FEBRUARY 2022

2021 high-yield market year in review

- High yield was among the best returning fixed-income sectors in 2021.
- Higher commodity prices, record low defaults, accelerating reopening activity and ongoing fiscal and monetary policy support aided the asset class in the face of interest rate volatility, record supply, retail outflows, ongoing supply chain/labor supply issues and emerging COVID variants.

Returns

Index high-yield returns (ICE BofA U.S. HY Cash Pay Constrained Index)

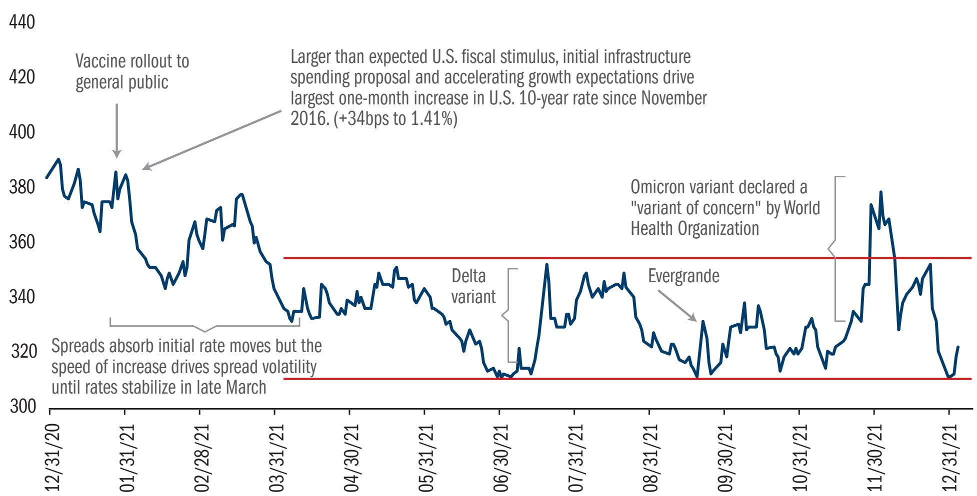
High-yield return summary

	HY	BB	B	CCC
2021 return	5.27%	4.19%	4.92%	10.02%
Spread change	-62	-46	-47	-130

Source: Columbia Threadneedle Investments based on data from ICE. All data as of 12/31/21.
Past performance is not a guarantee of future results.

- The high-yield market in 2021 was characterized by a lack of spread volatility and return dispersion, with positive total returns in each quarter and ten out of twelve months.
- The year's return was driven by coupon income with a 0.28% price decline partially offsetting a 5.56% coupon return.

1-year high yield spread-to-worst
(ICE BofA U.S. HY Cash Pay Constrained Index)



Source: Columbia Threadneedle Investments based on data from ICE.

- Spreads tightened 37bps over the first quarter of 2021 to +348bps. From there, spreads remained within a 40bps range between +310bps and +350bps for much of the remainder of the year, only breaking out above this range briefly in late-November with the emergence of the omicron variant and hawkish Fed pivot.

CCC-rated securities outperformed materially with a 10.02% total return, with economic reopening driving tightening over the first half of the year; lower interest rate sensitivity as compared to higher rated issuers was also a driver.

- The outperformance of CCCs was not broad based, however. The top-10 (out of approximately 150 CCC-rated issuers) contributed nearly half of the rating category's total return.
- Seven of the top-10 contributors were energy sector issuers.
- Two others, AMC Entertainment (AMC) and Exela Technologies (EXLINT) were driven by "meme stock" frenzy early in the year.

Returns by industry (ICE BofA U.S. HY Cash Pay Constrained Index)

- Energy was by far the best performing sector of 2021 with a 13.62% total return driven by a 59% increase in oil prices over the year. This follows a year in which it was the only sector with a negative total return.
- Other notable outperformers included transportation and automotive with 8.04% and 6.21% total returns, respectively.
- While all ICE level-3 sectors exhibited positive total returns during the year, more stable and defensive sectors underperformed. The utility, telecommunications, media and healthcare sectors were the notable laggards with returns of 1.27%, 1.57%, 2.11% and 2.74%, respectively.

