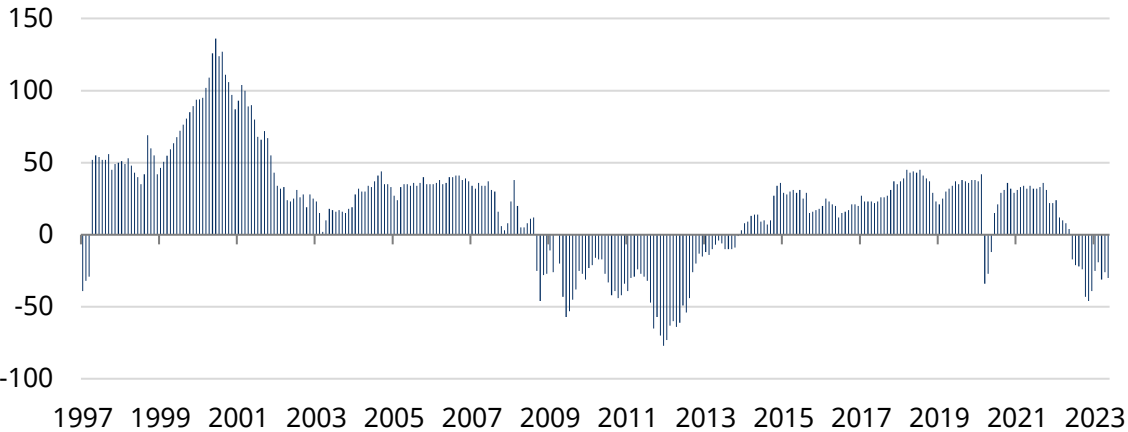
# IG long vs short OAS

## Shape of spread curves

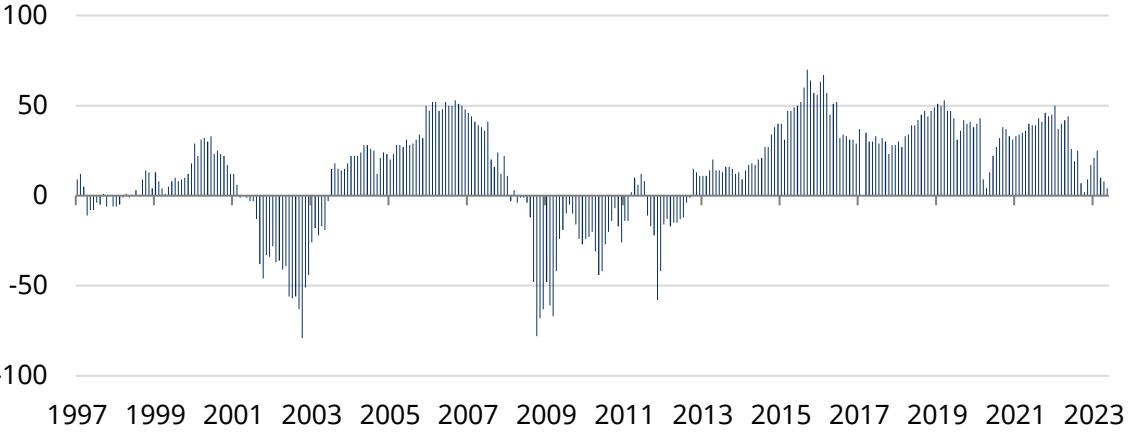
IG GBP non-gilts (bps)



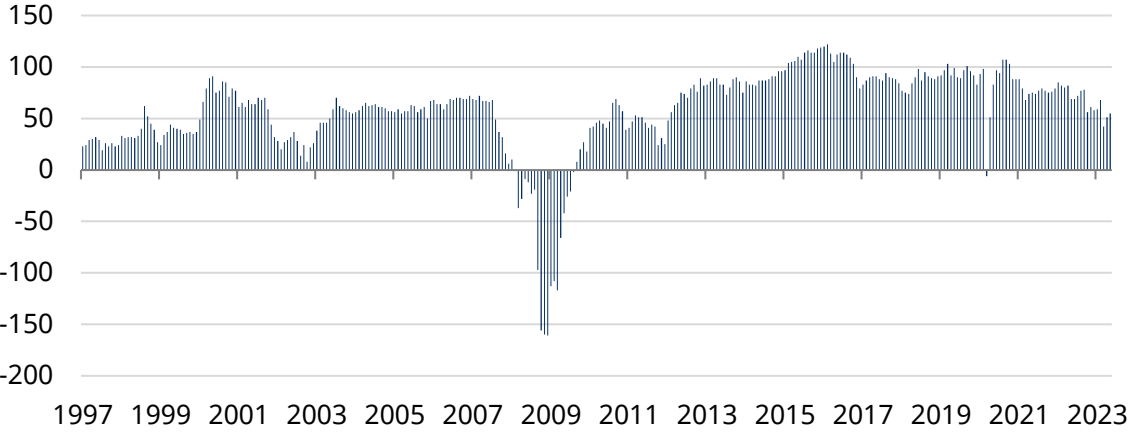
IG GBP corporates (bps)



IG EUR (bps)

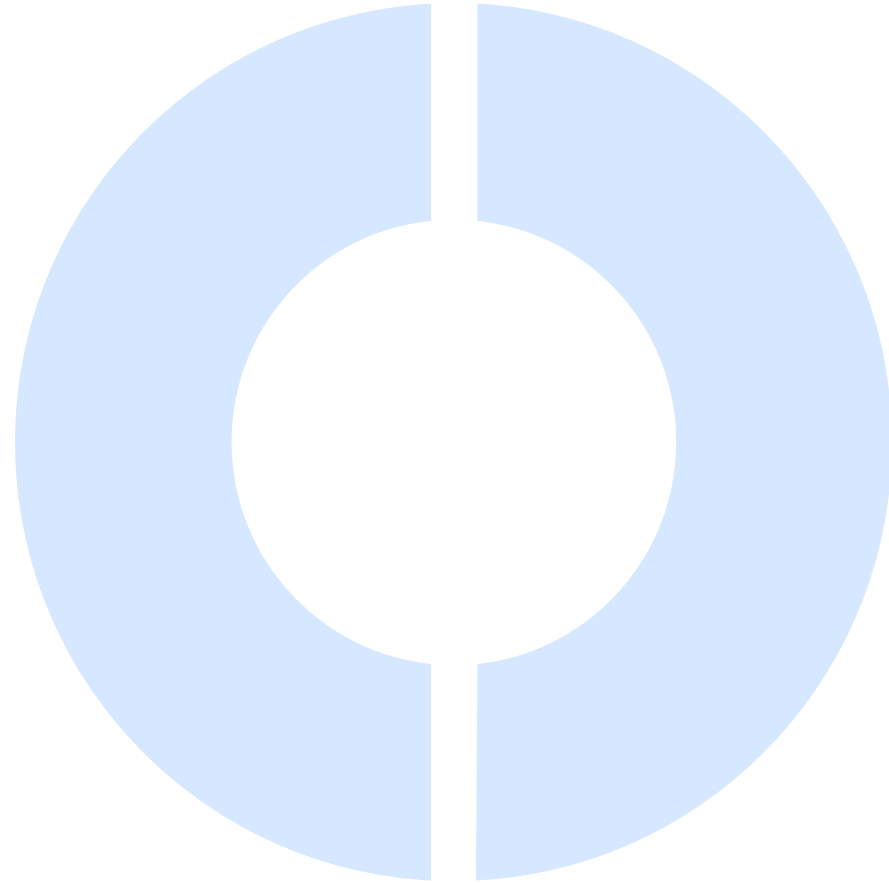


IG USD (bps)



Source: Schroders, ICE Data Indices. Figures showing 10+ (15+ for IG USD) minus 1-5 year index spread. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

**Schroders**

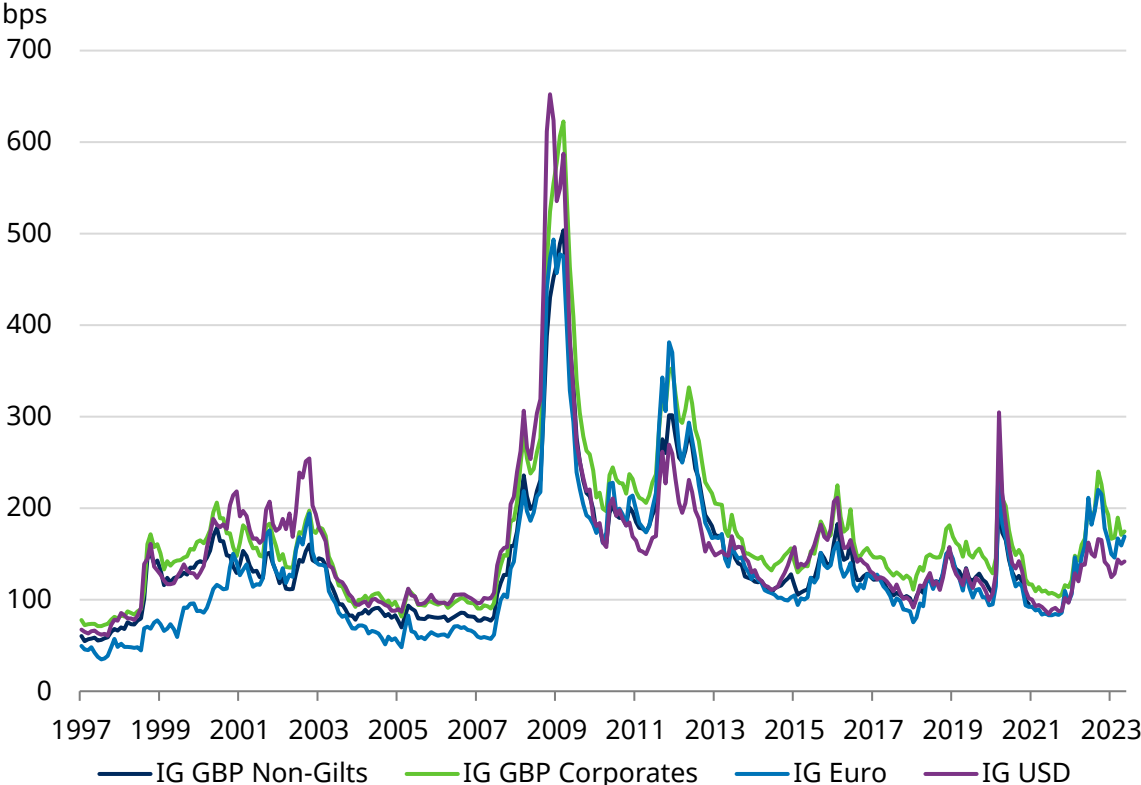


**Corporate credit**  
Valuation

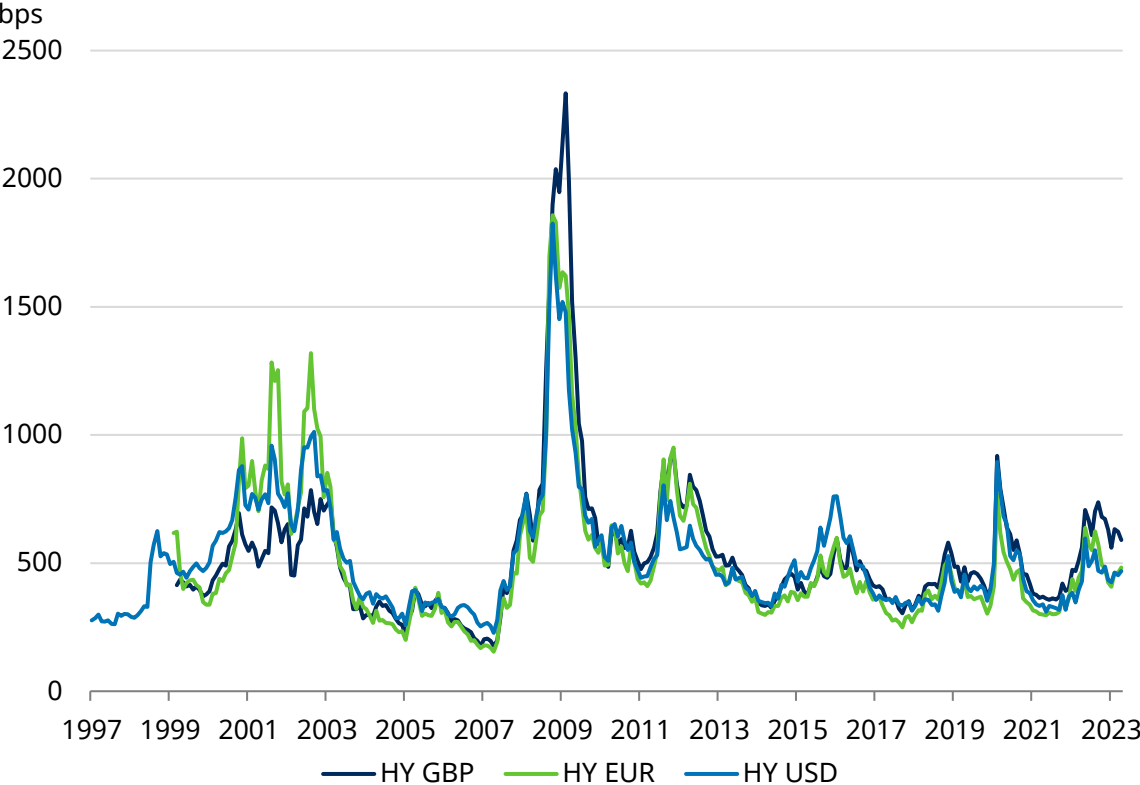
# IG and HY valuation

## Historical ratings-adjusted credit spreads

### IG adjusted spreads



### HY adjusted spreads

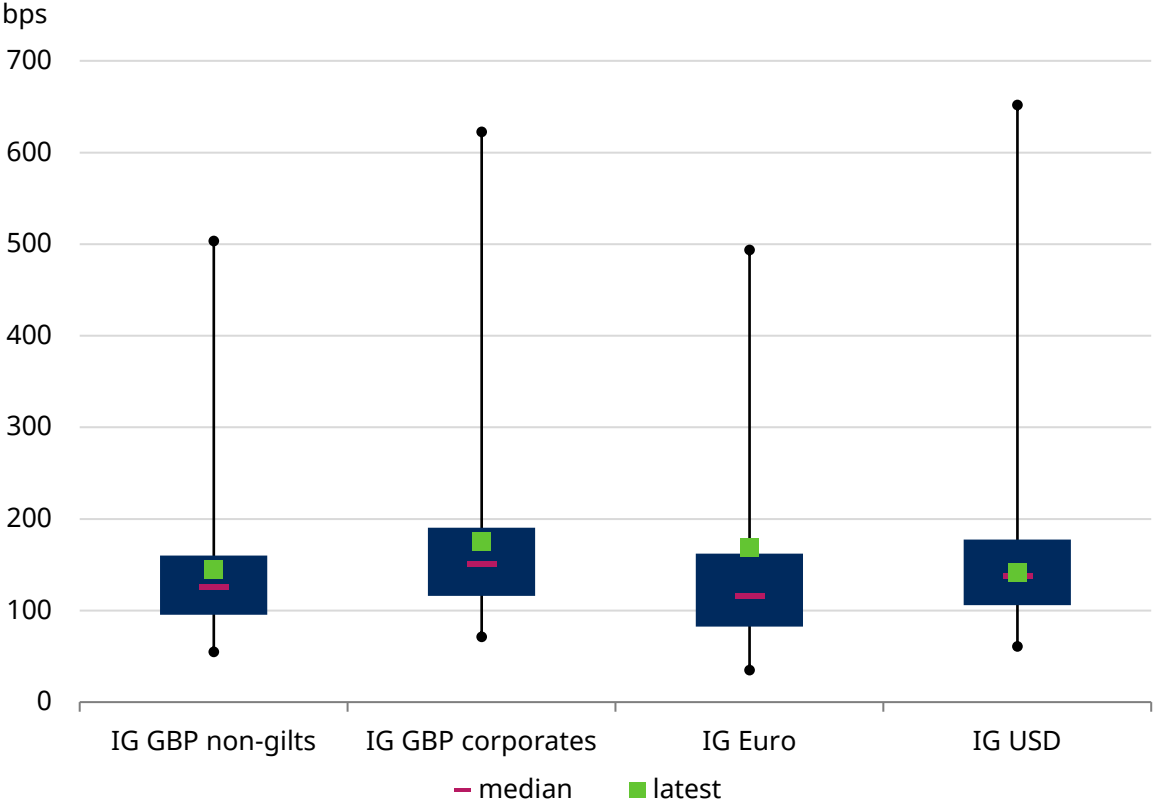


Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 31 May 2023. Please see relevant disclaimers on page 73. Spreads are adjusted for changes in the distribution of credit ratings within each index over time.

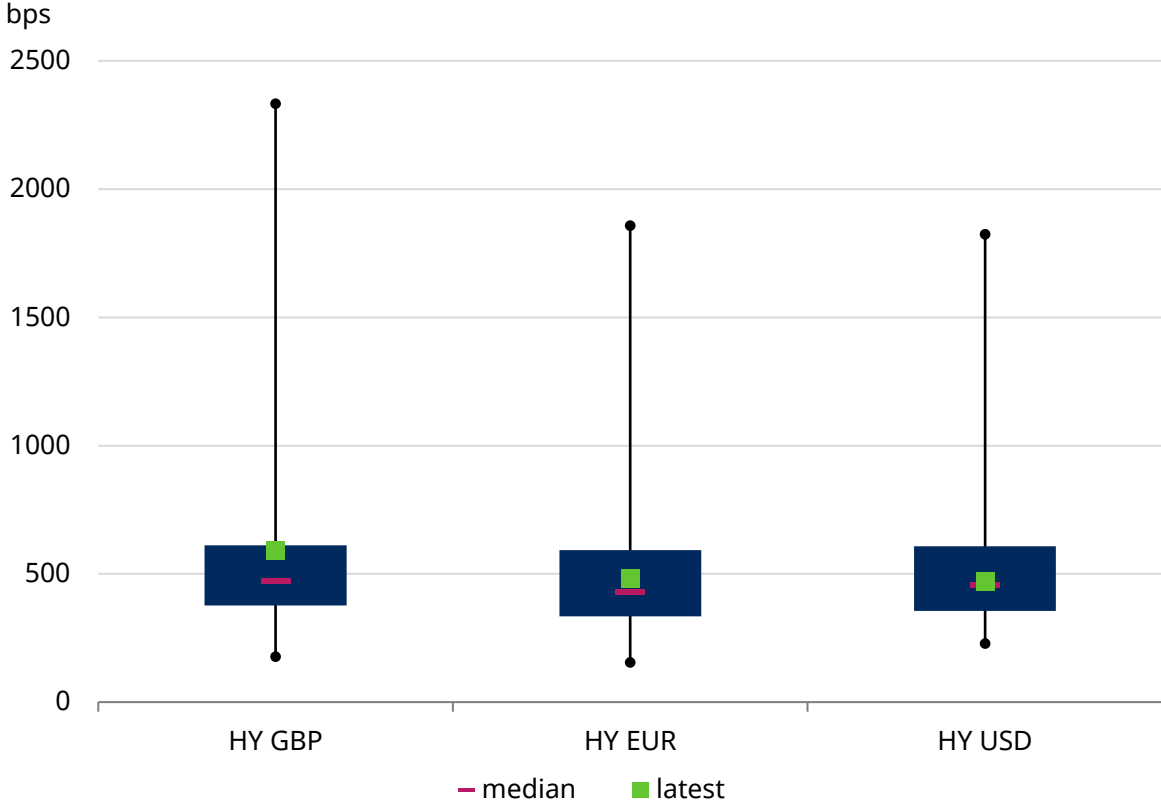
# IG and HY valuation

## Spread percentiles<sup>1</sup>

### IG adjusted spreads



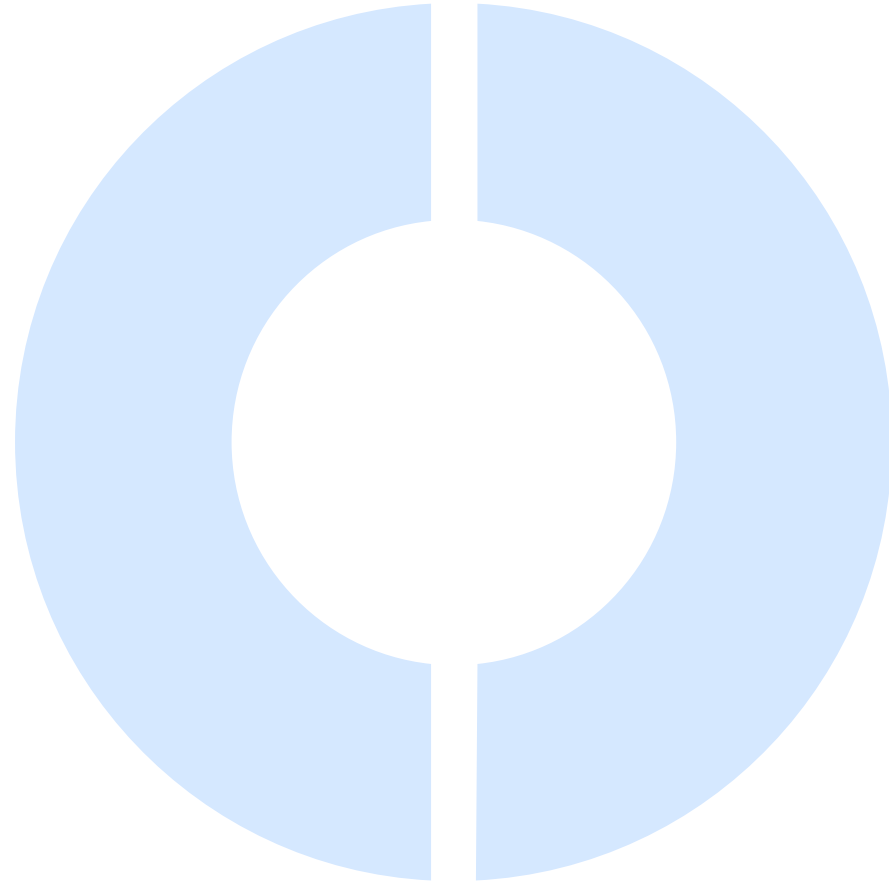
### HY adjusted spreads



Source: Schroders, Refinitiv Datastream, ICE Data Indices, J.P. Morgan. Data as at 31 May 2023. Spreads are adjusted for changes in the distribution of credit ratings within each index over time. Please see relevant disclaimers on page 73.