Quarterly progression of industry returns (%)
(ICE BofA U.S. HY Cash Pay Constrained Index)

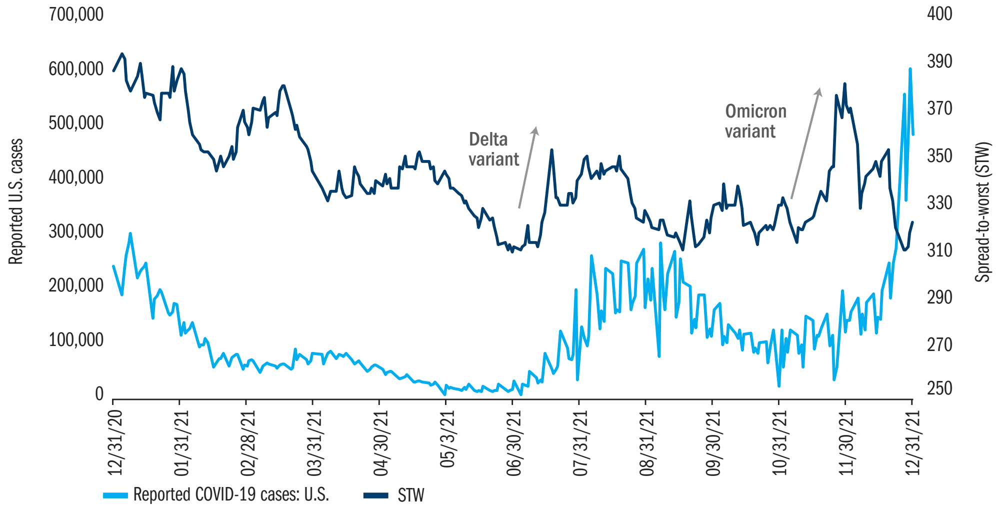
	Q1	Q2	Q3	Q4	YTD
Automotive	0.65	3.12	0.32	2.01	6.21
Banking	-0.35	3.21	1.47	0.39	4.76
Basic industry	0.61	2.54	0.76	0.93	4.93
Capital goods	1.20	1.94	0.96	0.62	4.79
Consumer goods	-0.05	3.35	1.09	0.90	5.36
Energy	3.83	6.10	1.71	1.41	13.62
Financial services	0.18	2.16	0.99	0.76	4.14
Healthcare	0.13	1.42	0.80	0.37	2.74
Insurance	0.75	1.93	1.25	0.63	4.63
Leisure	1.51	2.12	0.69	0.64	5.05
Media	-0.38	2.00	0.54	-0.05	2.11
Real estate	0.20	2.66	1.42	0.36	4.70
Retail	1.03	2.87	0.97	0.20	5.14
Services	1.05	2.37	0.84	0.93	5.28
Technology and electronics	0.03	1.96	0.92	0.51	3.45
Telecommunications	-0.72	1.70	0.53	0.07	1.57
Transportation	3.70	2.74	0.56	0.83	8.04
Utility	-1.59	1.52	0.96	0.41	1.27
Total	**0.82**	**2.75**	**0.94**	**0.68**	**5.27**

Source: Columbia Threadneedle Investments based on ICE data. As of 12/31/21.
Past performance is not a guarantee of future results.

High-yield valuations (ICE BofA U.S. HY Cash Pay Constrained Index)

High-yield valuations widened briefly with the emergence of the new delta and omicron variants in advance of observed case count increases in the U.S.

U.S. high-yield spread-to-worst vs. reported COVID-19 cases (U.S.)



Source: Columbia Threadneedle Investments based on data from ICE and Bloomberg.

Quarterly recaps

High-yield return summary (%)*

	Q1	Q2	Q3	Q4	2021
BB	-0.29	2.75	1.08	0.60	4.19
B	1.17	2.15	0.68	0.83	4.92
CCC	4.63	3.84	1.03	0.23	10.02
Total*	0.82	2.75	0.94	0.68	5.27

* Referencing the ICE BofAML U.S. HY Cash Pay Constrained Index.
Source: Columbia Threadneedle Investments based on data from ICE. All data as of 12/31/21.

First quarter 2021

The ICE BofA U.S. High Yield Cash Pay Constrained Index returned 0.82% over the first quarter. Lower-rated issuers outperformed materially. BB, B and CCC-rated issues returned -0.29%, 1.17% and 4.63%, respectively. Overall spreads ended the quarter 37bps tighter.

The asset class was supported by higher commodity prices, accelerating vaccine rollout and reopening progress and the finalization of a third round of U.S. fiscal stimulus. Driven by a larger than initially expected U.S. fiscal stimulus package, improving U.S. growth expectations and reopening activity and the initial outlines of a proposed $2.2 trillion U.S. infrastructure program, the U.S. 10-year treasury rate rose 83bps over the quarter to 1.74%. Unsurprisingly, higher quality and longer-dated issues underperformed in the rising rate environment. Returns by maturity bucket over the quarter were 2.24%, 0.68% and -1.70% for 0–5 years, 5–8 years and 8+ years to maturity, respectively.

The modest overall total return for the quarter masked significant dispersion by rating quality with material outperformance of lower-rated issuers, particularly within the distressed portions of the market. Within the CCC and lower category, returns by subcategory ratings for the first quarter were 4.2%, 16.3% and 15.4% for CCC, CC, C-rated issuers, respectively. Returns within the CC and C-rated category were primarily driven a handful of issuers within the energy and healthcare sectors. Oil prices were nearly 22% higher, leading to material outperformance by the energy sector. Transportation and leisure were also notable outperformers, benefiting from the vaccine rollout and reopening activity. Utilities, telecommunications, media and banking were notable underperformers. Issuance at $158.6 billion across 242 issues was a quarterly record.

Second quarter 2021

The ICE BofA U.S. High Yield Cash Pay Constrained Index returned 2.75% over the second quarter. Lower-rated issuers continued to outperform although to a lesser degree than the first quarter. BB, B and CCC-rated issues returned 2.75%, 2.15% and 3.84%, respectively. Overall spreads ended the quarter 34bps tighter.

High-yield valuations were somewhat range-bound over the first two months of the period but tightened sharply in June. Returns were driven by sharply higher commodity prices, strong earnings and economic data driven by the successful vaccine rollout in the U.S. and subsequent reopening activity and lower interest rates. These factors offset retail outflows, heavy new issuance, and ongoing supply chain issues and labor shortages. After reaching a YTD high of 1.74% on March 31, the 10-year U.S. Treasury rate decreased 29bps over the quarter. Oil prices were 24% higher over the quarter, resulting in material outperformance from the energy sector. Other outperformers for the quarter included consumer goods, banking, automotive and retail. Meanwhile, healthcare, utilities, telecommunications and capital goods underperformed. Default activity was modest over the quarter leaving the last-12-months par-weighted default rate at 1.63% according to J.P. Morgan. For the first half of 2021, default activity was the lightest since 2011 according to J.P. Morgan. New issuance of $140.5 billion in the second quarter was the third highest quarter on record, behind Q1 '21 and Q2 '20.

Third quarter 2021

The ICE BofA U.S. High Yield Cash Pay Constrained Index returned 0.94% for the third quarter. There was limited dispersion by rating over the period. BB, B and CCC-rated issuers returned 1.08%, 0.69% and 1.03%, respectively. Overall spreads were 11bps wider over the quarter.

High-yield bond prices declined over the quarter but were offset by coupon income, resulting in a modest positive total return. Spreads were slightly wider, masking a few brief widening events that were driven by the ongoing spread of the delta variant, heightened equity volatility, and fears around Chinese property sector contagion. Each of these events which were followed by quick recoveries. Concerns over slowing economic growth, volatile interest rates and mixed technicals also weighed on sentiment.

While there were brief periods of volatility, return dispersion in high yield during the quarter (as defined by comparing the top decile performers with the bottom decile performers) was the lowest it's been since we began tracking it in 2015. It's also notable that Q2 '21 had the second lowest dispersion.

While the 10-year U.S. Treasury rate increased only 2bps over the quarter, it ended 32bps above the intra-quarter low of 1.17% seen in early August and was 19bps higher over the last week of the period. Oil (WTI) prices were 2% higher, ending at $75.03/bbl. The small point-to-point changes hides a 15% intra-quarter drawdown and subsequent recovery. Despite volatile oil prices, energy was again the top performing sector. Other outperformers include banking, real estate and insurance. Underperformers included automotive, telecommunications, transportation and media. There were zero defaults during the third quarter. The last-12-months par-weighted default rate according to J.P. Morgan declined to 0.99%.