<sup>1</sup>Percentiles 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**



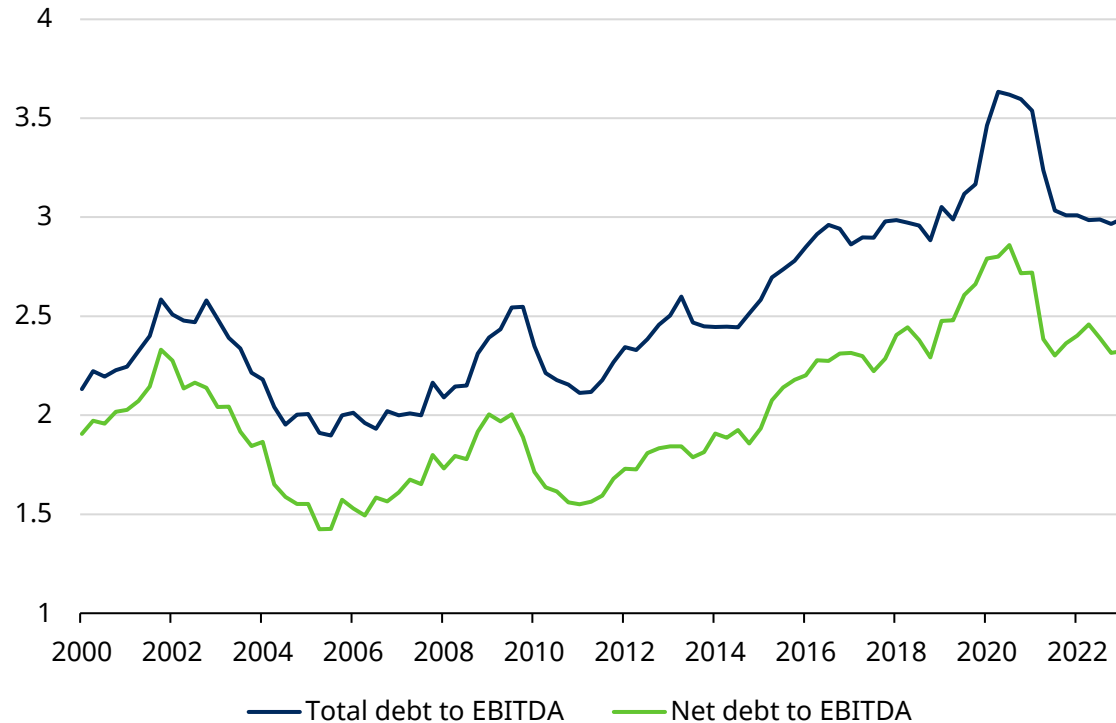
**Corporate credit**  
Fundamentals

# US IG leverage

Leverage has been broadly stable in recent quarters

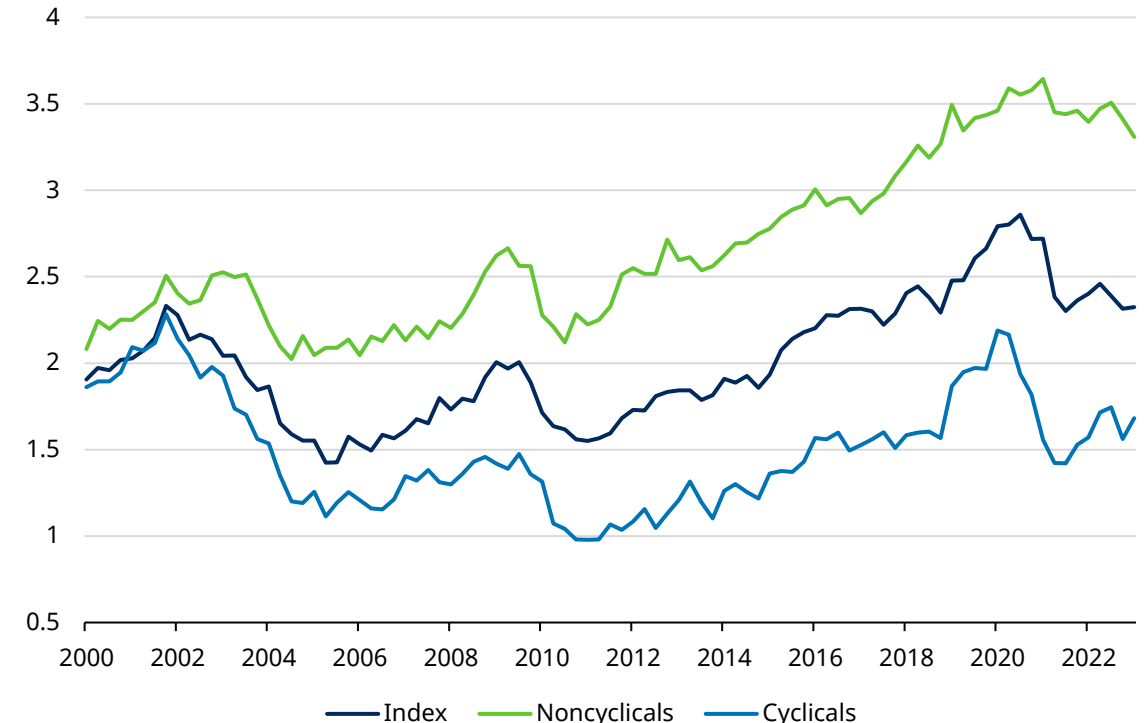
## US IG leverage

Debt to last 12 months EBITDA



## US IG net leverage

Net debt to last 12 months EBITDA



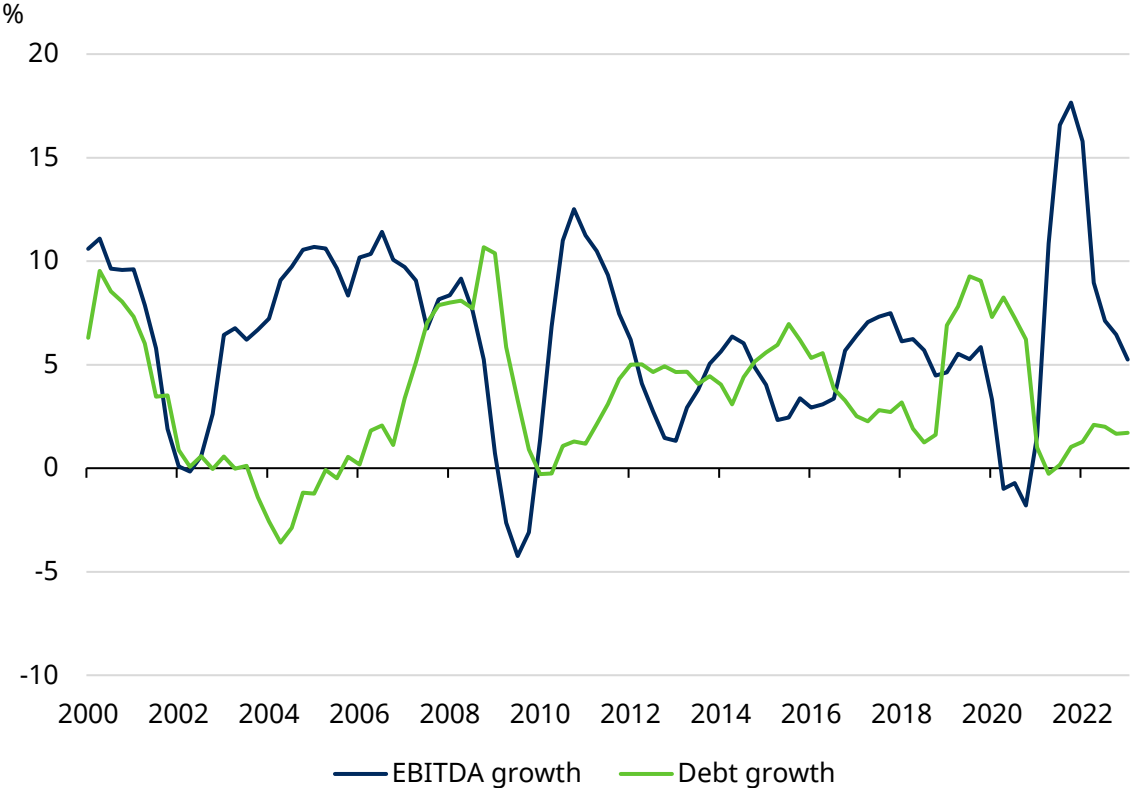
Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

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

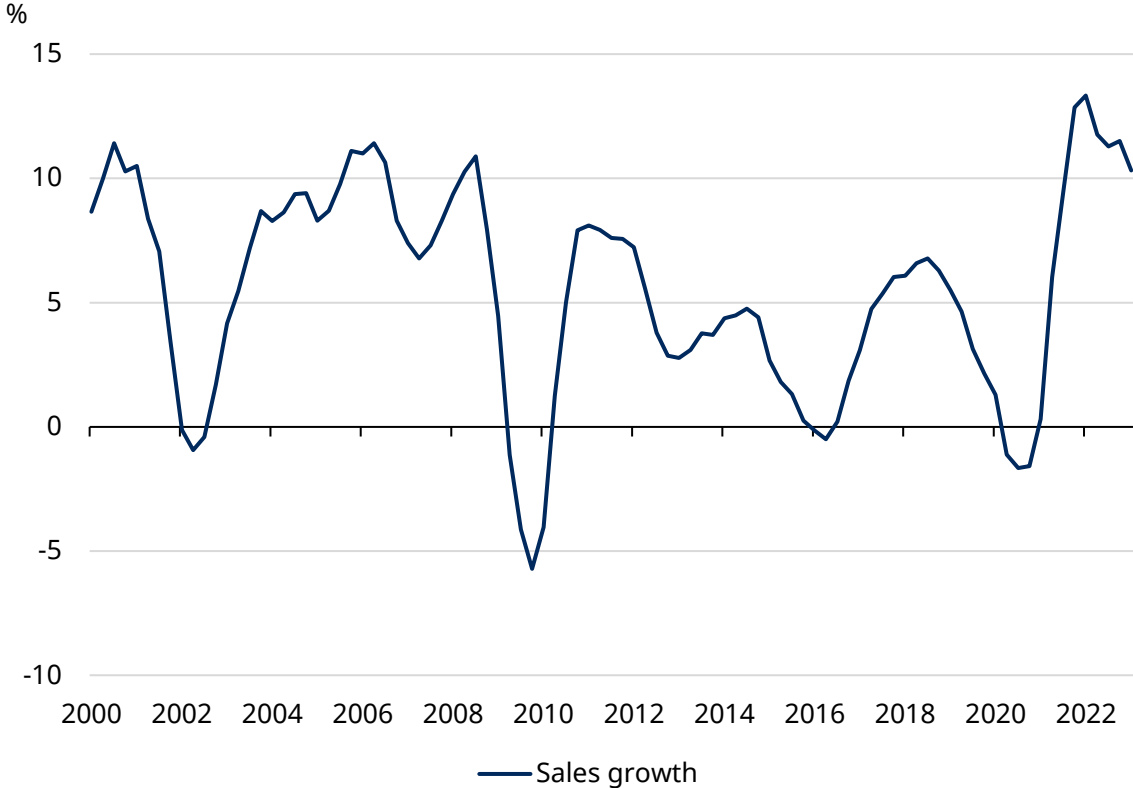
# US IG earnings, sales and debt growth

Earnings growth continued to slow in Q1

US IG EBITDA and debt growth (last 12 months)



US IG sales growth (last 12 months)



Sales growth also slowed but remains at very elevated levels

Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

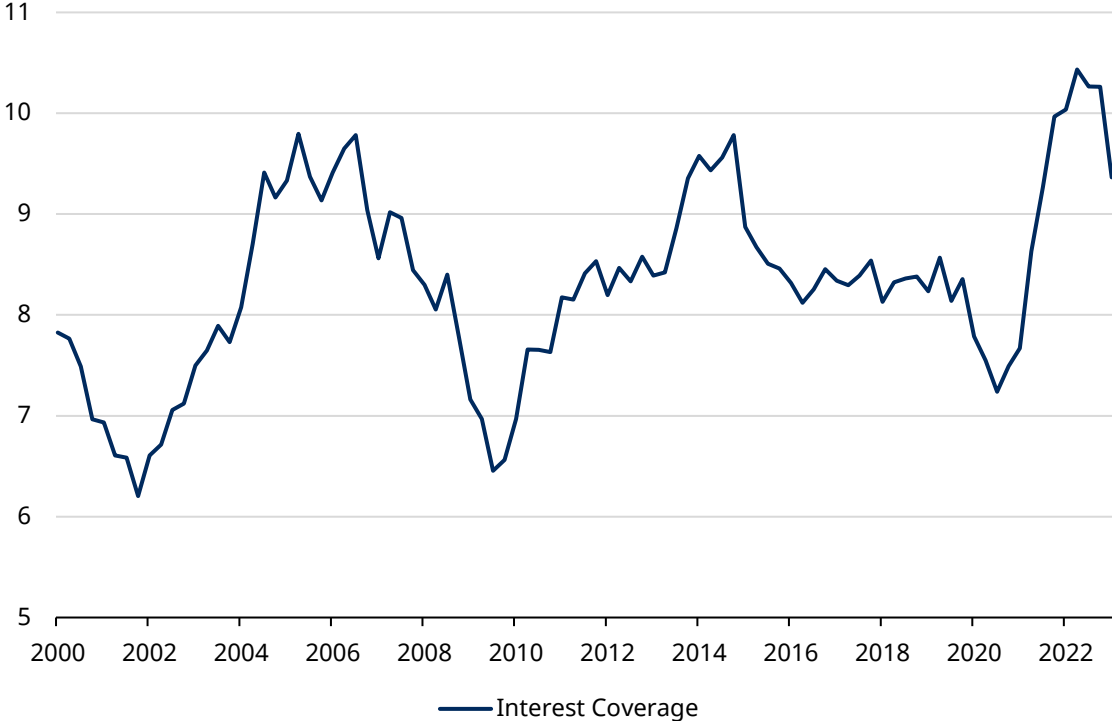


# US IG interest coverage

Interest coverage has declined but remains elevated

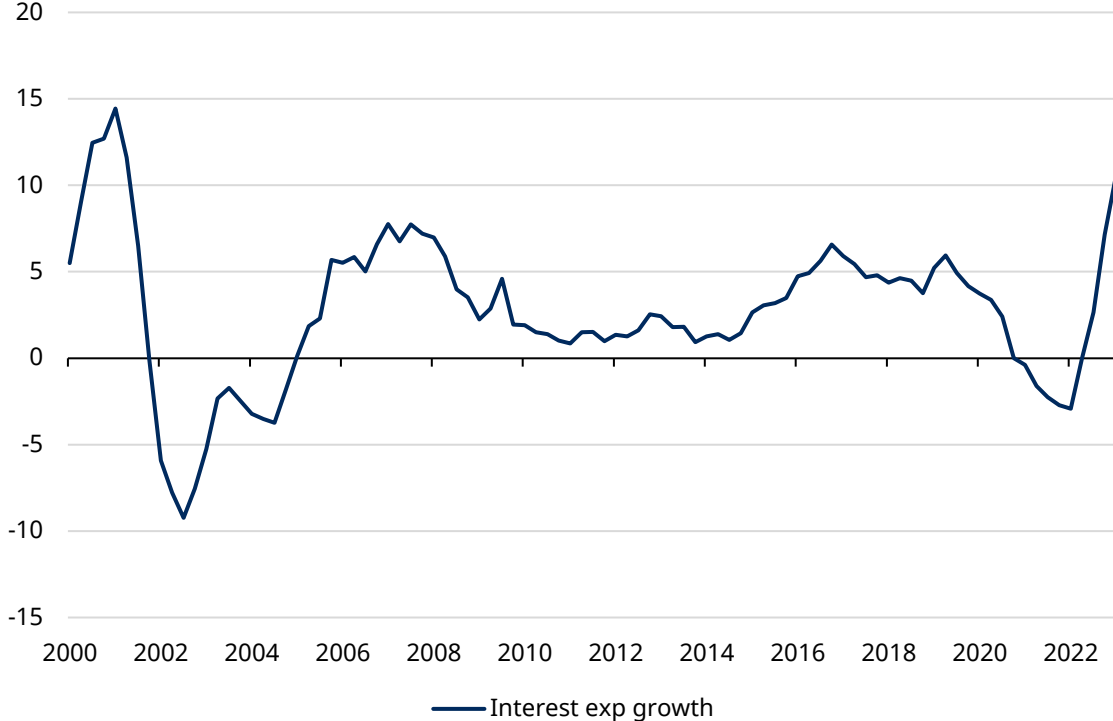
## US IG interest coverage ratio

Last 12 months EBITDA to interest expense



## US IG annual interest expense growth

%



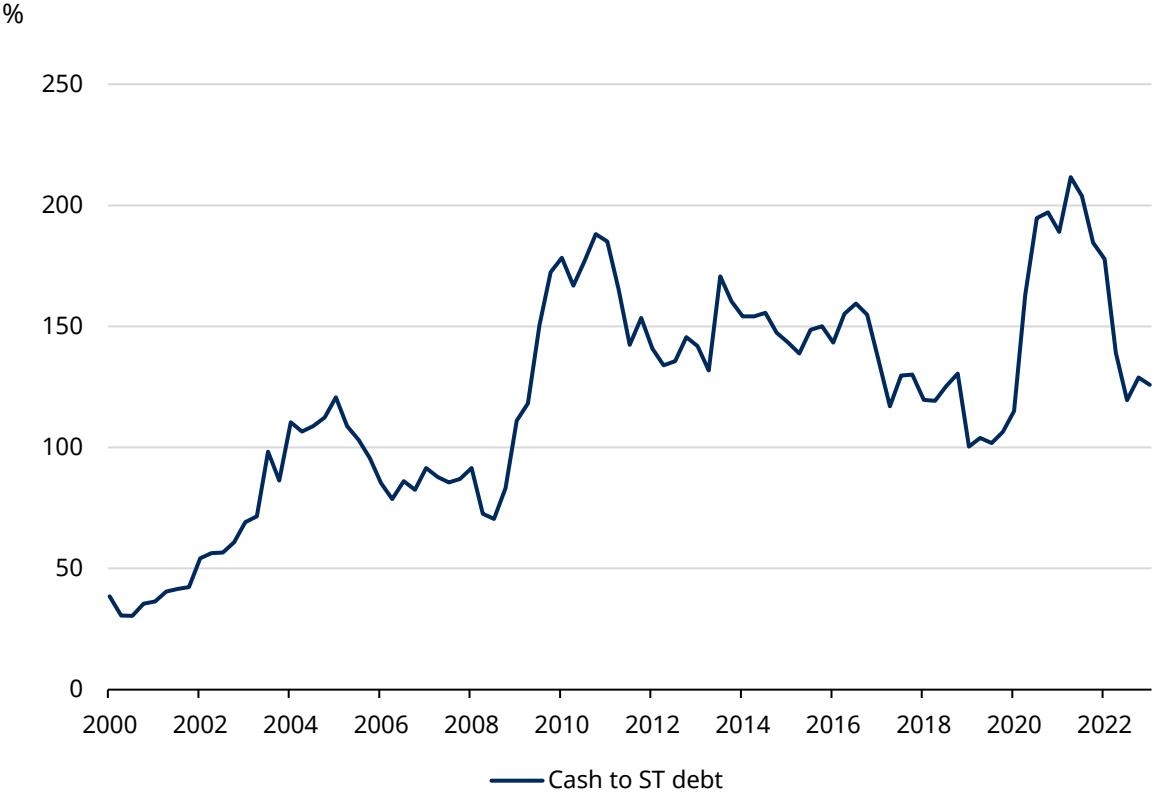
**Interest expense growth is the highest since 2001 as higher interest rates are starting to have an impact**

Source: Schrodgers, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

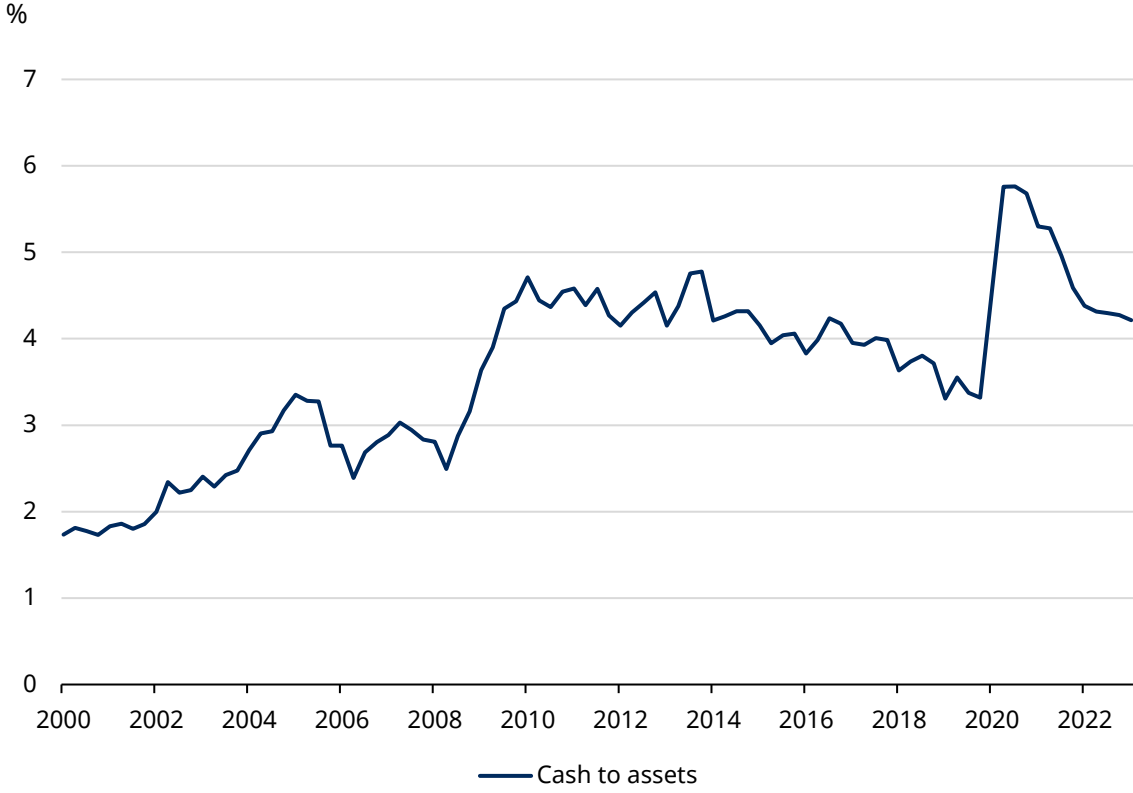
# US IG cash balances

Cash balances broadly stable in Q1

## US IG cash to short term debt



## US IG cash to assets



Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

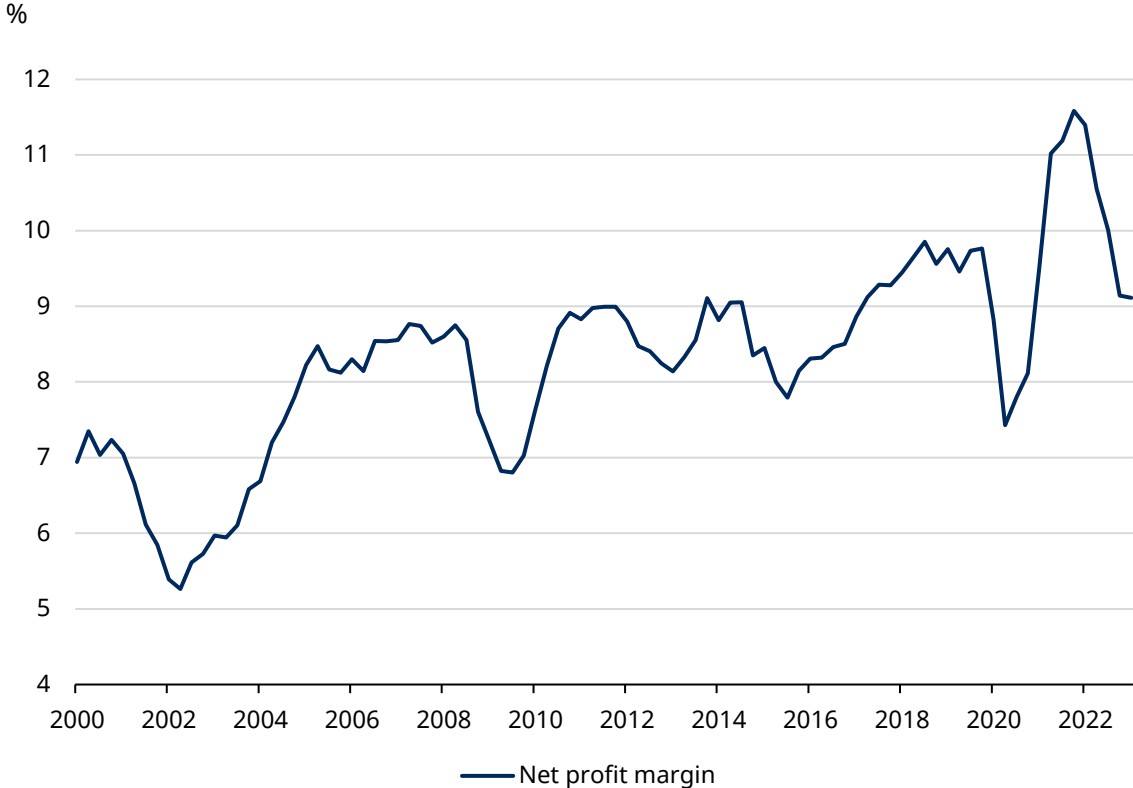
# US IG corporate margins

## EBITDA margins continued to fall in Q1

### US IG EBITDA margin



### US IG net profit margin



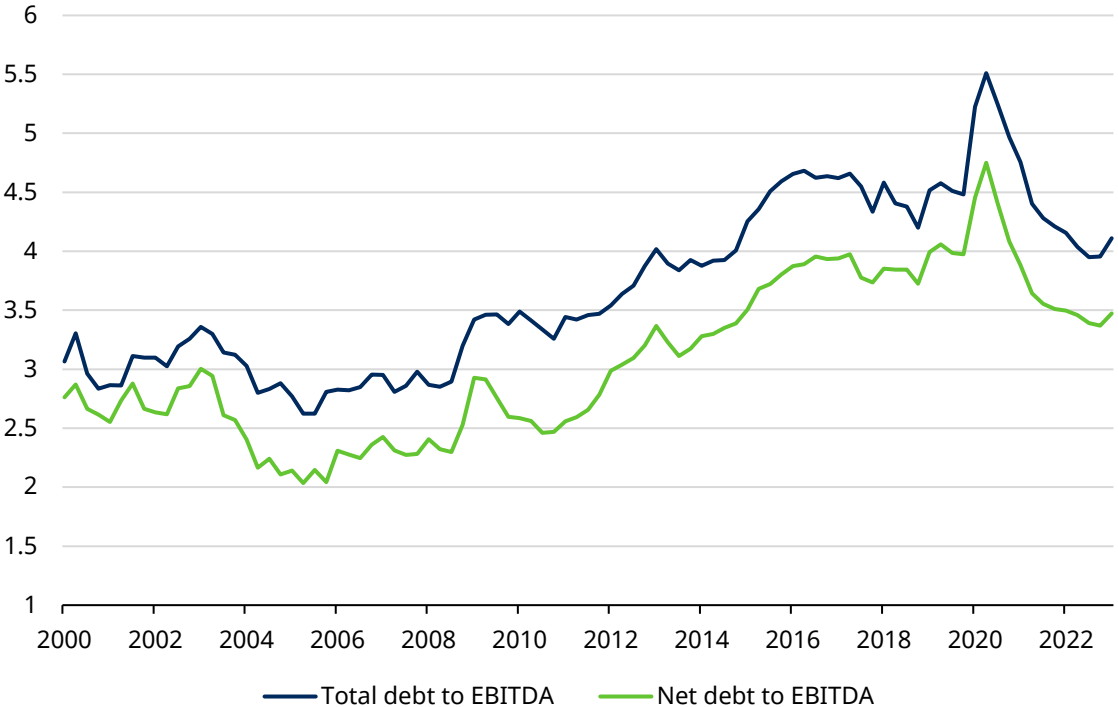
Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