Fourth quarter 2021

The ICE BofA U.S. High Yield Cash Pay Constrained Index returned 0.68% in the fourth quarter. Lower-rated issues underperformed with BB, B and CCC-rated issues returning 0.60%, 0.83% and 0.23%, respectively. Overall spreads ended the quarter 2bps tighter.

The fourth quarter's positive total return and modest spread tightening masks notable intra-quarter volatility driven by interest rate volatility, the emergence of the omicron variant and the Fed's hawkish pivot. While spreads were unchanged for the quarter through mid-November, higher interest rates had already driven high-yield bond prices lower. However, spreads broke out of the narrow trading range of the previous eight months and widened nearly 50bps over the last week of November as the emergence of the omicron variant led to increased economic concerns.

While Fed speaker commentary had been trending hawkish throughout the quarter, Chairman Powell's November 30 commentary to the Senate Banking Committee indicating an earlier-than-expected end to asset purchases also weighed on investor sentiment. The market reversed all of November's spread widening in December, however, as initial data indicated the omicron variant to be less virulent than previous mutations. The top-performing sectors over the quarter included automotive, energy, services and basic industry. Underperformers included media, telecommunications and retail.

Notable items

ETF return summary

The three largest high yield focused ETFs (by AUM), JNK, HYG and USHY returned 3.99%, 3.75% and 5.01% (net of fees), respectively.

Quarterly progression of notable high yield ETF retuns (% net of fees)

	Q1	Q2	Q3	Q4	2021
SPDR Bloomberg HY (JNK)	0.61	2.14	0.49	0.70	3.99
iShares iBoxx HY (HYG)	0.58	2.01	0.34	0.77	3.75
iShares Broad USD High Yield (USHY)	0.70	2.62	0.70	0.91	5.01

Source: Bloomberg, iShares.

	Q1	Q2	Q3	Q4	2021
ICE BofA US HY CP Cons. Index	0.82	2.75	0.94	0.68	5.27

Past performance does not guarantee future results.

Fallen angels, rising stars

- 2021 saw a partial reversal of the prior year's record fallen angel activity with $59 billion of rising stars vs. only $10 billion of fallen angels.
- Rising star activity was concentrated in the energy, technology and media sectors.
- Of the $59 billion of rising stars in 2021, $24 billion were previous fallen angels.

2021 fallen angels

Ticker	Issuer	Par ($b)	Sector
JWN	NORDSTROM INC	2,791	Retail
PRGO	PERRIGO COMPANY	2,454	Healthcare
PTEN	PATTERSON-UTI ENERGY INC	860	Energy
RAKUTN	RAKUTEN INC	800	Retail
HXL	HEXCEL CORP	700	Capital goods
RWNYNY	GENTING NY LLC/GENNY CAP	525	Gaming
UFS	DOMTAR CORP	500	Packaging/paper
FTI	TECHNIPFMC PLC	460	Energy
RWLVCA	RESORTS WORLD/RWLV CAP	350	Gaming
BSIG	BRIGHTSPHERE INVESTMENT	275	Financials
PRA	PROASSURANCE COR	250	Financials