# US HY leverage

Leverage ticked up slightly in Q1 but remains well below pandemic era peaks

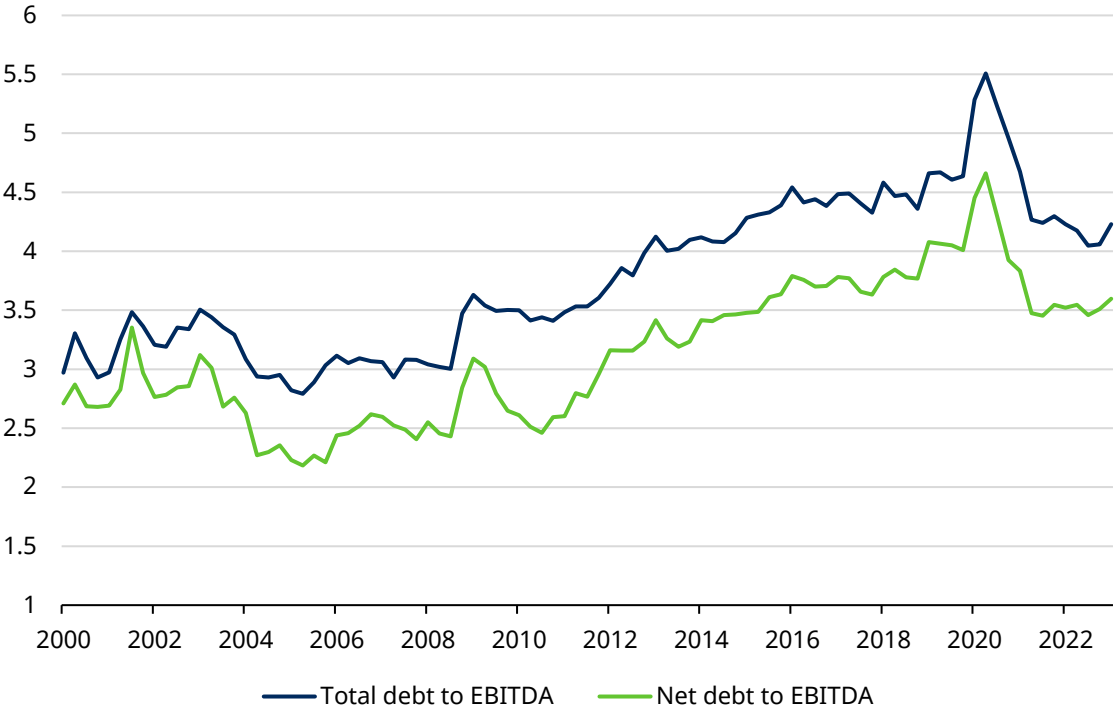
## US HY leverage

Debt to last 12 months EBITDA



## US HY ex-energy leverage

Debt to last 12 months EBITDA

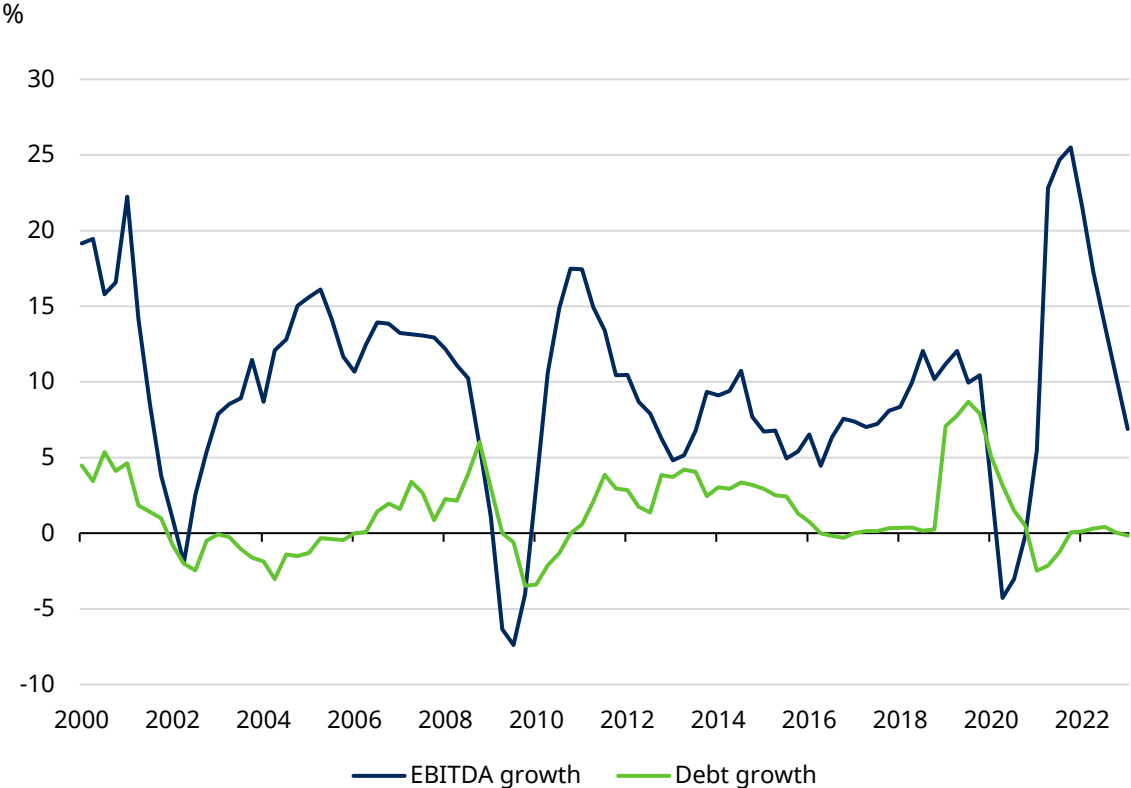


Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

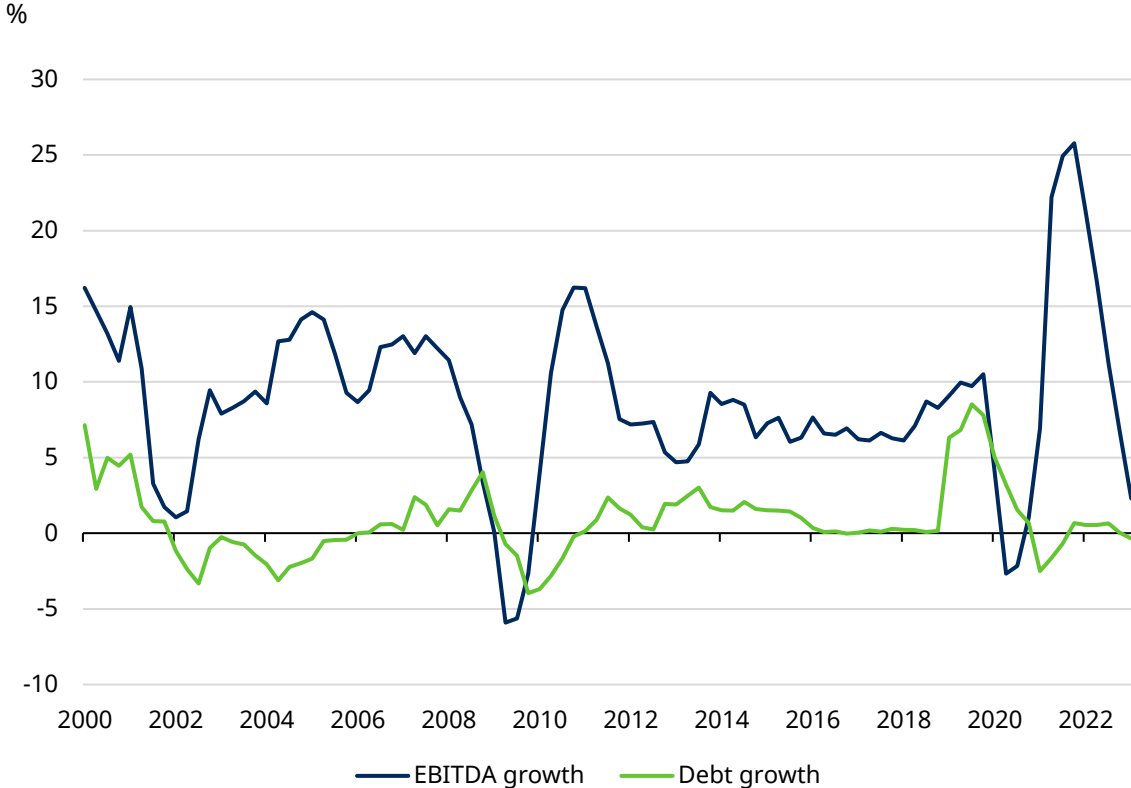
# US HY earnings and debt growth

EBITDA growth continued to cool in Q1, while debt growth remained 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 Q1 2023. Please see relevant disclaimers on page 73.

# US HY interest coverage

Interest coverage has declined but remains elevated

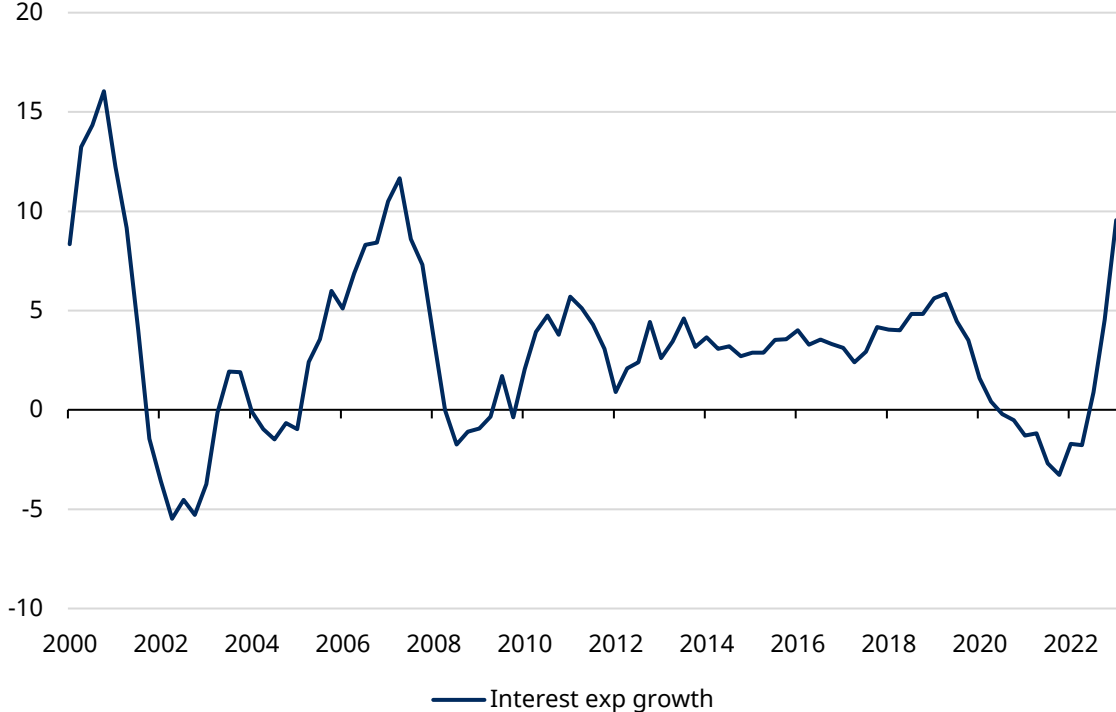
## US HY interest coverage ratio

Last 12 months EBITDA to interest expense



## US HY annual interest expense growth

%



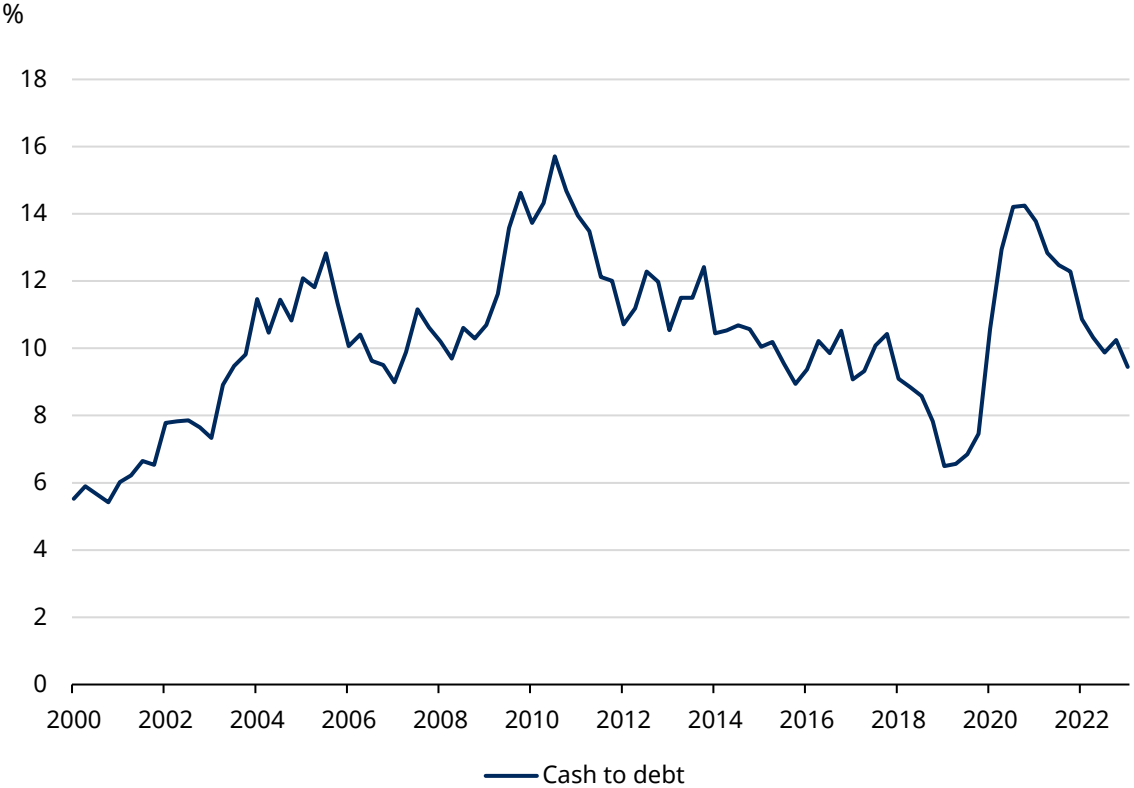
**Interest expense growth is the highest since the global financial crisis as higher interest rates are starting to have an impact**

Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

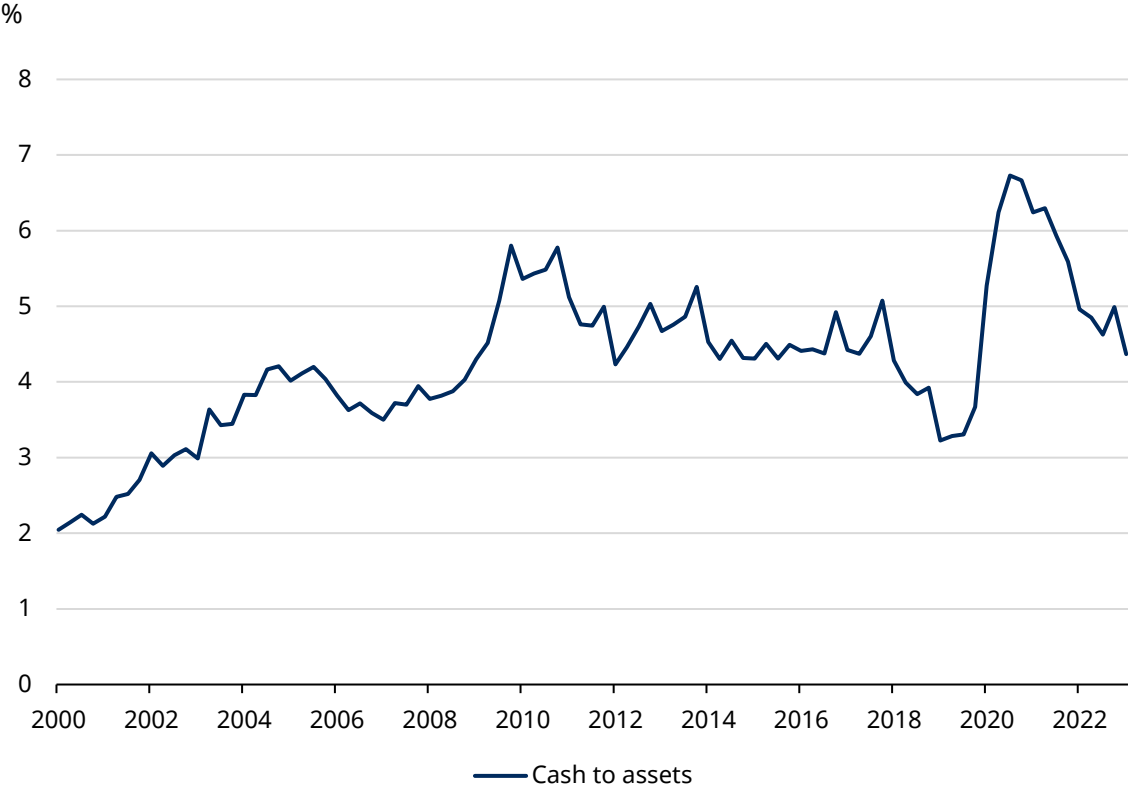
# US HY cash levels

Cash balances slightly down in Q1

## US HY cash to debt



## US HY cash to assets



Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

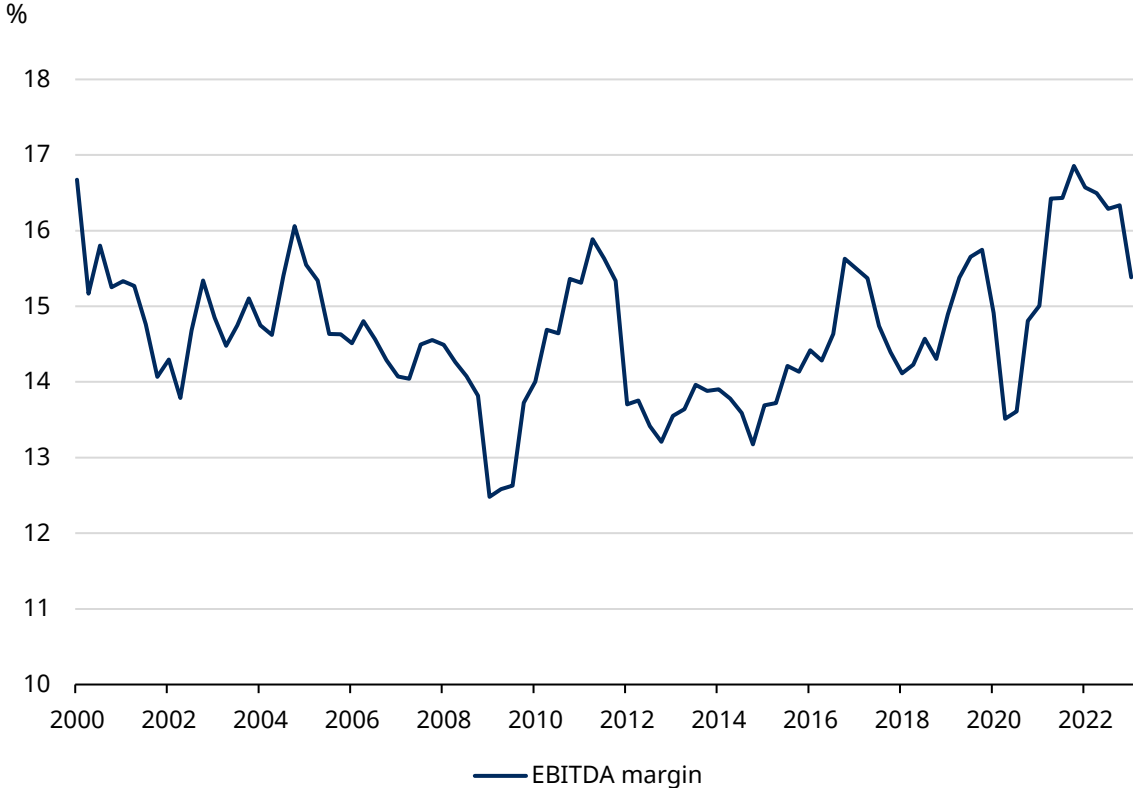
# US HY corporate margins

EBITDA margins declined in Q1, albeit from high levels

### US HY EBITDA margin



### US HY ex-energy EBITDA margin



Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

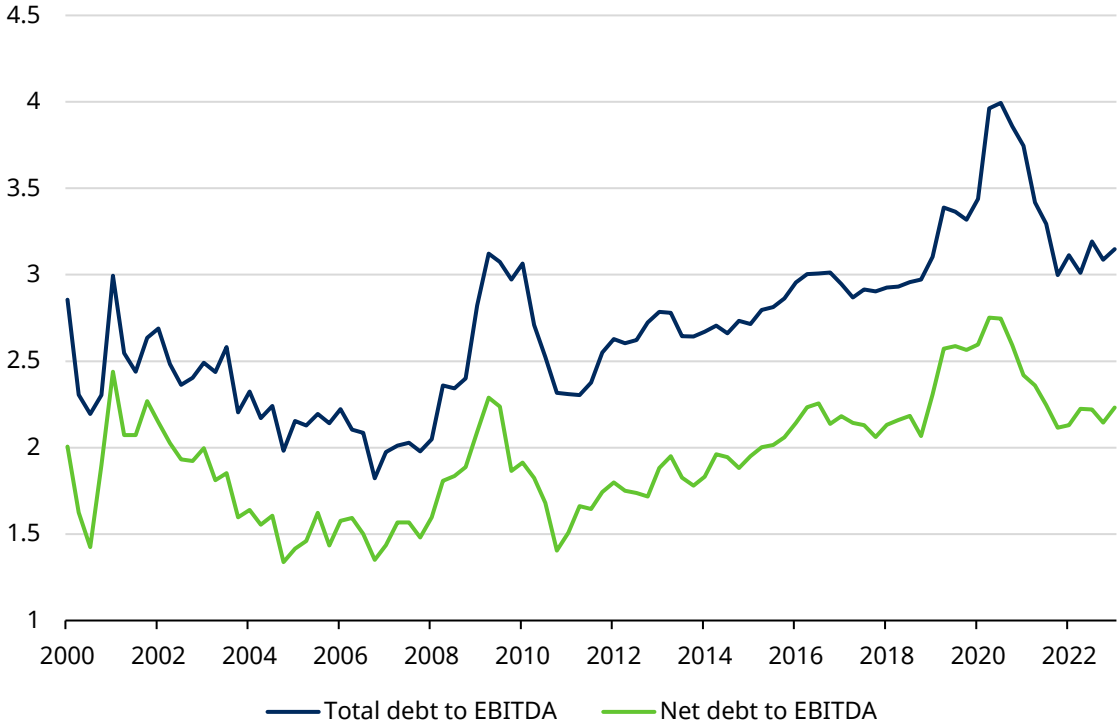


# Euro IG leverage, earnings and debt growth

Leverage has been broadly stable in recent quarters

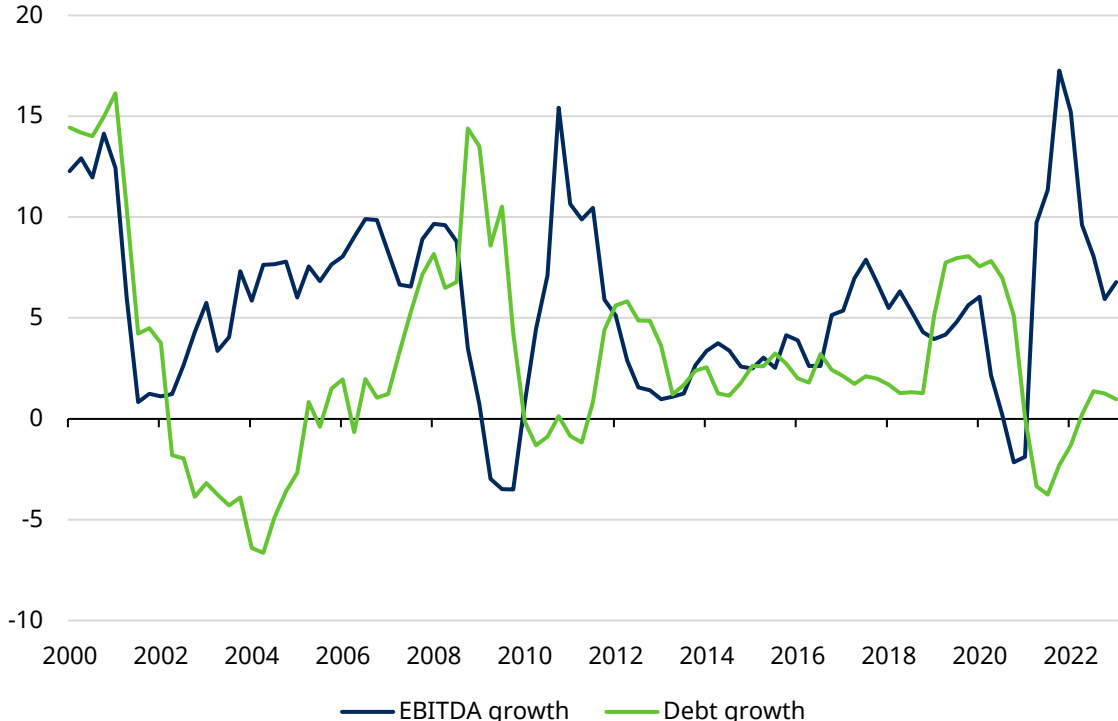
## Euro IG leverage

Debt to last 12 months EBITDA



## Euro IG EBITDA and debt growth (last 12 months)

%



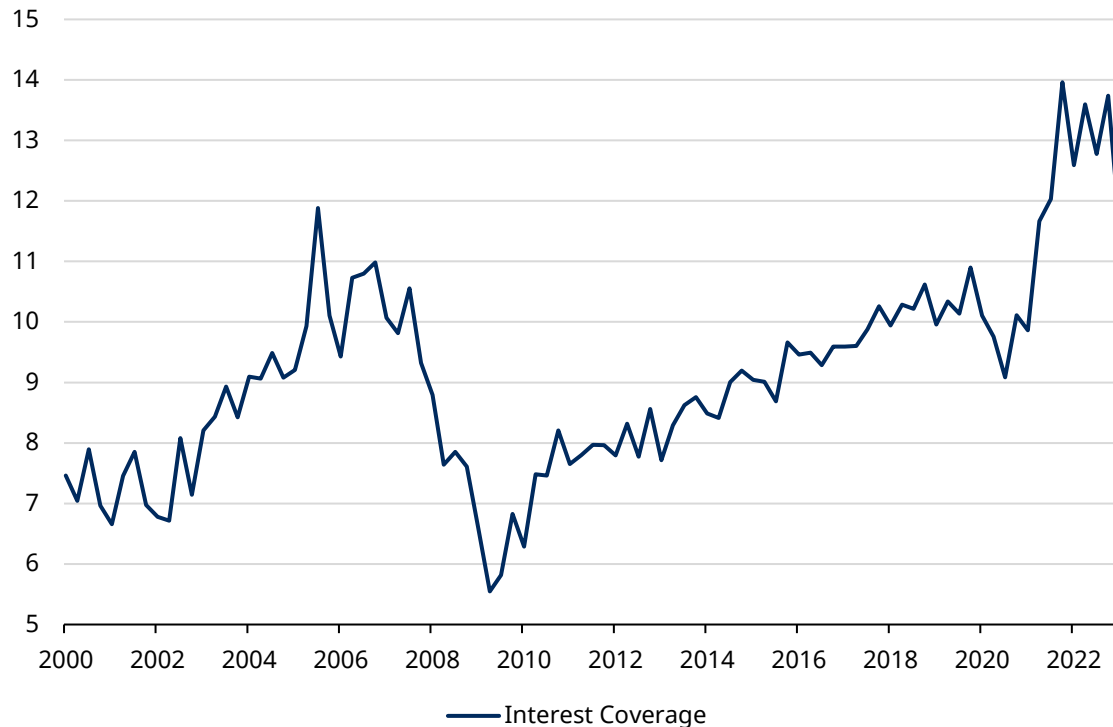
Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

# Euro IG interest coverage

Interest coverage has declined but remains very elevated

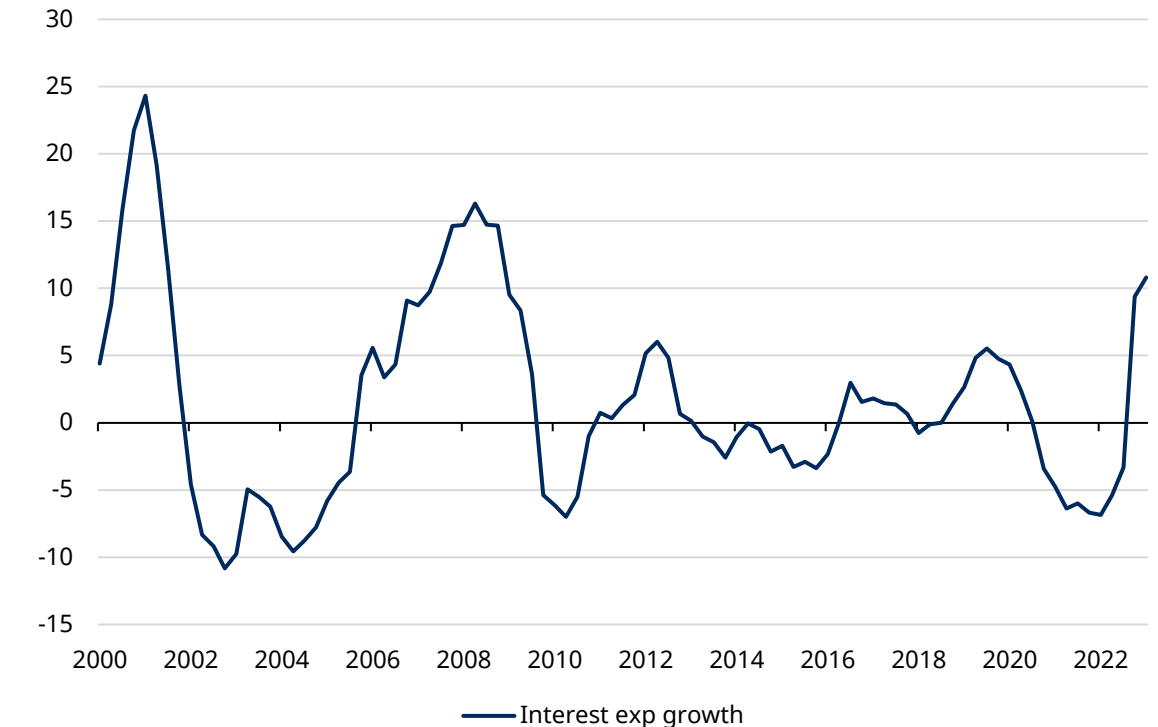
## Euro IG interest coverage ratio

Last 12 months EBITDA to interest expense



## Euro IG annual interest expense growth

%

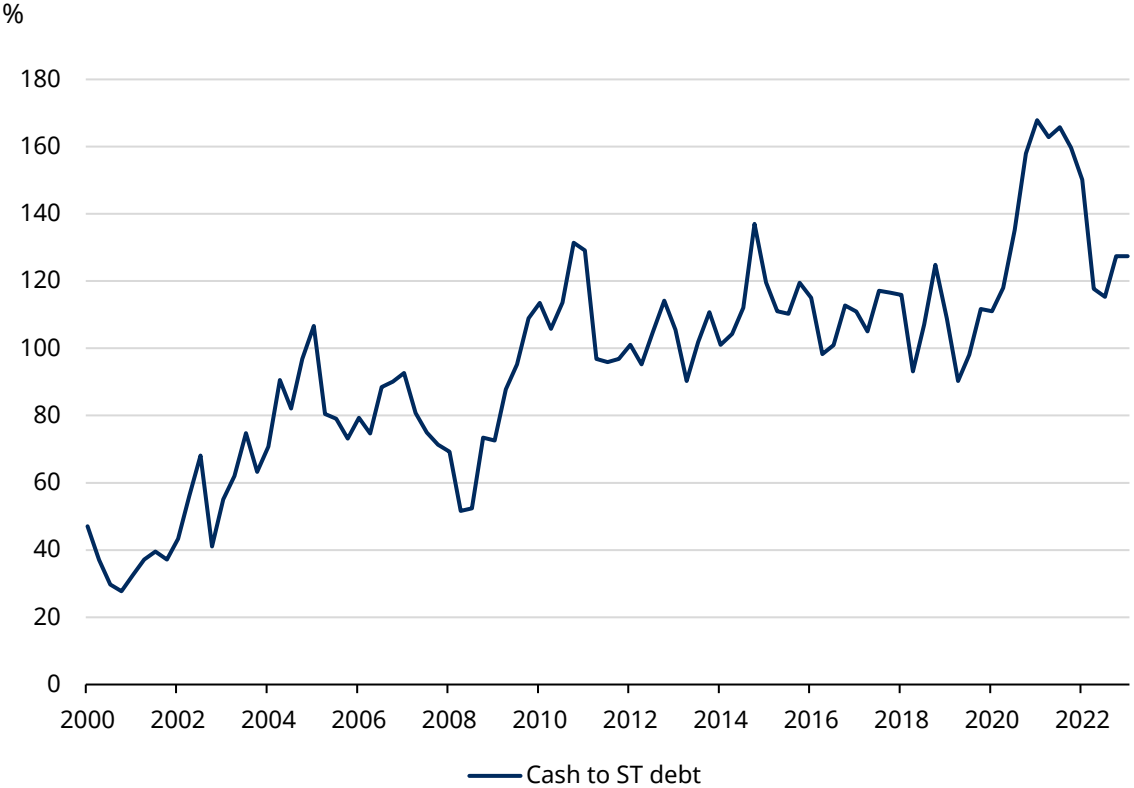


**Interest expense growth is the highest since the global financial crisis as higher interest rates are starting to have an impact**

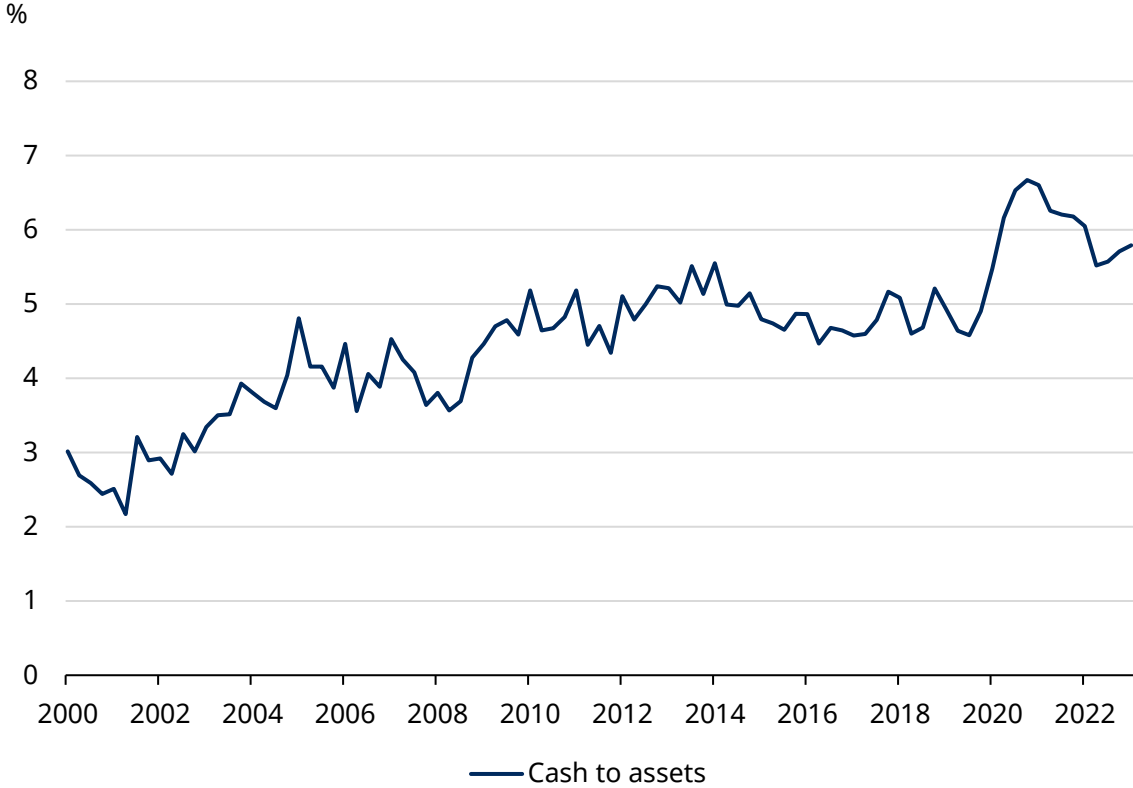
Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

# Euro IG cash levels

## Euro IG cash to short term debt



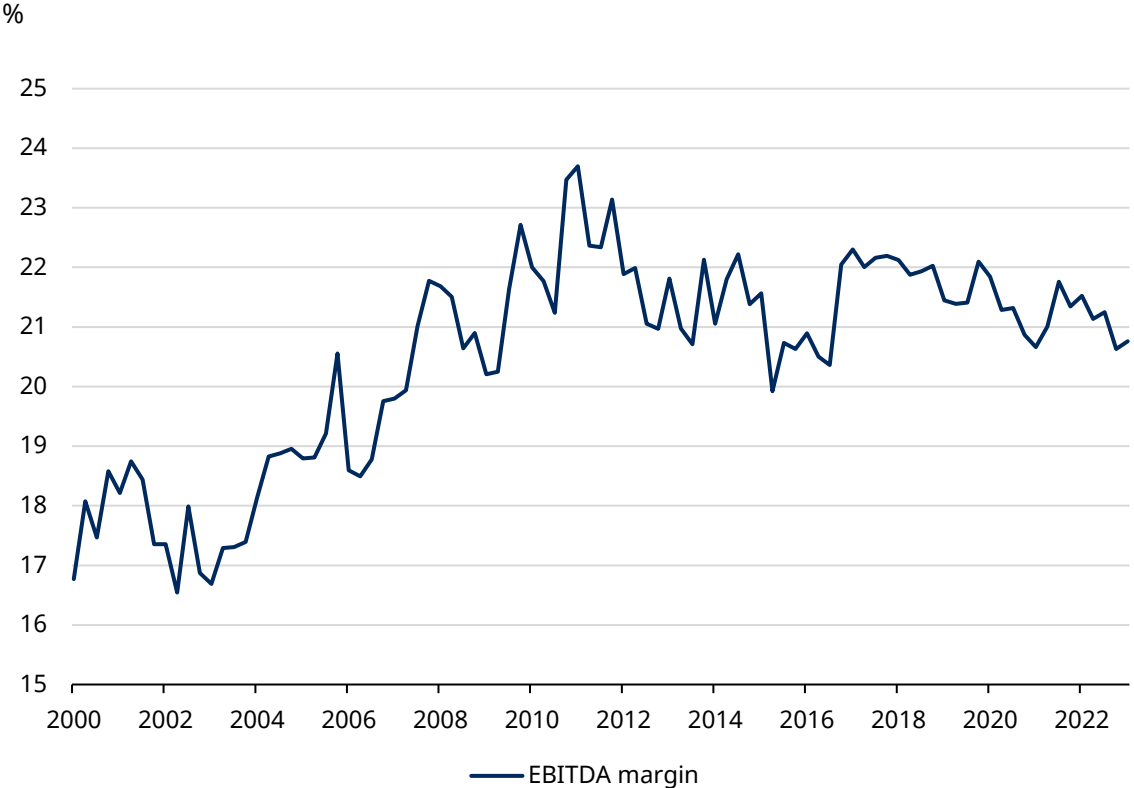
## Euro IG cash to assets



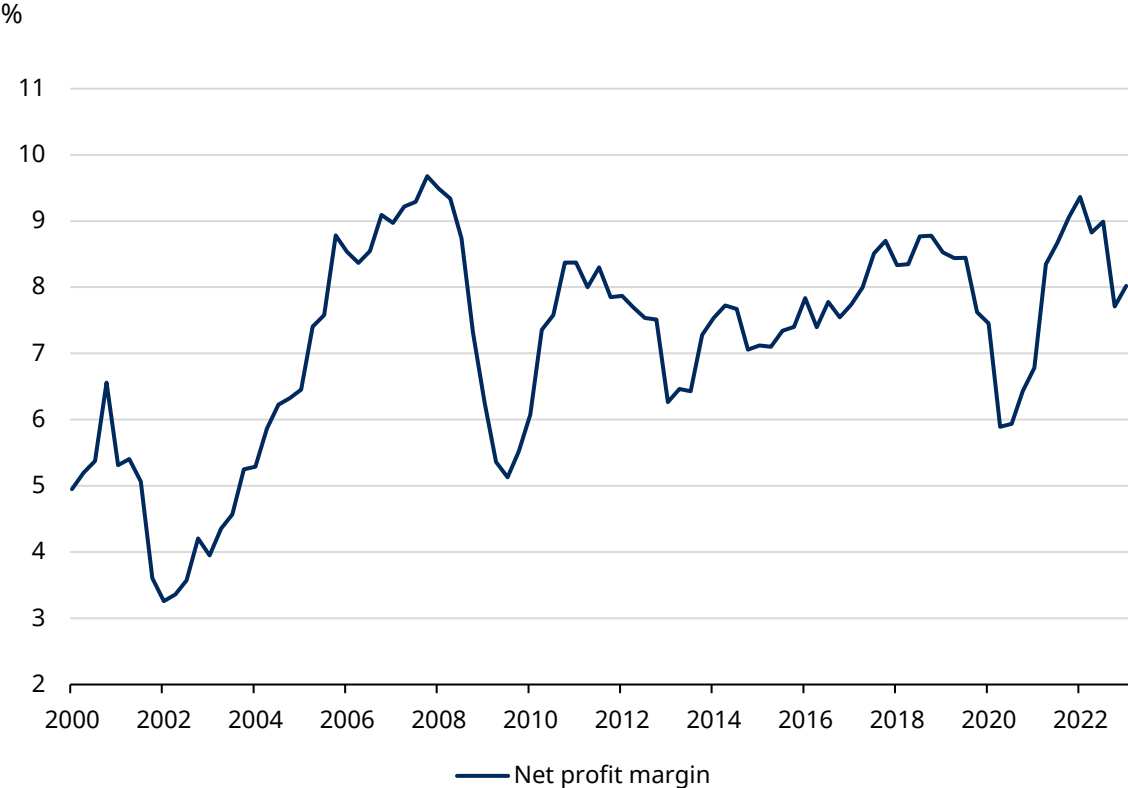
Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

# Euro IG corporate margins

## Euro IG EBITDA margin



## Euro IG net profit margin



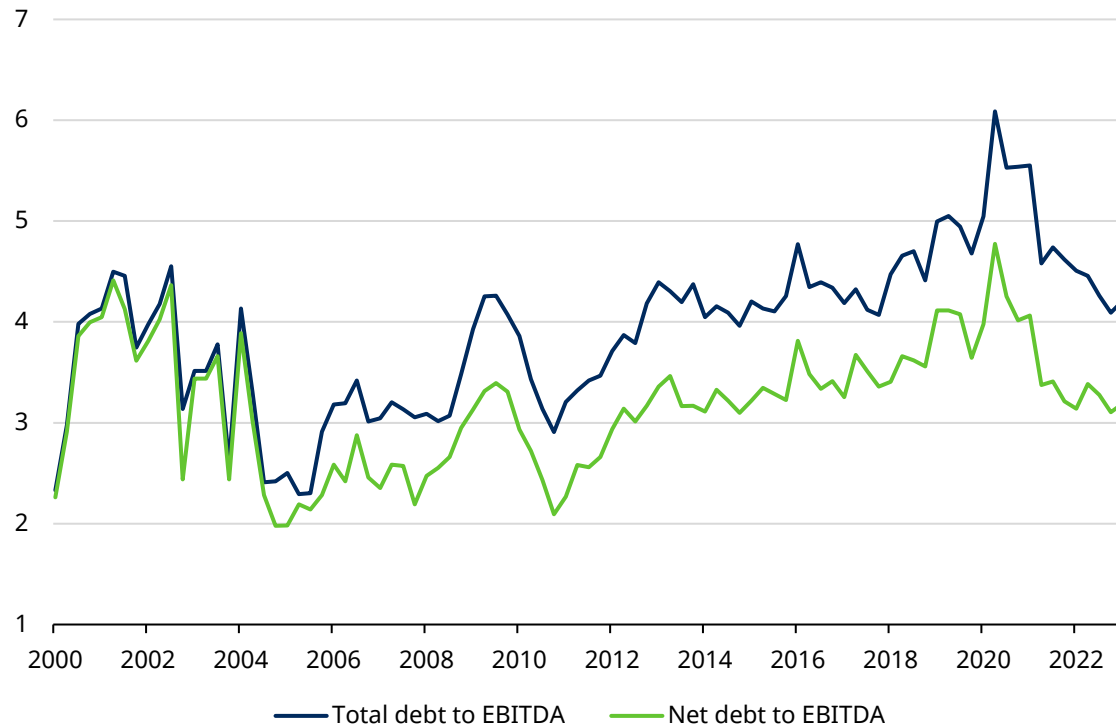
Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