2021 rising stars

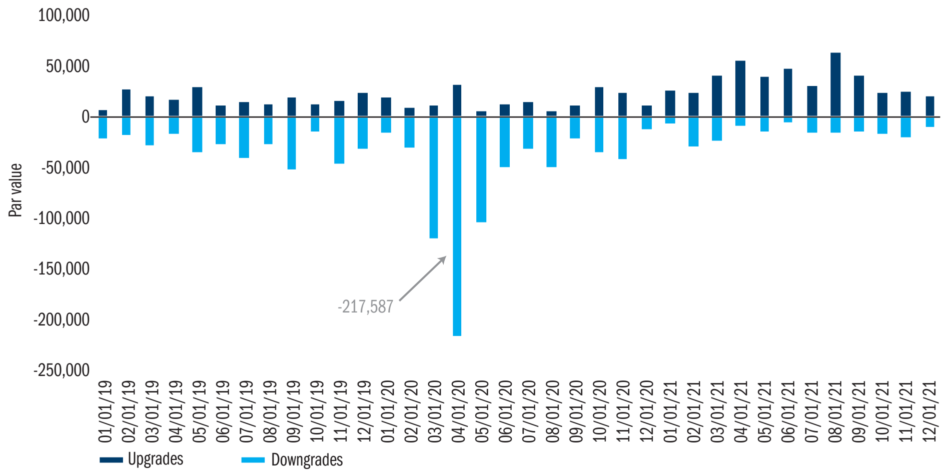
Ticker	Issuer	Par ($b)	Sector
NFLX	NETFLIX INC	8,900	Media
CVECN	CENOVUS ENERGY	5,713	Energy
CLR	CONTINENTAL RESO	4,761	Energy
OVV	OVINTIV INC	4,538	Energy
JBSSBZ	JBS USA LUX/JBS USA FIN	4,050	Food producers
BERY	BERRY GLOBAL GROUP INC	3,975	Packaging/paper
CF	CF INDUSTRIES INC	2,750	Chemicals
DELL	DELL TECHNOLOGIES INC	2,577	Technology
EPR	EPR PROPERTIES	2,375	Travel
MTNA	ARCELORMITTAL	2,311	Metals
WDC	WESTERN DIGITAL CORP	2,300	Technology
JWN	NORDSTROM INC	2,116	Retail
FE	FIRSTENERGY CORP	2,000	Utilities
VRSN	VERISIGN INC	1,800	Technology
QRVO	QORVO INC	1,548	Technology
FCAIM	FIAT CHRYSLER AU	1,468	Autos
MDC	MDC HOLDINGS INC	1,400	Real estate
MCHP	MICROCHIP TECHNOLOGY INC	1,200	Technology
GS	GOLDMAN SACHS GROUP INC	939	Financials
URI	UNITED RENTALS NORTH AM	750	Capital goods
AKERBP	AKER BP ASA	500	Energy
AMD	ADVANCED MICRO DEVICES	312	Technology
SKGID	SMURFIT CAPITAL FNDG PLC	292	Packaging/paper

Source: Bank of America.

Upgrades/downgrades

- Rating agency activity also reversed from the prior year's trend with 28% of high yield par value receiving an upgrade during the year and upgraded par value outgaining downgrades by a 2.5:1 ratio.

ICE BofA U.S. HY CP Constrained Index: Upgrade/downgrade face

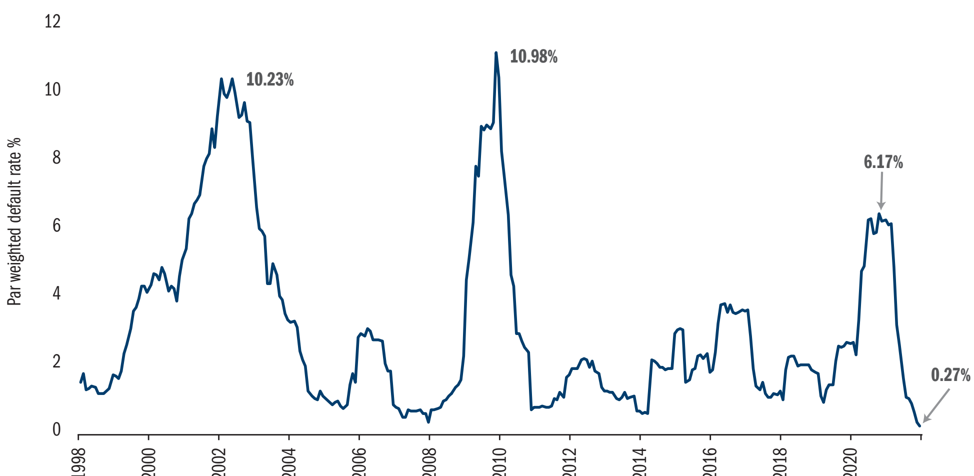


Source: Bank of America.

Defaults and recoveries

- Default activity declined dramatically from 2020 levels with the J.P. Morgan par-weighted default rate ending the year at 0.27%.
  - The 2021 par-weighted default rate is a new record low, 0.09% below 2007's 0.36% rate.
- Per J.P. Morgan, there were eight defaults on just $4.1 billion of par during the year.

J.P. Morgan par weighted default rate



Source: Columbia Threadneedle Investments based on data from J.P. Morgan. As of 12/31/21.

2021 high-yield defaults

Issuer	Ticker	Bonds (par, $b)	Sector	Date
Carslon Traval Inc	CARLTV	900	Services	06/15/21
HighPoint Operating	HPR	625	Energy	03/15/21
Washington Prime Group	WPG	600	Financial	02/15/21
Seadrill	SDRL	515	Energy	01/15/21
GTT Communications	GTTN	500	Telecommunications	06/30/21
Voyager Aviation Holdings	VAHLLC	415	Transportation	02/15/21
Riverbed Technology	RVBD	400	Technology	11/15/21
Basic Energy Services	BASX	300	Energy	04/15/21

Source: J.P. Morgan.

- The average recovery rate in 2021 rebounded to 47%, with an admittedly small sample set, following two consecutive years of average recovery rates in the low-20% range.

Par-weighted default and recovery rates (%)

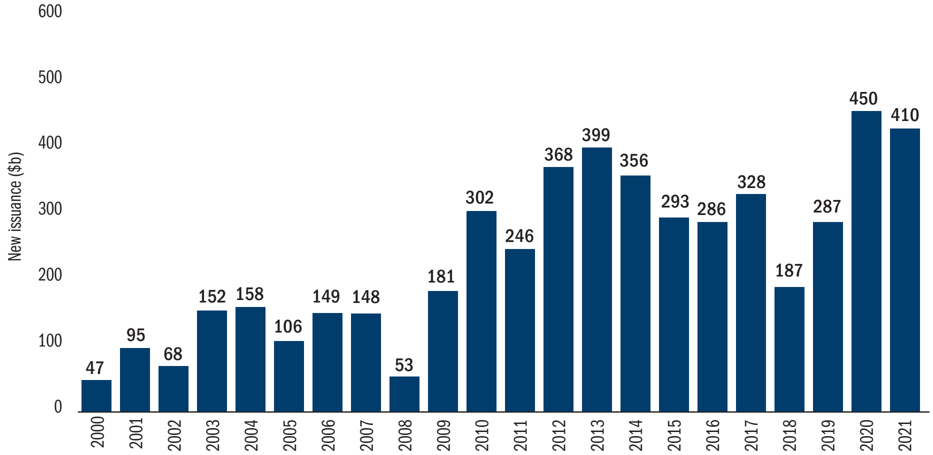
	Defaults	Recovery		Defaults	Recovery
Transportation	1.3	68.0	Food and beverages	0.0	N/A
Services	1.2	62.0	Gaming, lodging and leisure	0.0	N/A
Telecommunications	0.8	38.0	Healthcare	0.0	N/A
Energy	0.7	34.2	Housing	0.0	N/A
Financials	0.7	53.7	Industrials	0.0	N/A
Technology	0.0	N/A	Metals and mining	0.0	N/A
Cable and satellite	0.0	N/A	Retail	0.0	N/A
Diversified media	0.0	N/A	**Total**	**0.27**	**47.0**

Source: Columbia Threadneedle Investments based on data from J.P. Morgan. As of 12/31/21.

New issues

- New issuance marked a new calendar year record of $483 billion across 730 new issues, according to J.P. Morgan, eclipsing the previous record of $440 billion set in 2020.
- Despite the record issuance, there was little deterioration in issuance by credit quality. Issuance by rating for the year was 41%, 45% and 14% for BB, B and CCC-rated issuers, respectively, with CCC issuance only modestly larger than the rating category's index share.
- Refinancing declined as a use of proceeds to 60.2%, from 66% in 2020, with an offsetting increase in M&A related issuance to 20%, which trended higher throughout the year and represented nearly 32% of Q4 issuance.
- The high-yield market saw 128 debut issuers in 2021 (according to J.P. Morgan). This compares to 90 debut issuers in 2020 and an average of 72 debut issuers between 2015 and 2020.
  - The record high for debut high-yield issuers was seen in 2010 with 135.

Annual high yield new issue volume ($b)



Source: Columbia Threadneedle Investments based on data from J.P. Morgan. As of 12/31/21.