# Euro HY leverage

Leverage ticked up slightly in Q1 but remains well below pandemic era peaks

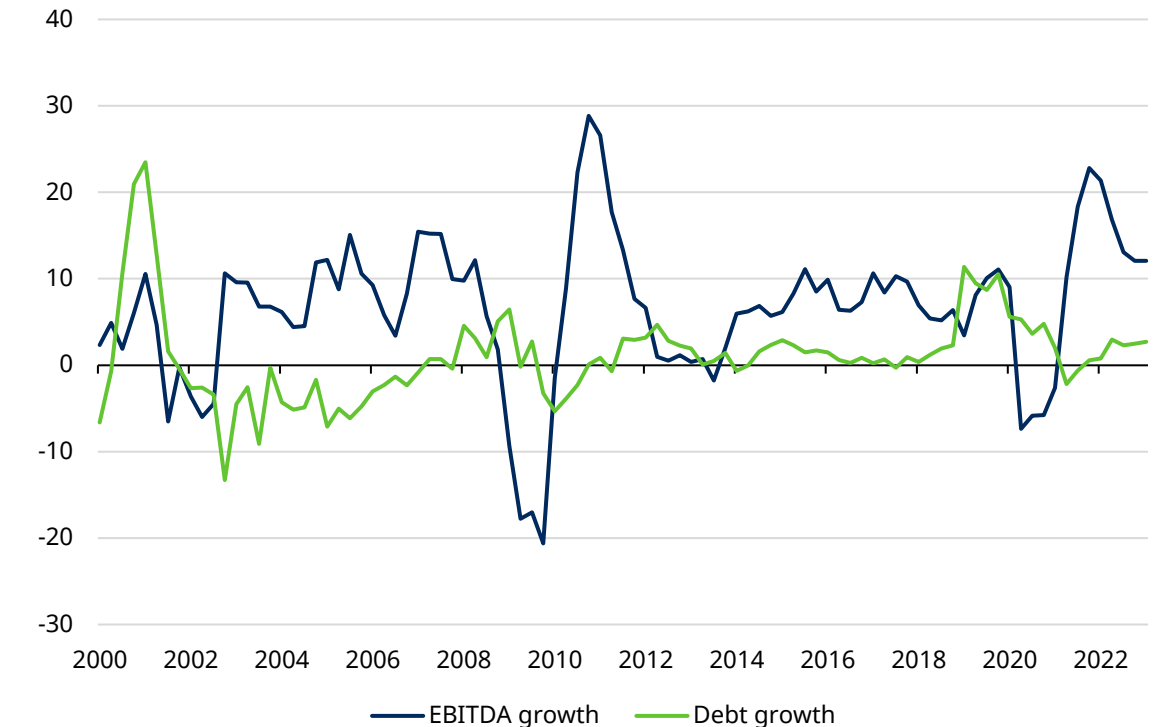
## Euro HY leverage

Debt to last 12 months EBITDA



## Euro HY EBITDA and debt growth (last 12 months)

%



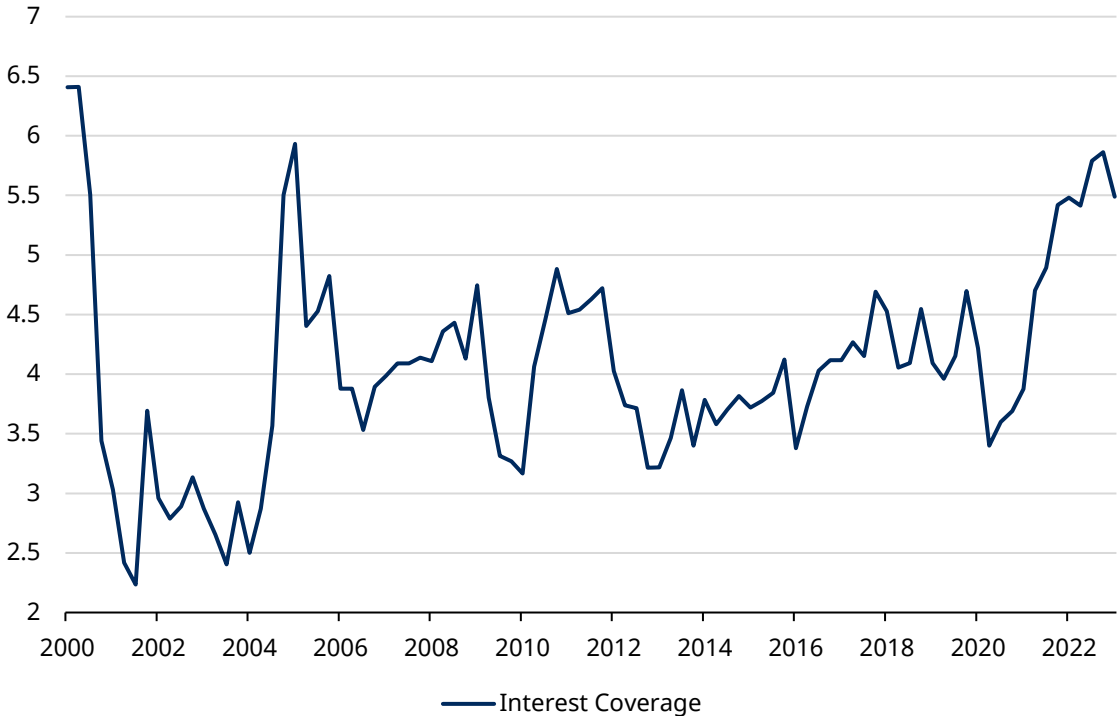
Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

# Euro HY interest coverage

Interest coverage has slightly declined but remains elevated

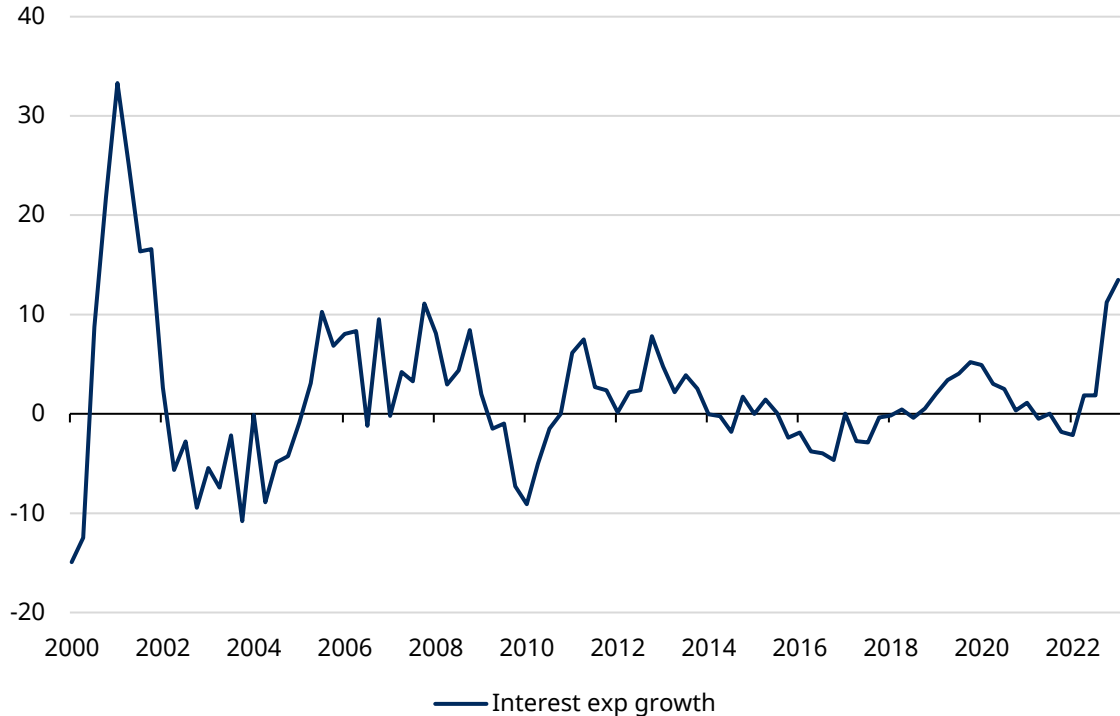
## Euro HY interest coverage ratio

Last 12 months EBITDA to interest expense



## Euro HY annual interest expense growth

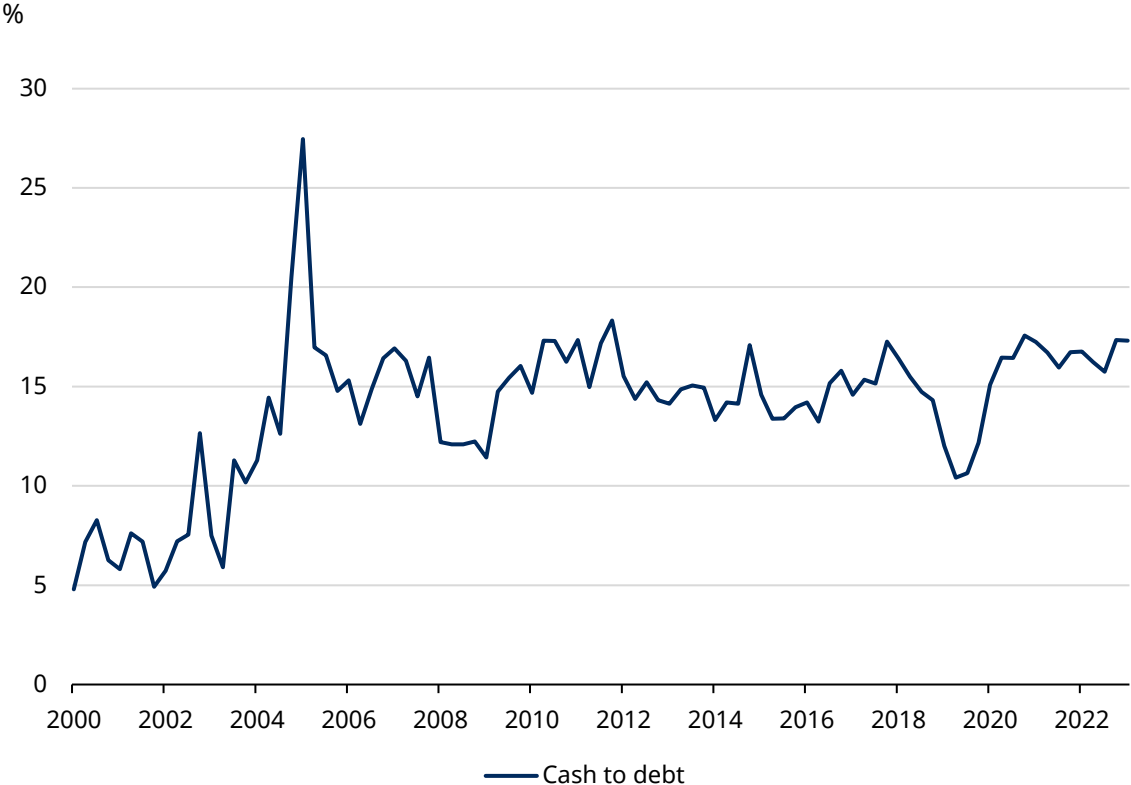
%



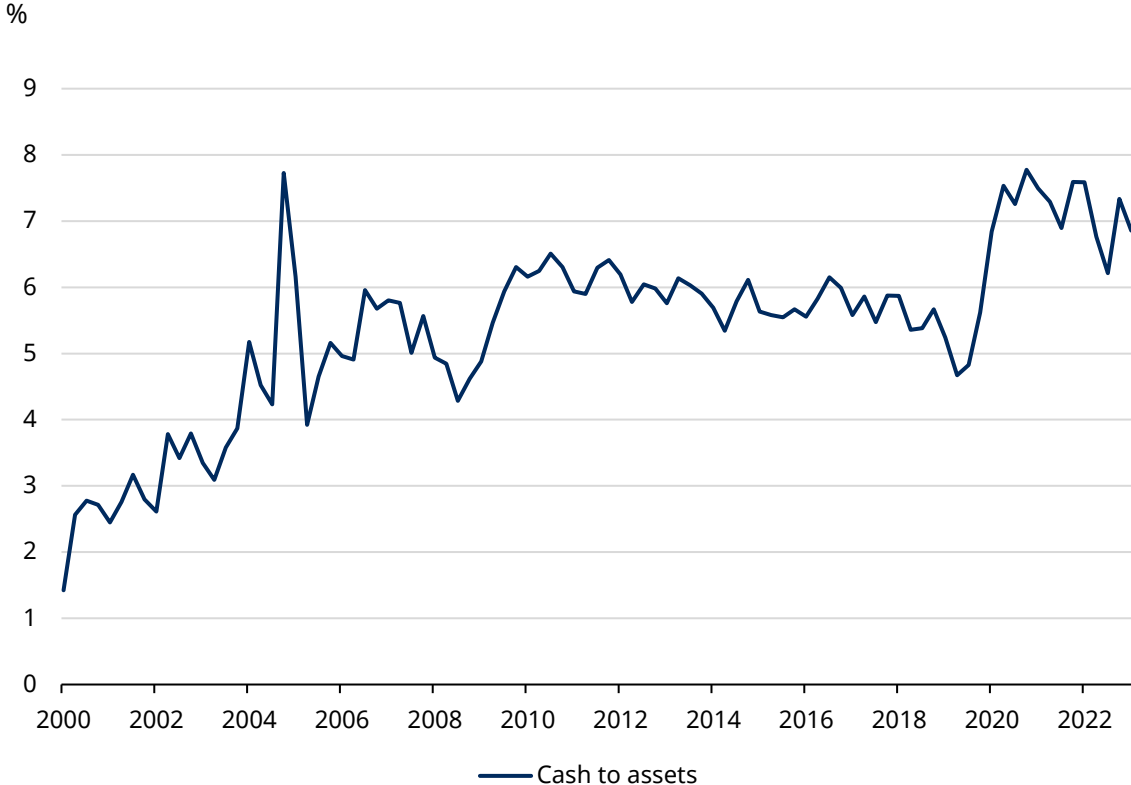
Source: Schroders, Bloomberg, Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

# Euro HY cash levels

### Euro HY cash to debt



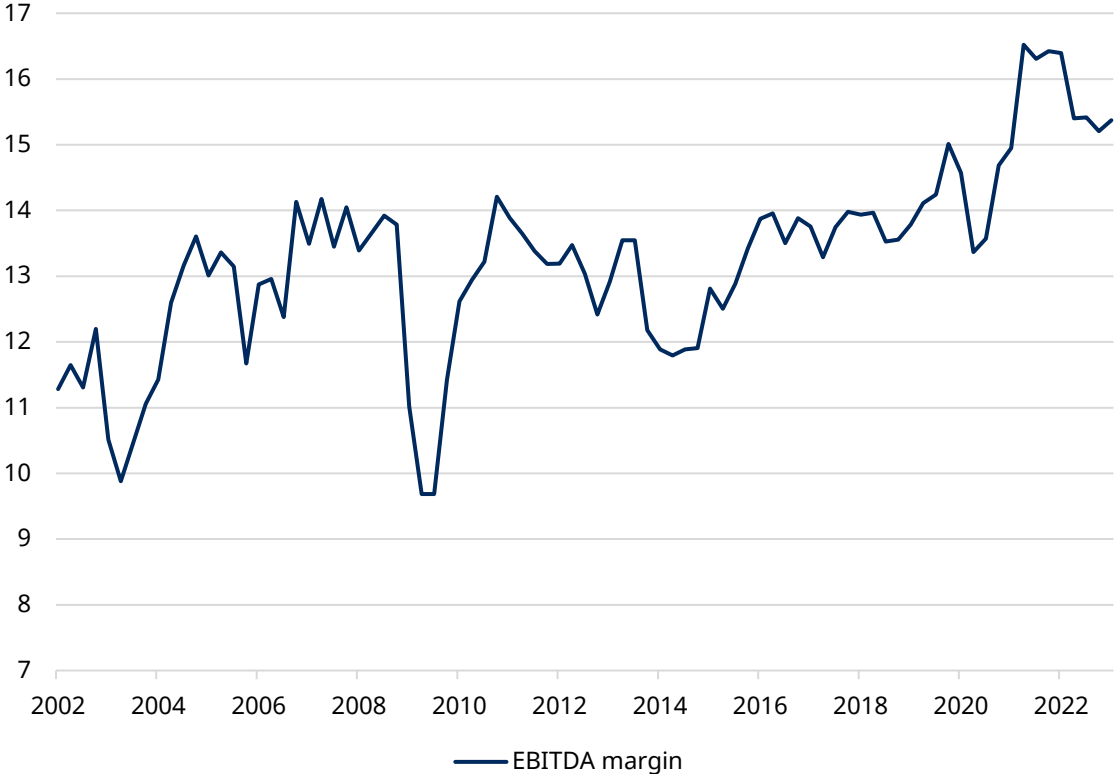
### Euro HY cash to assets



Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.

# Euro HY corporate margins

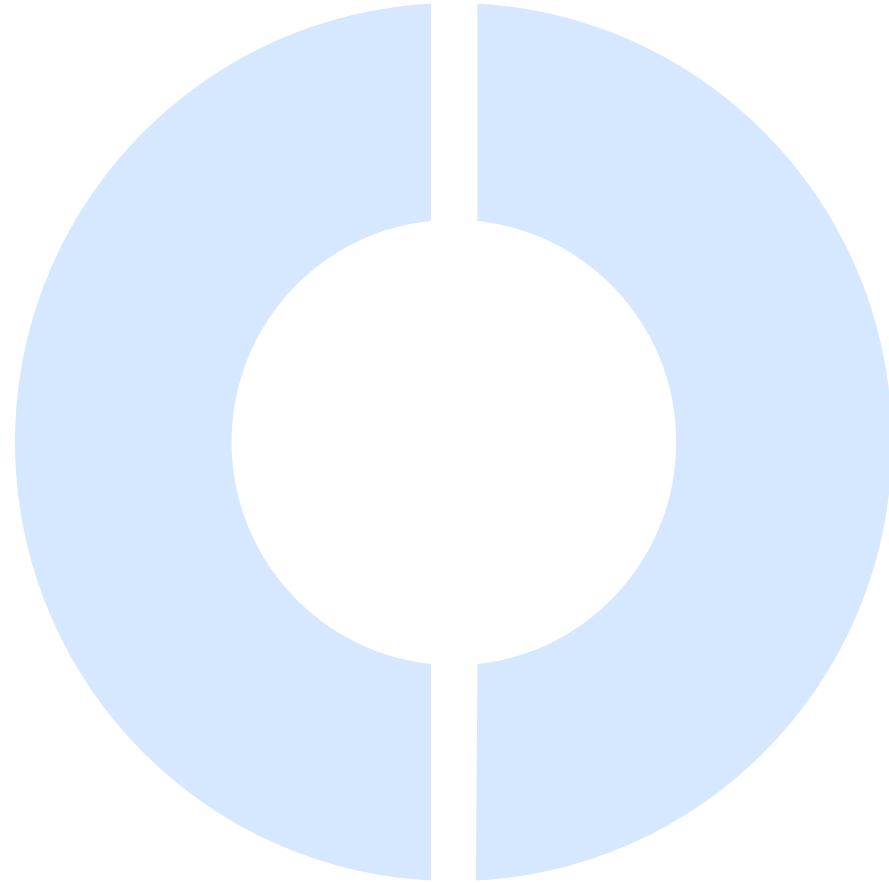
## Euro HY EBITDA margin



Source: Schroders, Bloomberg. Median issuer ex-Financials. Data as of Q1 2023. Please see relevant disclaimers on page 73.



**Schroders**



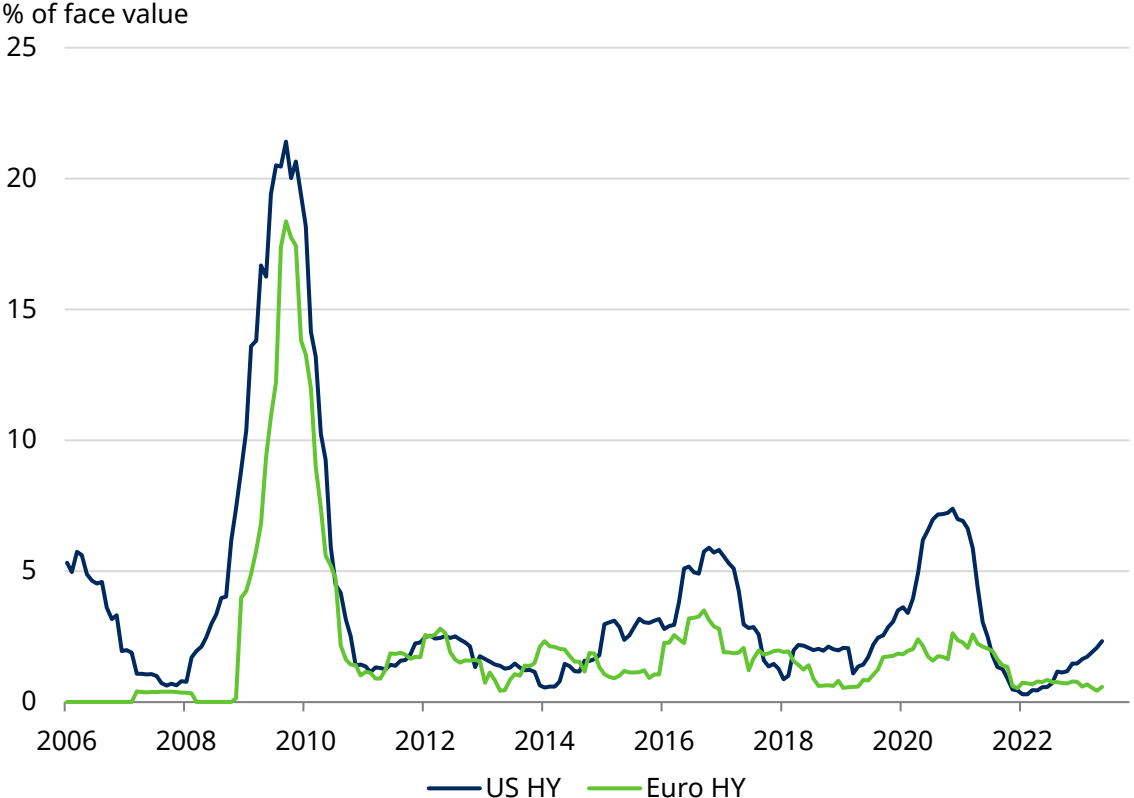
**Corporate credit**

Technicals

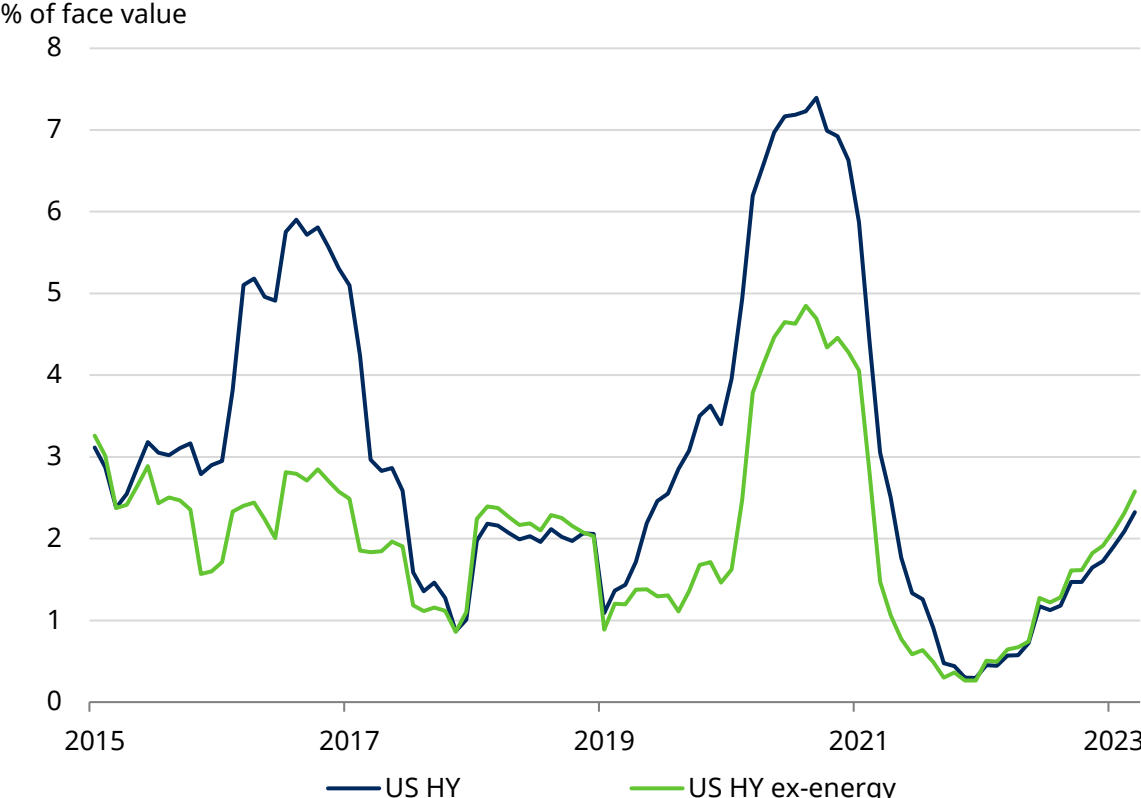
# HY default rates

US HY default rates are rising

## HY par default rate (last twelve months)



## US HY par default rate (last twelve months)

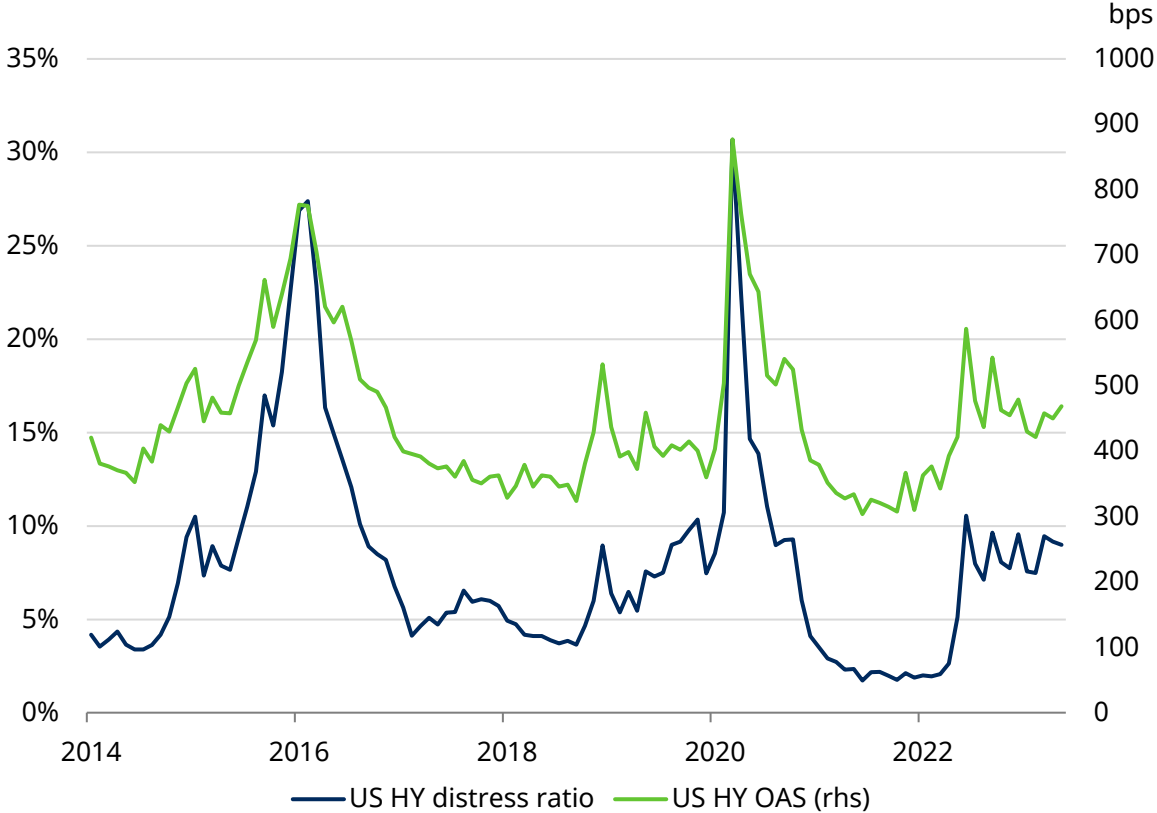


Source: Schroders, BofA Global Research, Moody's. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