High-yield new issuance: Percent of total issuance

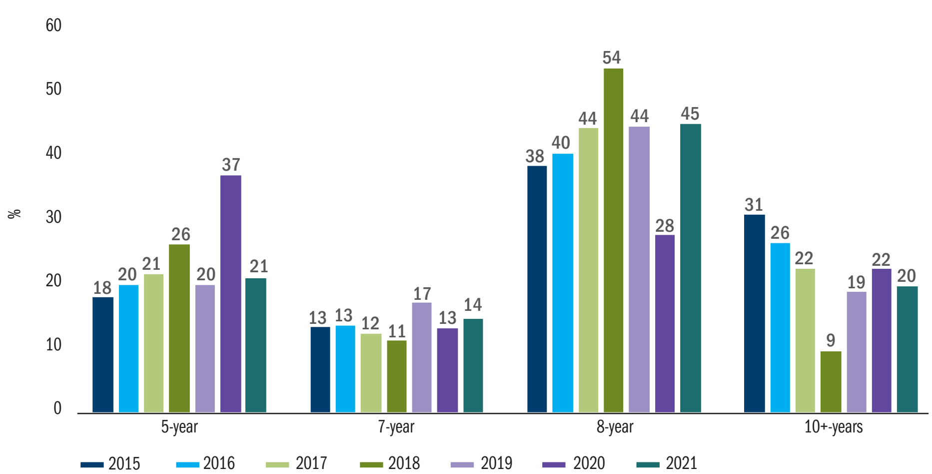
Rating	Q1	Q2	Q3	Q4	2021
Split BBB	1.7	0.7	0.0	0.0	0.9
BB	38.2	41.1	38.9	41.8	39.9
Split BB	12.0	8.3	13.0	17.5	12.0
B	34.1	33.7	36.4	28.0	33.4
Split B	4.9	3.0	3.6	4.6	4.0
CCC	9.1	12.3	8.1	7.8	9.6
NR	0.0	0.9	0.0	0.3	0.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Use of proceeds	Q1	Q2	Q3	Q4	2021
Acquisition finance	10.3	19.7	27.2	31.5	20.0
General corporate	10.0	15.4	13.5	21.1	15.8
Refinancing	77.1	59.6	55.5	43.1	60.2
Dividend/other	2.6	5.3	3.8	4.3	4.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Columbia Threadneedle Investments based on data from J.P. Morgan. As of 12/31/21.

- The 2020 phenomenon of elevated 5-year issuance normalized in 2021 while issuance by other tenors remained in normal ranges.
  - As a reminder, elevated 5-year issuance was seen in 2020 as issuers opportunistically tapped the market for liquidity, preferring shorter-dated issuance given the uncertainty around when/if the proceeds would ultimately be needed.

High-yield issuance by tenor

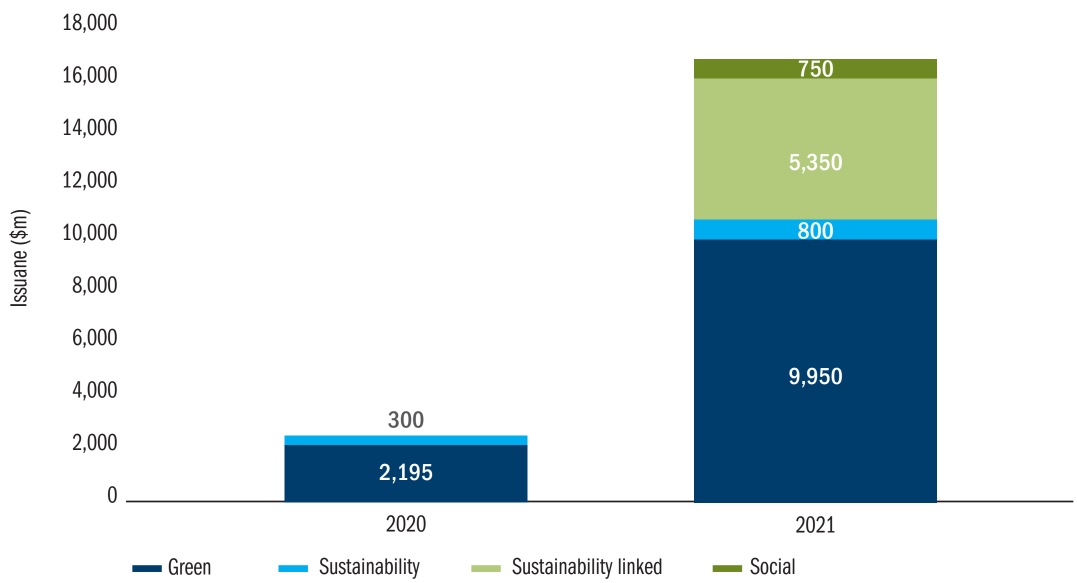


Source: Columbia Threadneedle Investments based on data from ICE. As of 12/31/21.