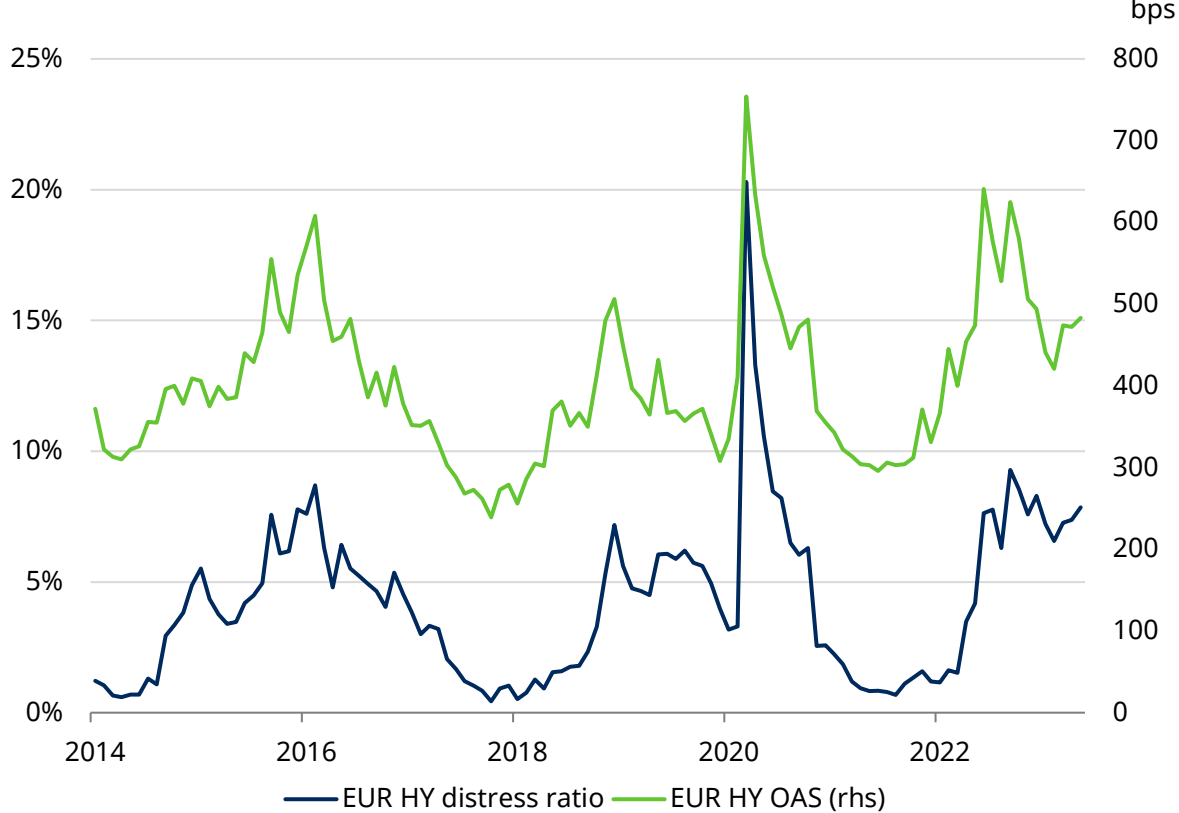
# HY distress ratios

Higher distress is usually a harbinger of defaults

US HY distress ratio<sup>1</sup>



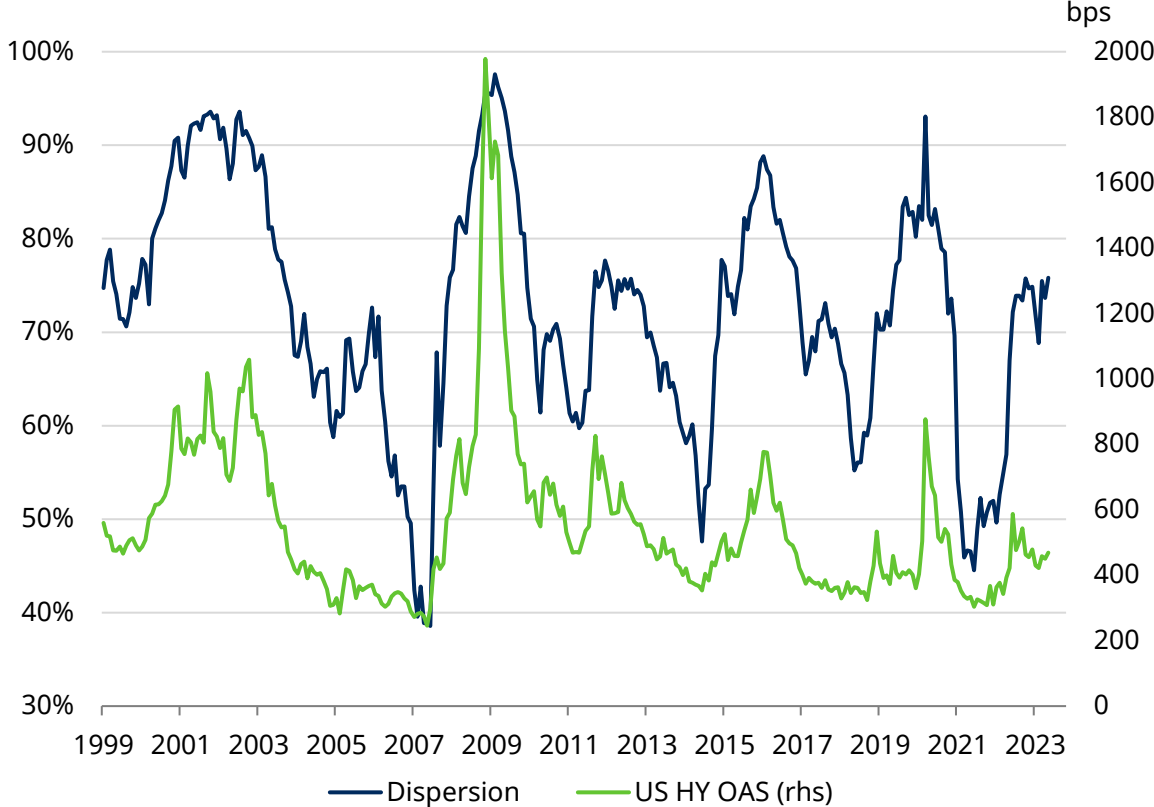
Euro HY distress ratio<sup>1</sup>



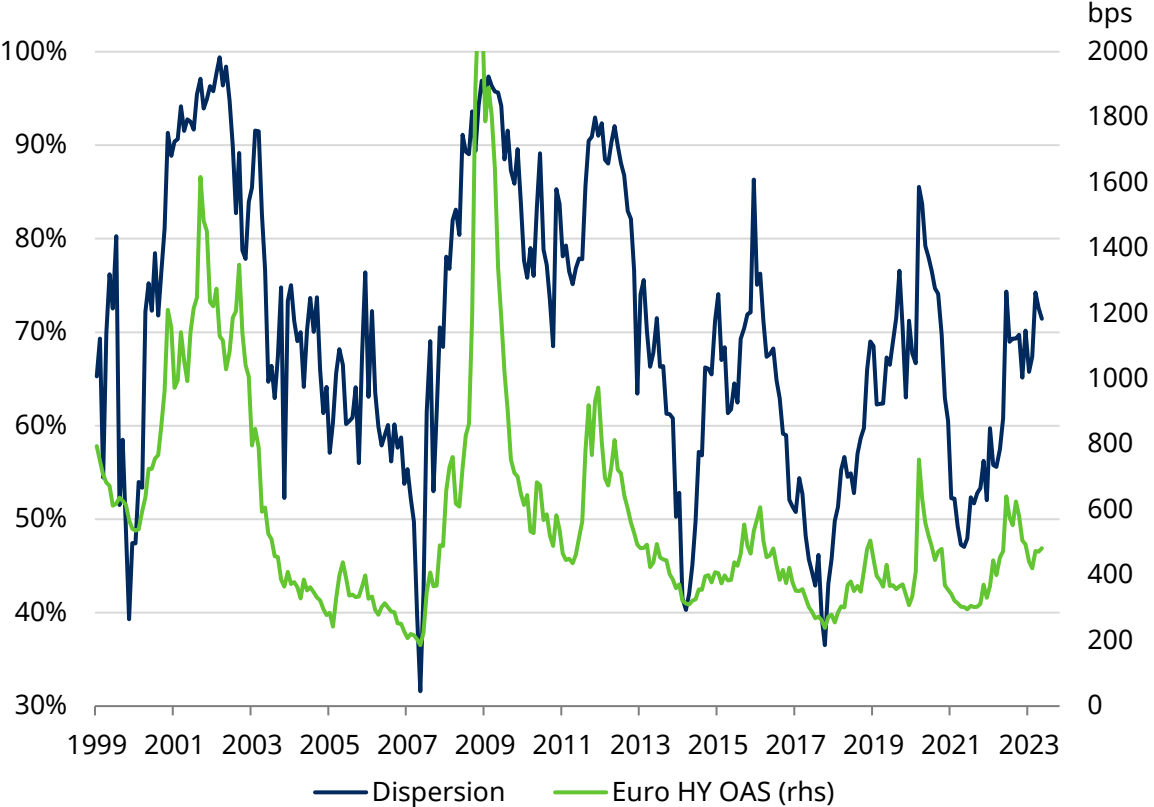
Source: Schroders, BofA Global Research, Moody's. Data as at 31 May 2023. <sup>1</sup>HY distress is defined as percentage of issues in the index trading with spreads > 1,000bp. Please see relevant disclaimers on page 73.

# HY spread dispersion

## US HY dispersion<sup>1</sup> vs US HY spread



## Euro HY dispersion<sup>1</sup> vs Euro HY spread



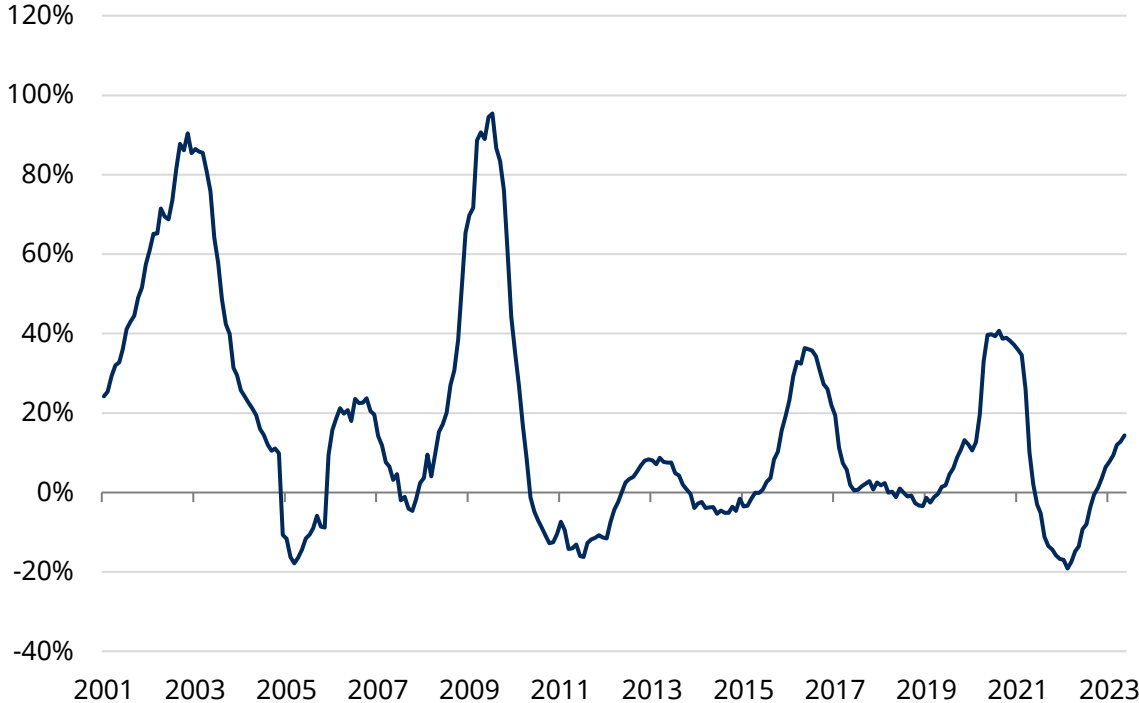
Source: Schroders, BofA Global Research. Data as at 31 May 2023. <sup>1</sup> Proportion of face value in index marked outside +/-100bps of overall index level. Please see relevant disclaimers on page 73.

# US HY ratings migration (net downgrades)

Indicator of changes in credit quality

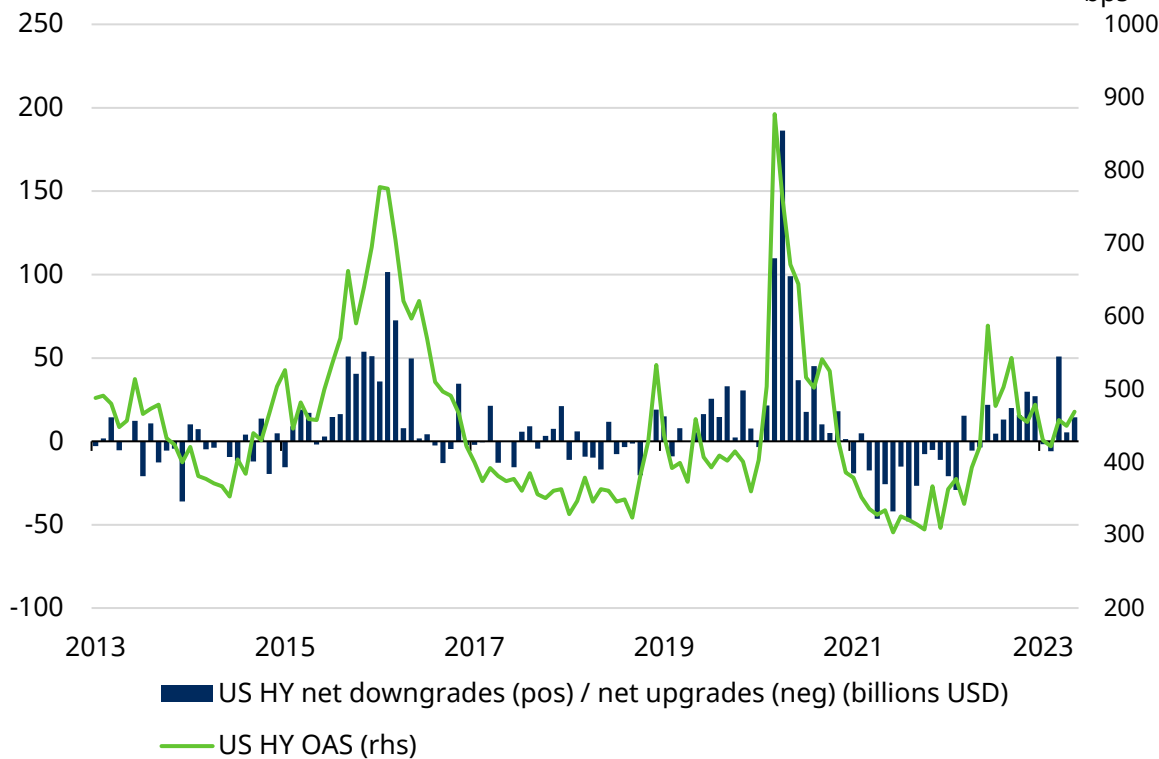
## US HY net downgrades<sup>1</sup>

Percentage of the HY index, last 12 months



## US HY monthly net downgrades

Billions USD



## Downgrades are outpacing upgrades

Source: BofA Global Research, Refinitiv Datastream. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

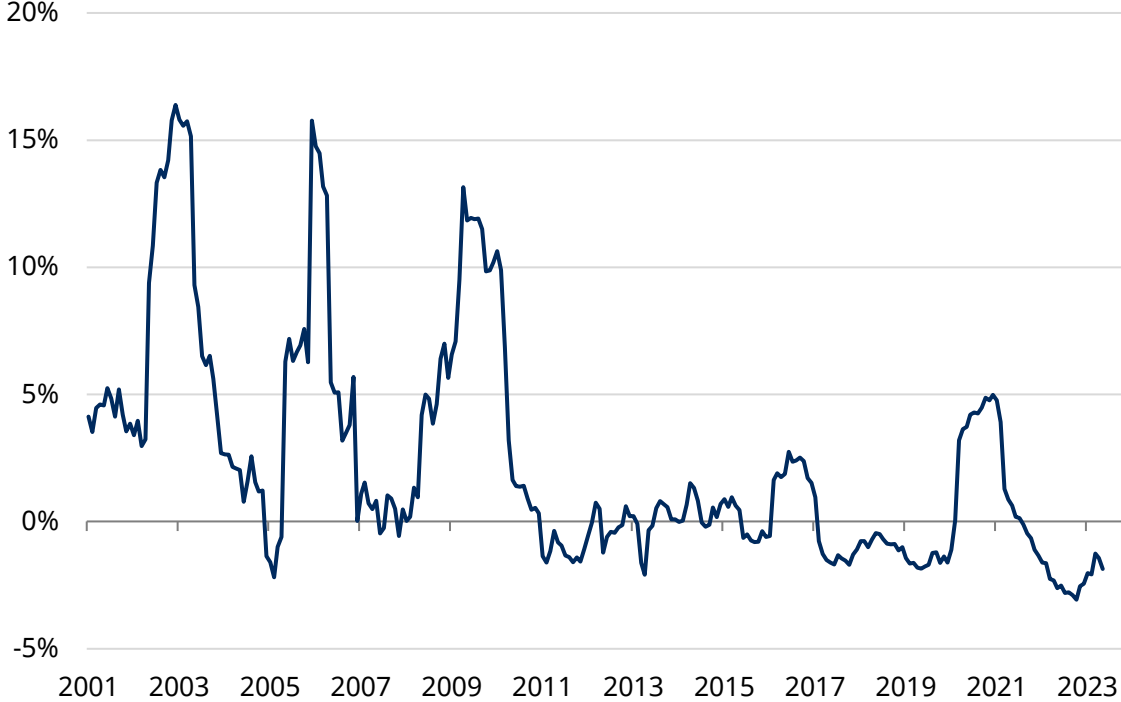
<sup>1</sup>Face value of downgraded HY bonds minus face value of upgraded bonds divided by face value of the index. Excludes upgrades from HY to IG.

# US IG fallen angels/rising stars

## Bonds downgraded from IG to HY

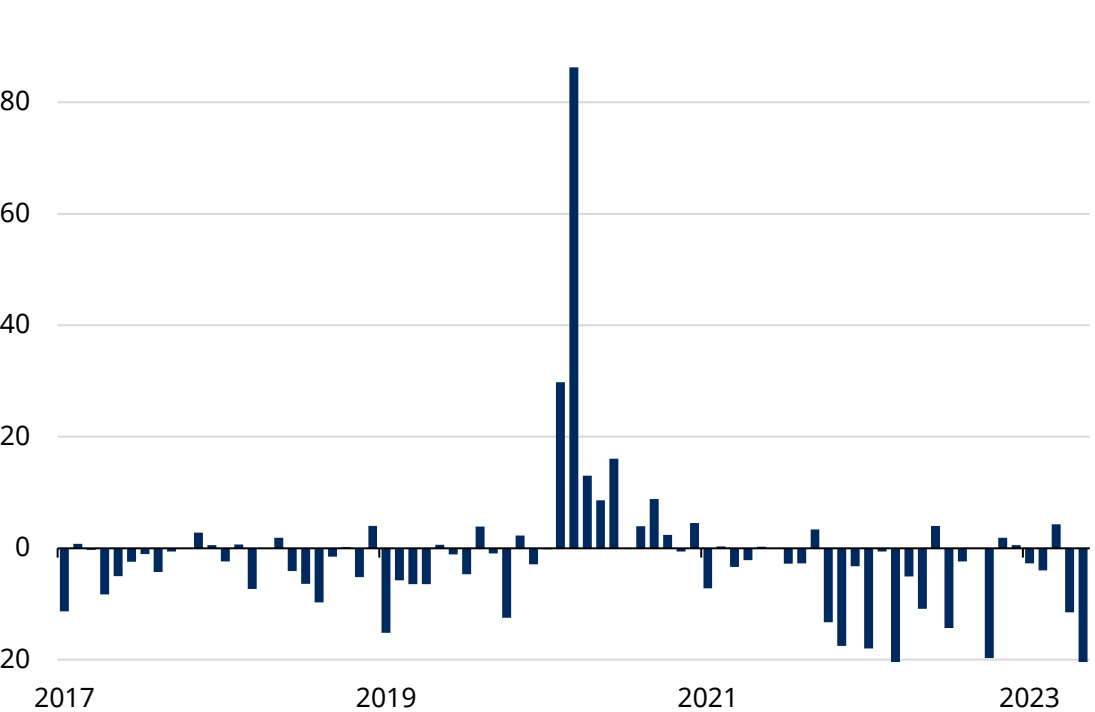
### US IG net fallen angels<sup>1</sup>

Percentage of the BBB index, last 12 months



### US IG monthly net fallen angels

Billions USD



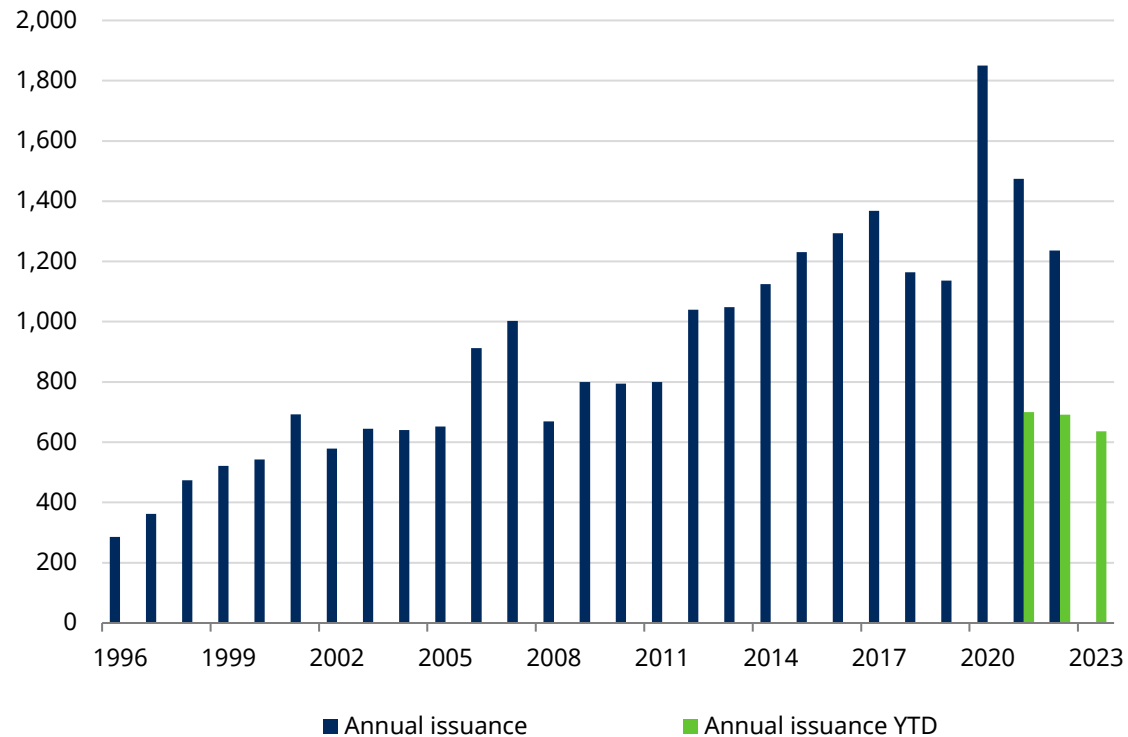
Source: BofA Global Research. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

<sup>1</sup>Face 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

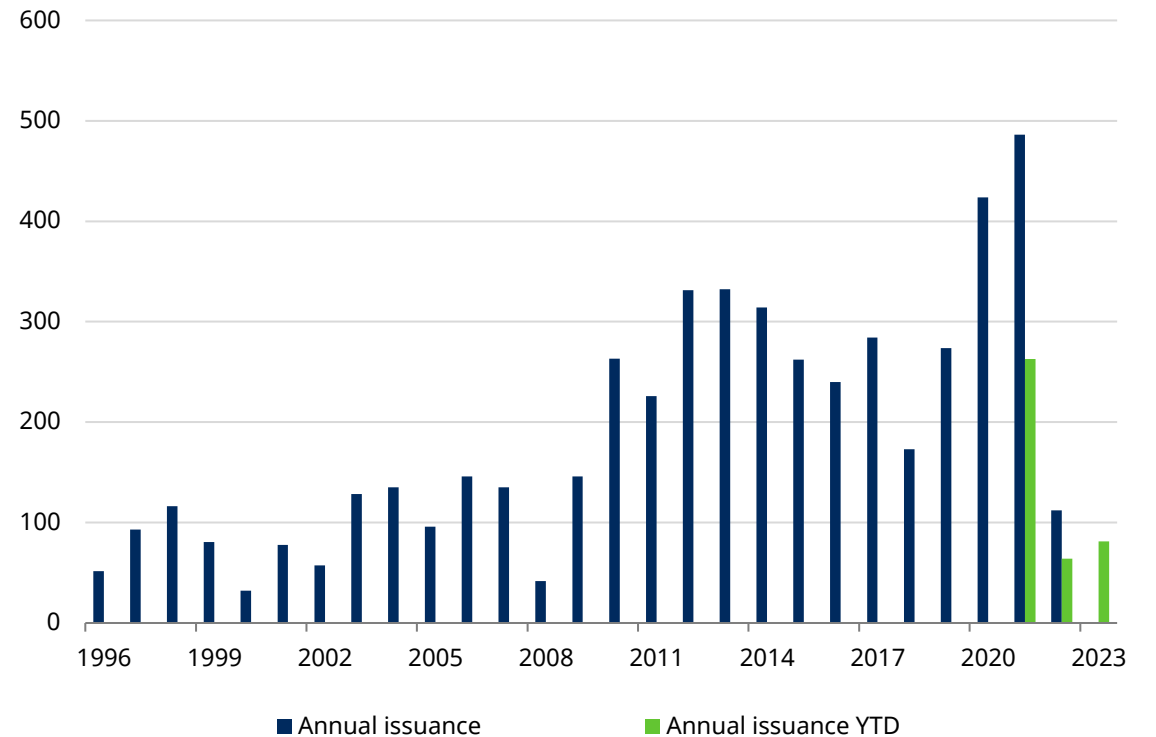
## US IG gross issuance

Billions USD



## US HY gross issuance

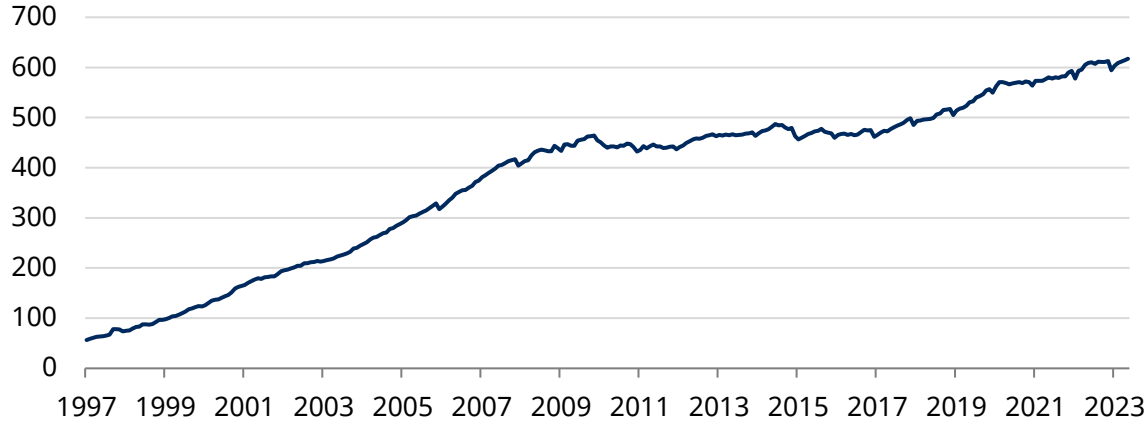
Billions USD



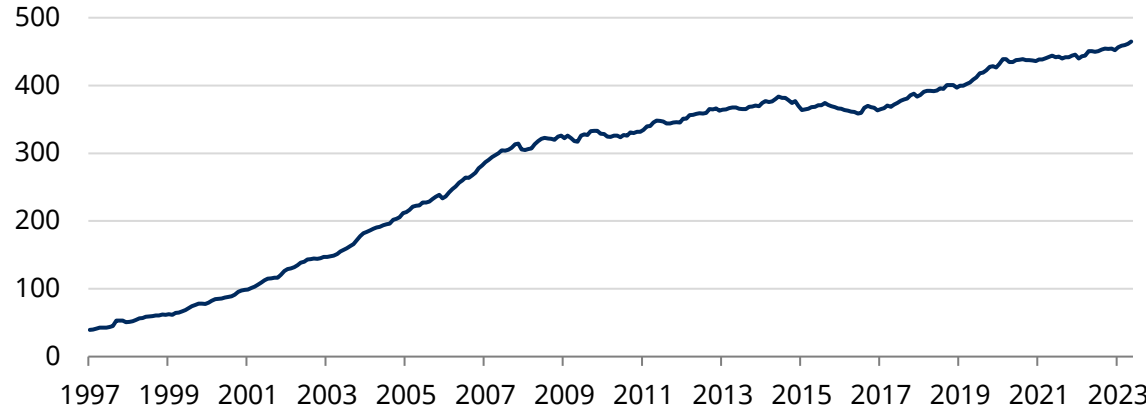
Source: Sifma. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

# IG bonds outstanding

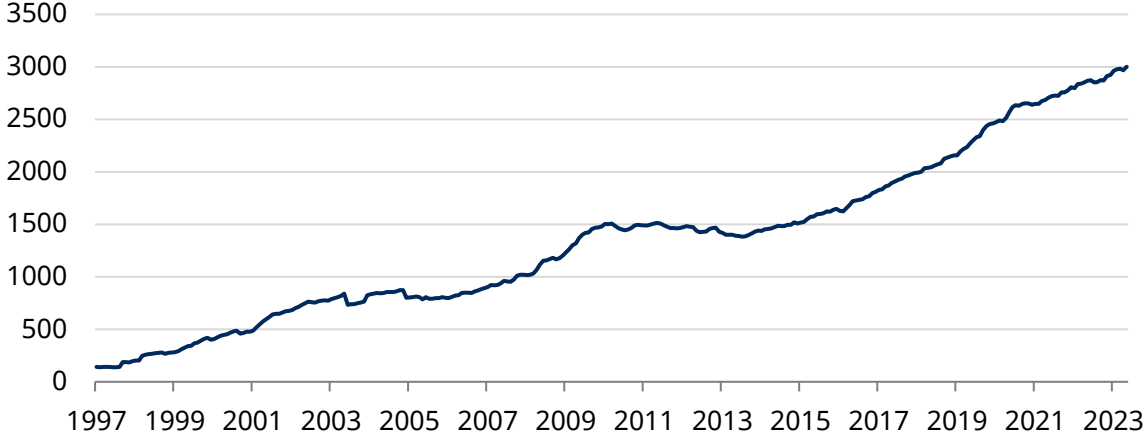
IG GBP non-gilts amount outstanding (bn GBP)



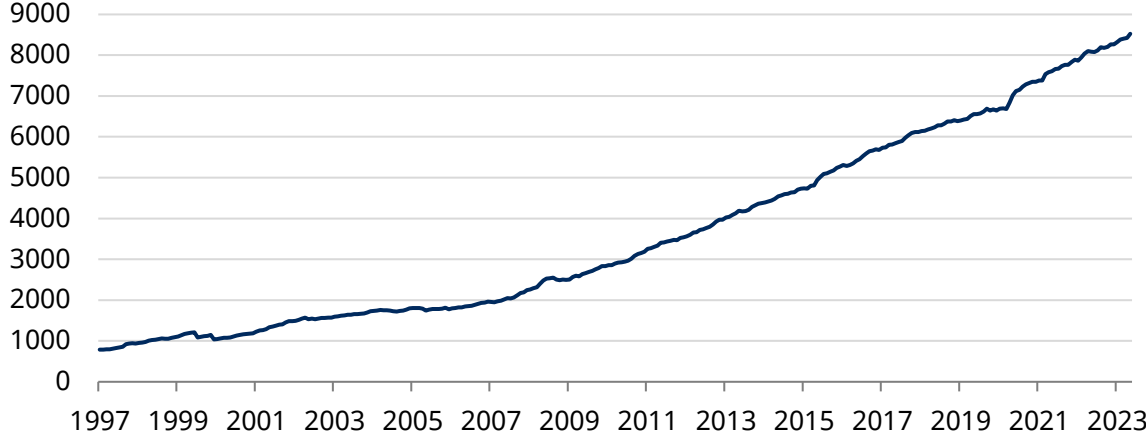
IG GBP corporates amount outstanding (bn GBP)



IG EUR amount outstanding (bn EUR)



IG USD amount outstanding (bn USD)

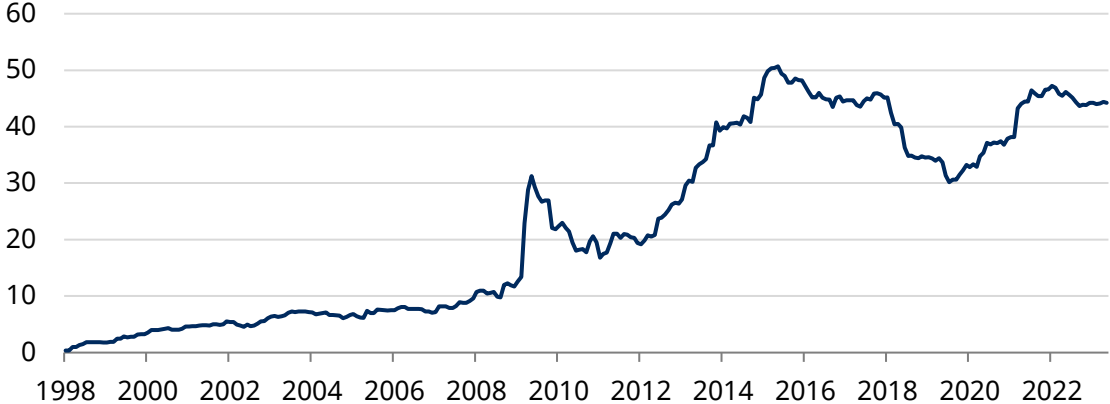


Source: Schroders, ICE Data Indices. Data as at 31 May 2023. Charts show face value of bond outstanding within relevant indices. Please see relevant disclaimers on page 73.

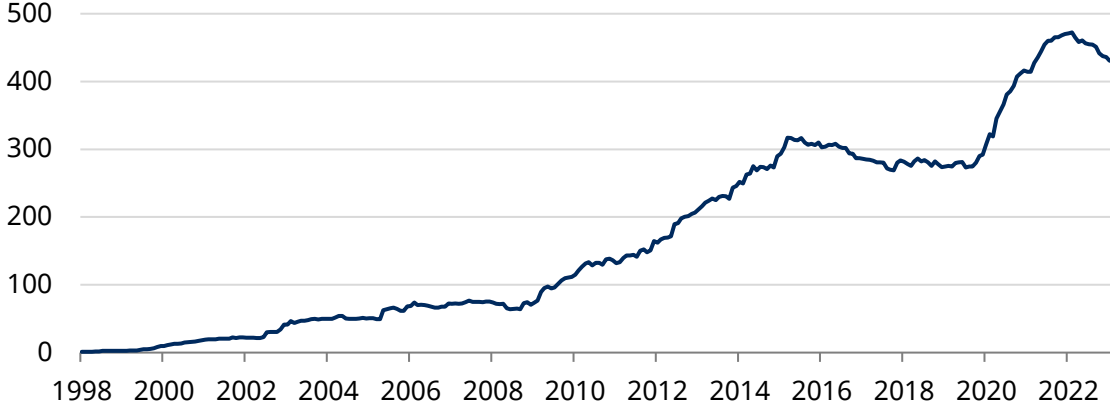


# HY bonds outstanding

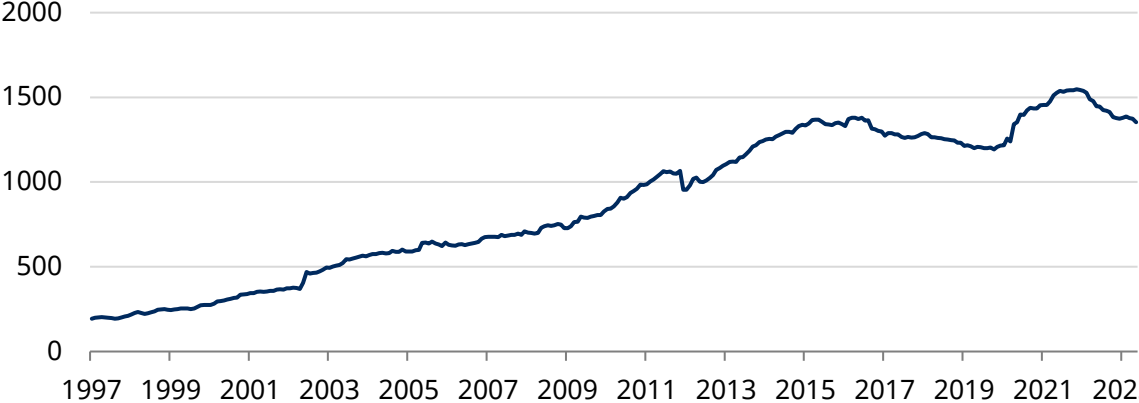
HY GBP amount outstanding (bn GBP)



HY EUR amount outstanding (bn EUR)



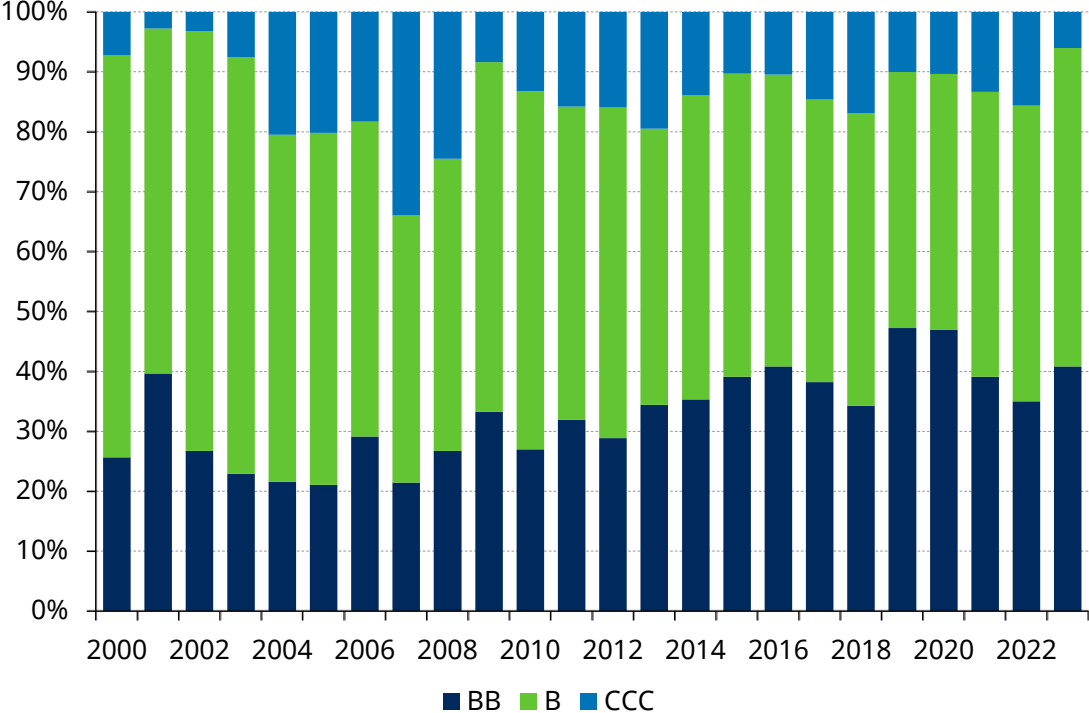
HY USD amount outstanding (bn USD)



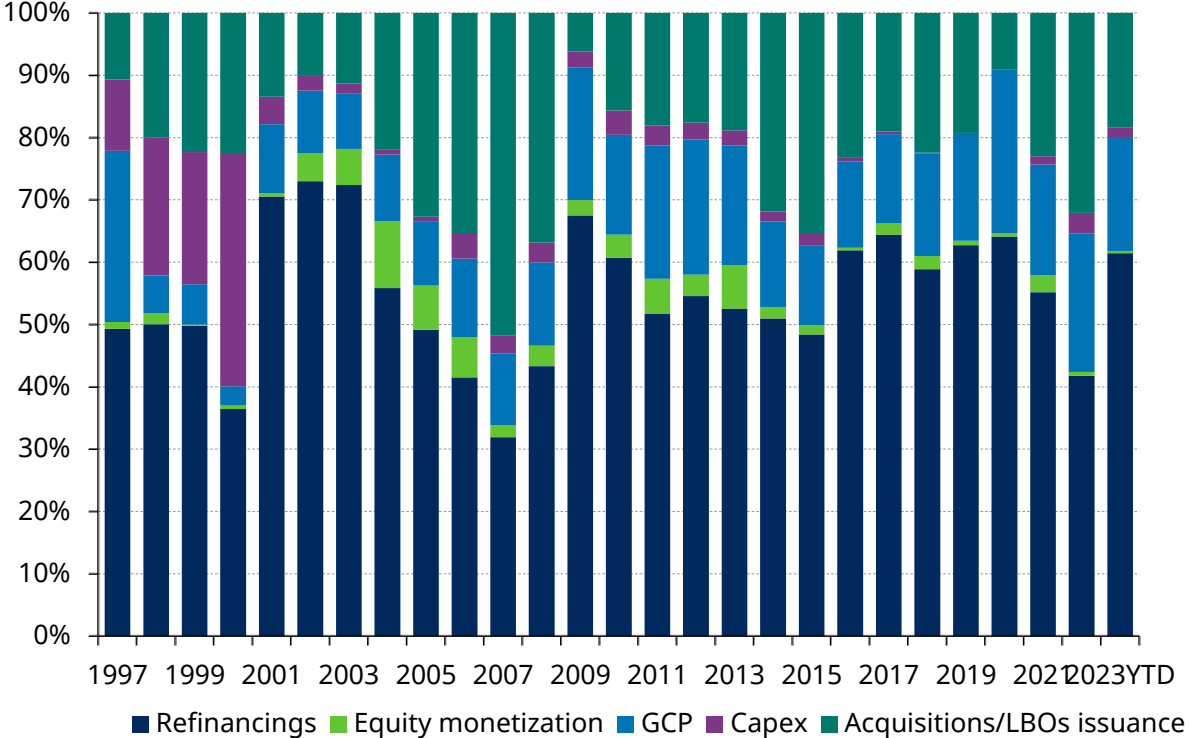
Source: Schroders, ICE Data Indices. Data as at 31 May 2023. Charts show face value of bond outstanding within relevant indices. Please see relevant disclaimers on page 73.

# Global HY issuance details

### Issuance by rating (percentage of issuance)



### Issuance by use of proceeds<sup>(1)</sup>

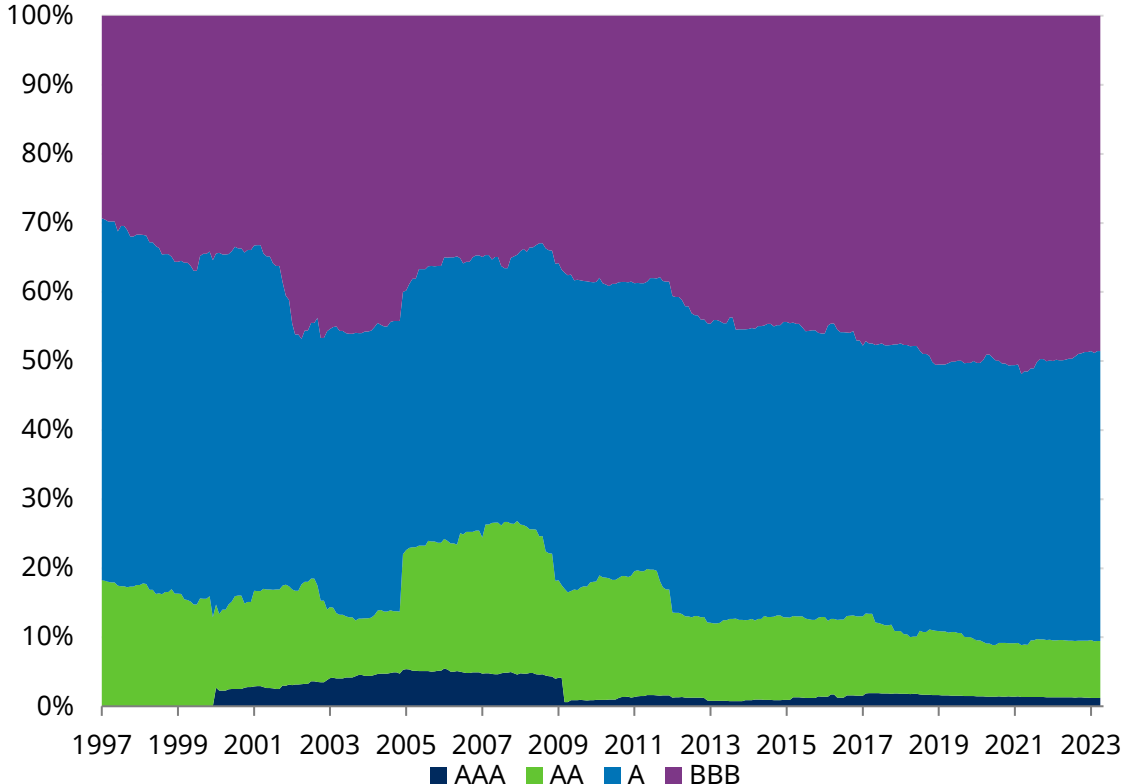


Source: Schrodgers, BofA Global Research, Moody's. Data as at 31 May 2023. Please see relevant disclaimers on page 73.  
 (1) GCP is General Corporate Purposes; Equity monetization includes dividends and share repurchases

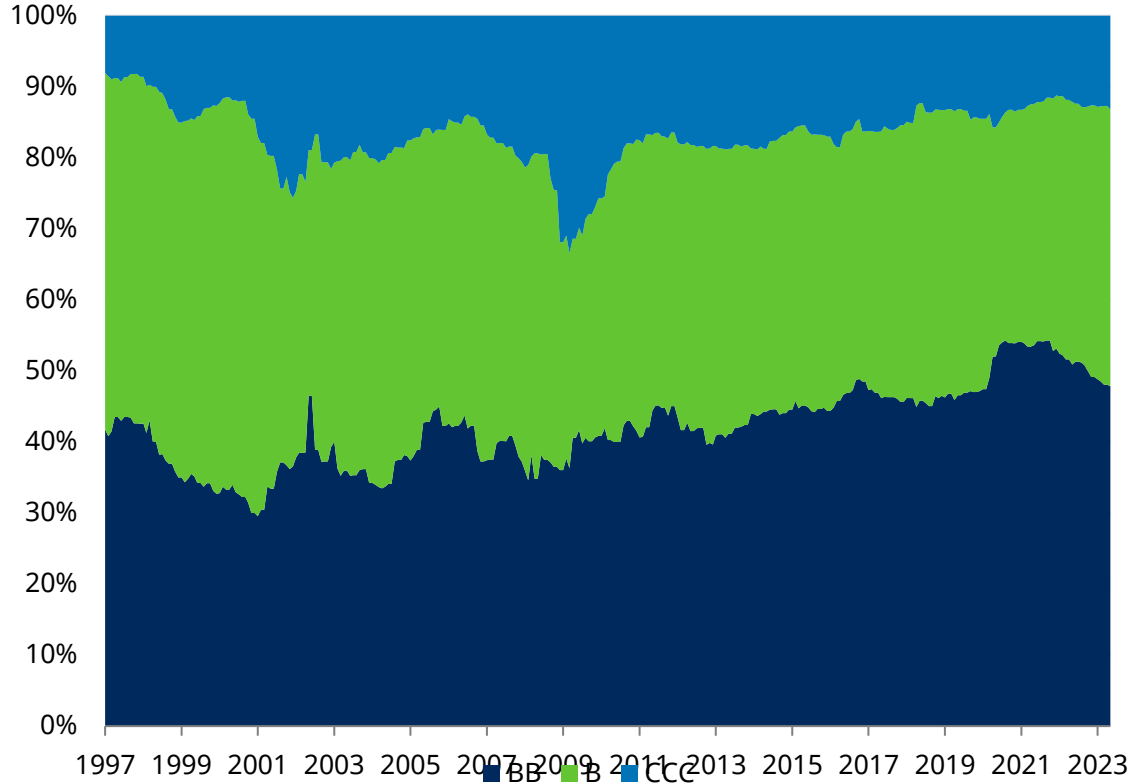
# US dollar credit historical ratings split

Significant changes in credit quality over time

### US IG ratings split



### US HY ratings split

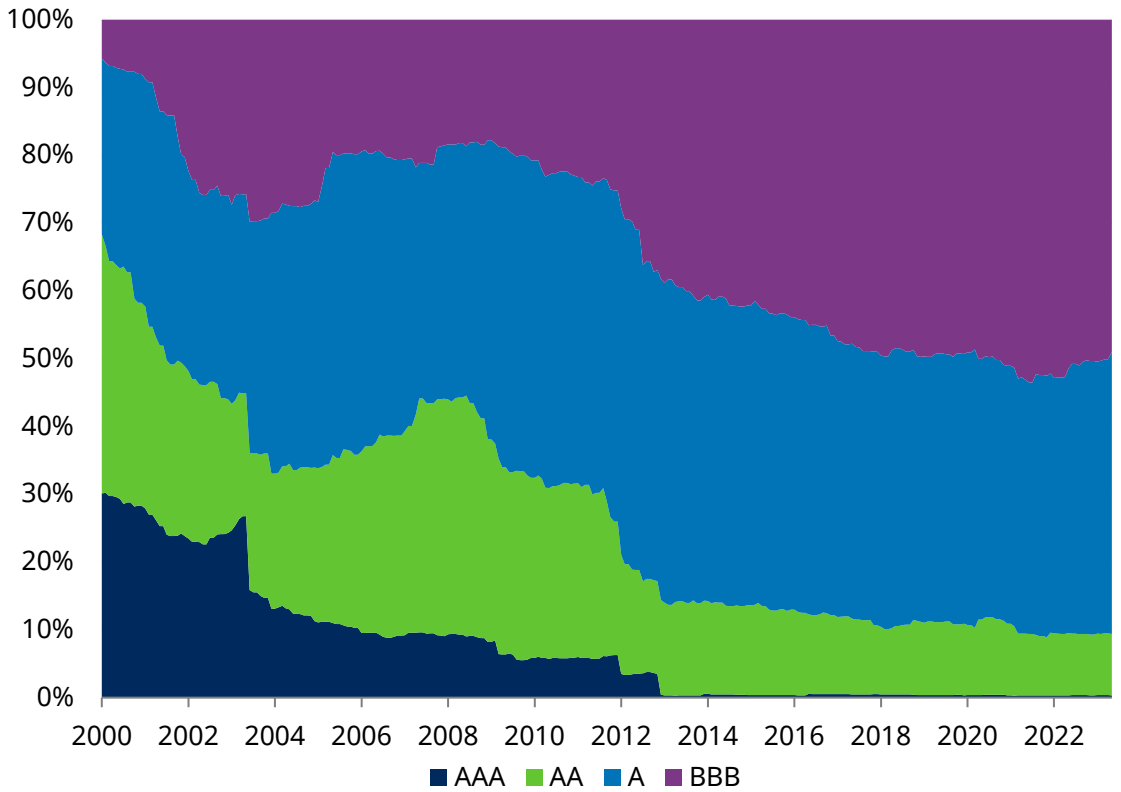


Source: Schroders, Refinitiv Datastream. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

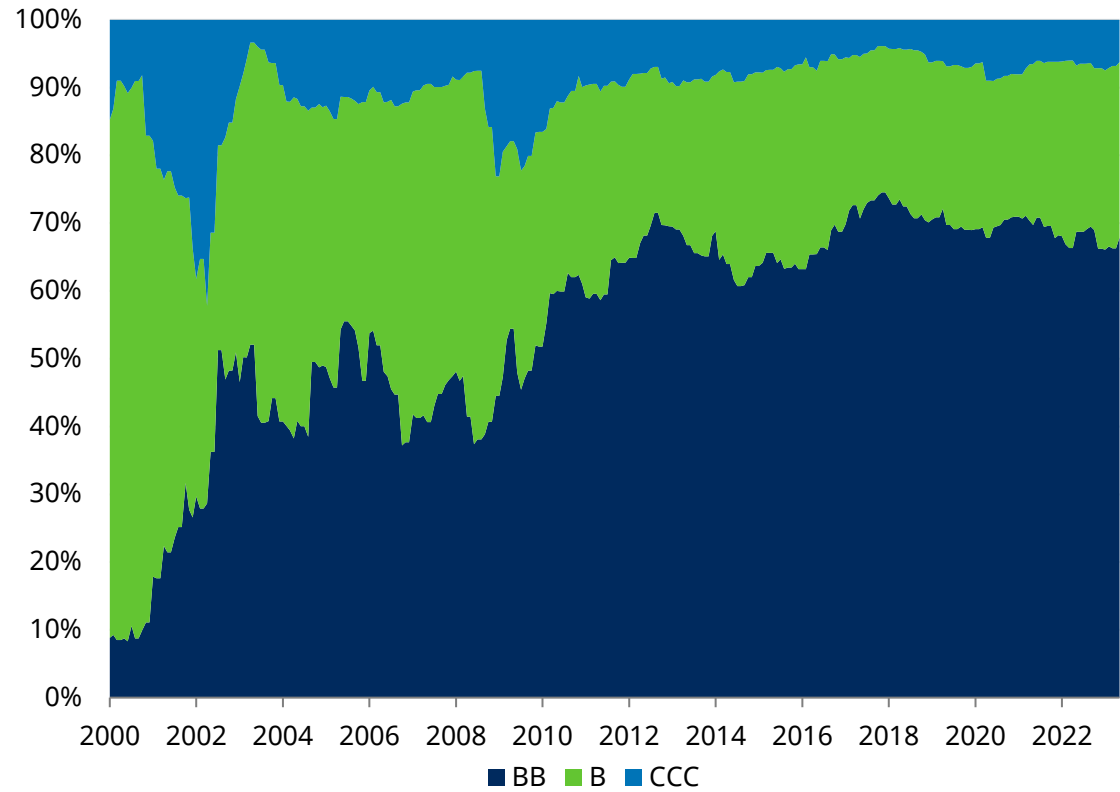
# Euro credit historical ratings split

Significant changes in credit quality over time

### Euro IG ratings split



### Euro HY ratings split

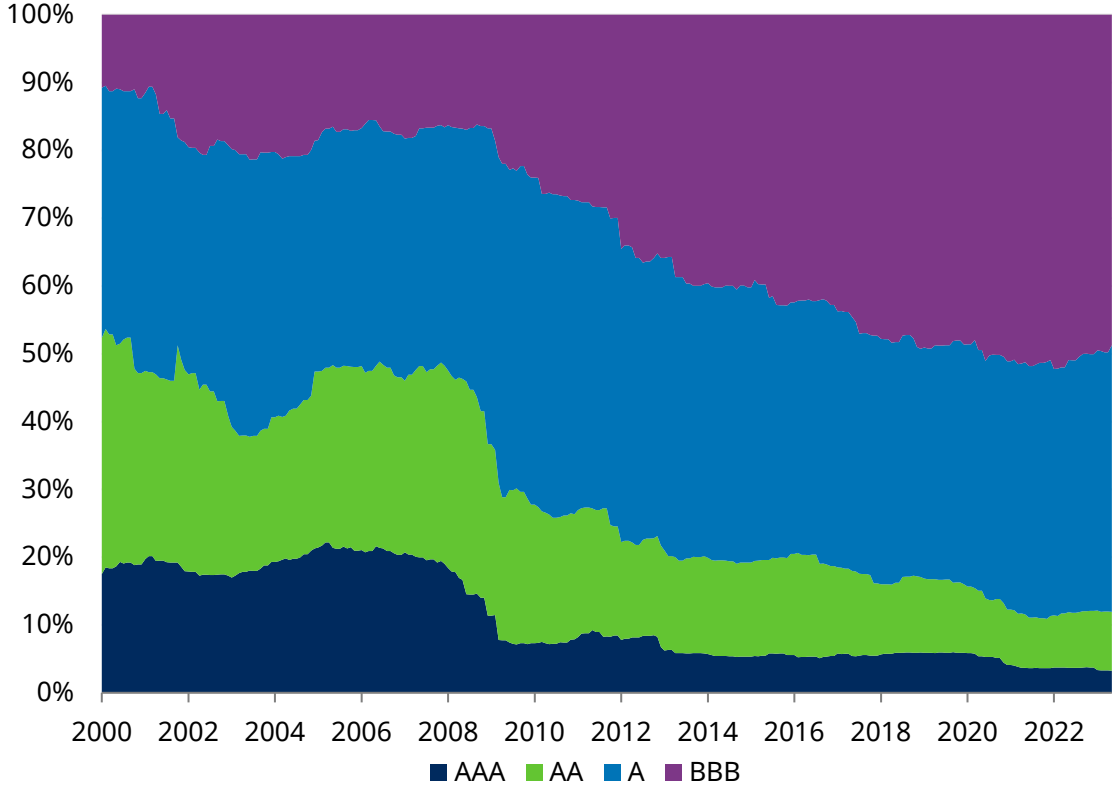


Source: Schroders, Refinitiv Datastream. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

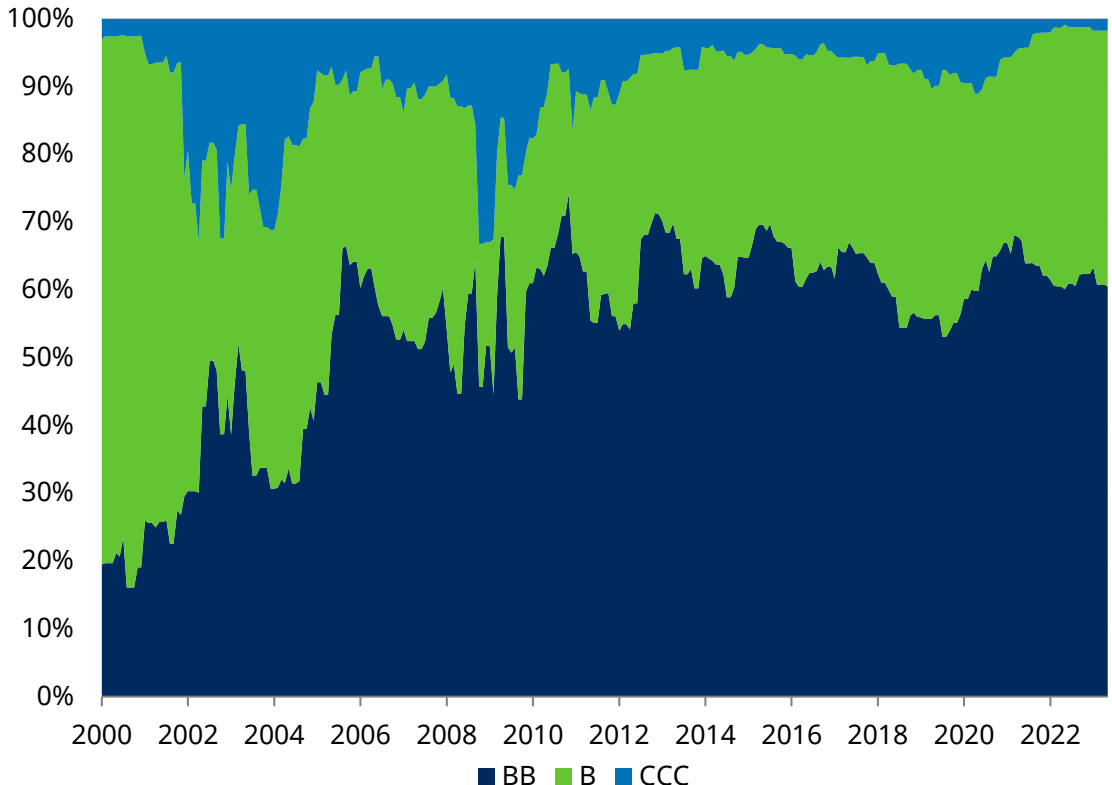
# Sterling credit historical ratings split

Significant changes in credit quality over time

### GBP IG ratings split

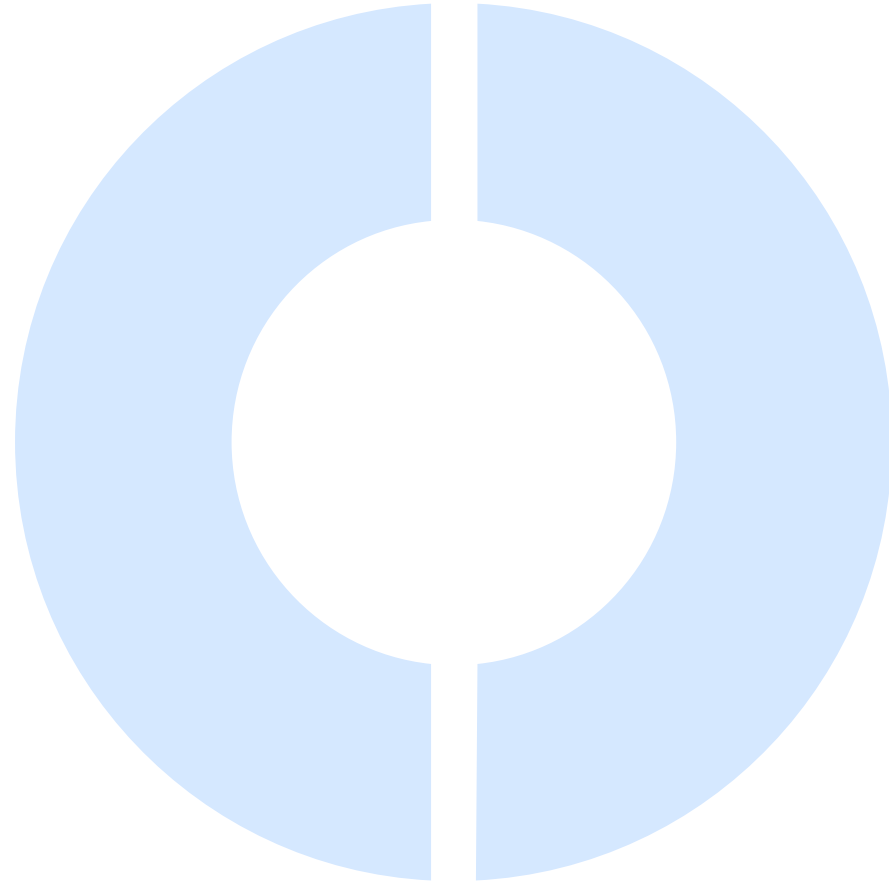


### GBP HY ratings split



Source: Schroders, Refinitiv Datastream. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

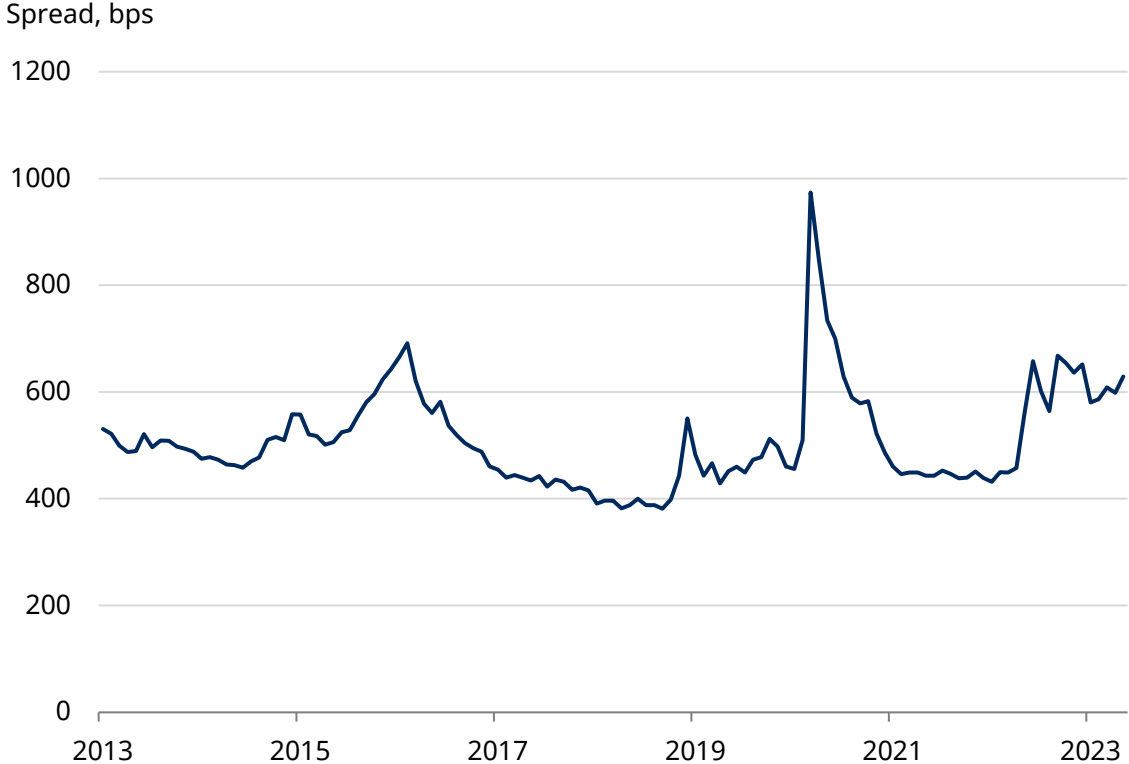
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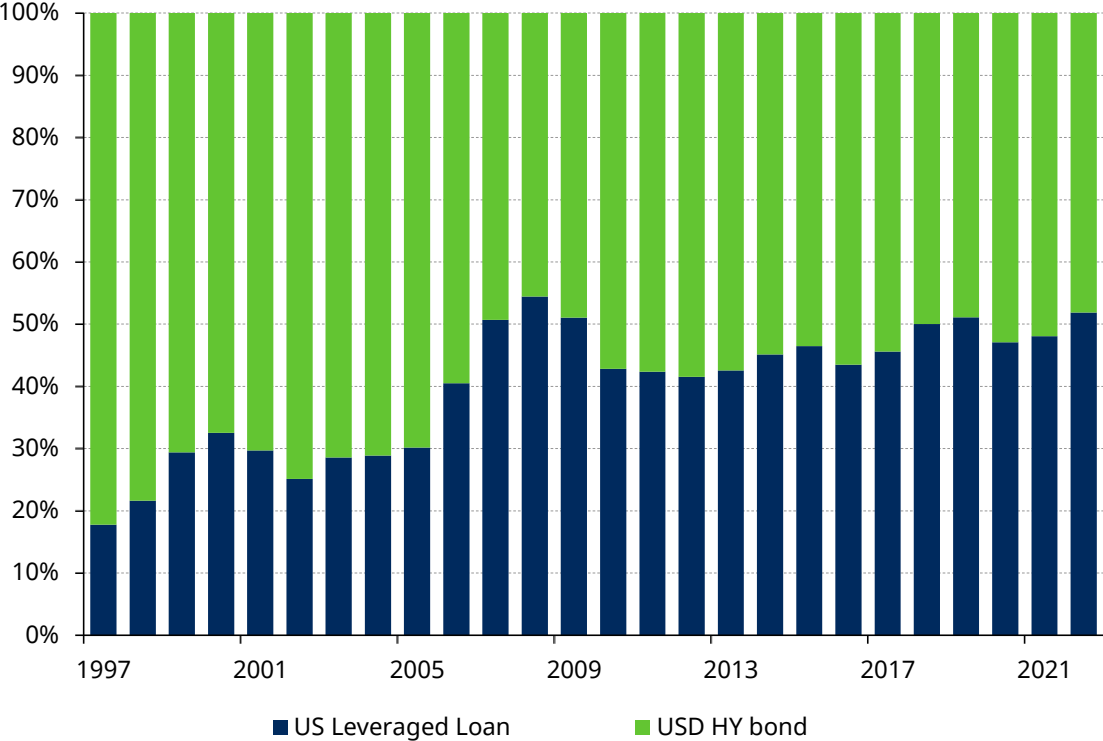
**Appendix: Alternatives**

# US leveraged loans

## US leveraged loan discount margin (3-year life)



## Loans as a percentage of US leveraged finance market (Face Value)



Source: Schroders, BofA Global Research, Credit Suisse. Data as at 31 May 2023. Please see relevant disclaimers on page 73.

# 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
  
- **IG CRE** - Internally sourced
- **HY CRE** - Internally sourced
- **Senior CRE** - Internally sourced
- **Senior Infra** - Internally sourced
- **Junior Infra** - Internally sourced
- **EU leverage loans** - Internally sourced
- **EUR Govt** - ICE Euro Government Index
- **EUR A** - ICE Single-A Euro Corporate Index
- **EUR BBB** - ICE BBB Euro Corporate Index



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