ESG considerations

- Green, sustainability and sustainability-linked, and social bond issuance saw a sharp increase over 2020 activity with proceeds largely concentrated in green and sustainability-linked issuance.
- While such issuance increased nearly 700% y/y to approximately $16 billion, it remains a small portion of the U.S. high-yield market with fewer than 30 issues currently included in the ICE BofA U.S. HY indices, accounting for roughly 1.3% of overall market value.
- For background, these categories are defined as follows:
  - A **green bond** is categorized as such if the net proceeds of the instrument will be applied toward green projects or activities that promote climate change mitigation or adaptation, or other environmental sustainability purposes.
  - A **sustainability bond** indicates the proceeds will be applied toward projects that are dedicated to environmentally sustainable outcomes (a combination of green and social activities as eligible projects).
  - A **social bond** indicates the proceeds will be applied toward projects that promote improved social welfare and positive social impact directly for underprivileged, low income, marginalized, excluded or disadvantaged populations.
  - A **sustainability linked bond** (SLB) indicates the issuer is committing explicitly (including in the bond documentation) to future improvements in corporate level sustainability outcome(s) within a predefined timeline. Unlike green, sustainability or social bonds, SLB proceeds may be used for general purposes.

Green, sustainability and social U.S. high yield issuance



Source: Columbia Threadneedle Investments based on data from Bloomberg, ICE. As of 12/31/21.

- On a related topic, the table below breaks out the U.S. high-yield market into buckets based on an issuer's MSCI ESG score. A few observations:
  - The lowest and non-rated ESG categories are also the highest yielding.
  - In general, the higher ESG score categories are also longer duration.
  - Credit agency rating scores are the lowest for non-rated and 0–2 ESG scores and highest for 8–10 ESG ratings. (0 worst, 10 best)
  - The correlation between carbon intensity is less pronounced given the concentration of higher carbon intensity among a few credits but the data indicates higher carbon intensity in the 0–4 ESG categories and less in the 4–10 scores.

ICE BofA U.S. HY Constrained Index (%)

MSCI ESG bucket	Wt	YTW	Dur	Carbon intensity	Wtd avg
NR	22.65	6.69	3.96	165.9	B2
0–2	9.18	5.25	4.33	212.5	B1
2–4	24.29	4.72	4.50	580.2	BB3
4–6	26.23	4.37	4.70	211.2	BB3
6–8	15.14	4.03	4.93	196.6	BB3
8–10	2.52	3.72	4.74	115.7	BB2
	100.00	**5.00**	**4.48**	**320.6**	

Source: ICE based on the ICE BofA U.S. HY Constrained Index as of 11/30/21.

- The tables below highlight the highly concentrated nature of carbon emissions within the U.S. high-yield market as of 12/31/21.
- Measured using MSCI's Scope 1 and 2 carbon intensity (tC02e/$m sales) data, the tables detail the top-10 most carbon intensive industries.
  - The top-10 most carbon intensive sectors account for nearly 83% of total carbon emissions intensity of the entire ICE BofA U.S. HY Cash Pay Constrained Index while representing just over 24% of total market value.
  - The top-5 most intensive sectors represent nearly 67% of all emissions intensity and just 18% of market value.
  - The top-10 most carbon intensive issuers represent approximately 46% of emissions intensity and just under 7% of market value.

Top 10 most carbon intensive sectors

Industry	Carbon intensity (tC02e/$m sales)	Index weight (%)	Contribution to index carbon intensity	Percent of index carbon intensity	
Electric – generation	3,103.9	1.73	76.1	24.5	**Top 5 66.5%**
Energy – exploration and production	1,033.5	5.89	53.8	17.3	
Gas – distribution	761.5	5.62	37.6	12.1	
Recreation and travel	969.4	2.33	21.1	6.8	
Metals/mining excluding steel	877.0	2.37	17.9	5.8	
Electric – integrated	1,461.8	1.24	15.1	4.9	
Air transportation	957.8	1.08	10.7	3.4	
Steel producers/products	216.8	0.63	9.7	3.1	
Chemicals	142.5	1.52	8.0	2.6	
Packaging	383.1	1.88	6.1	2.0	
	Top 10 issuer totals:	**24.28**	**256.2**	**82.5**	

Source: MSCI, Blackrock Aladdin.

Top 10 most carbon intensive issuers

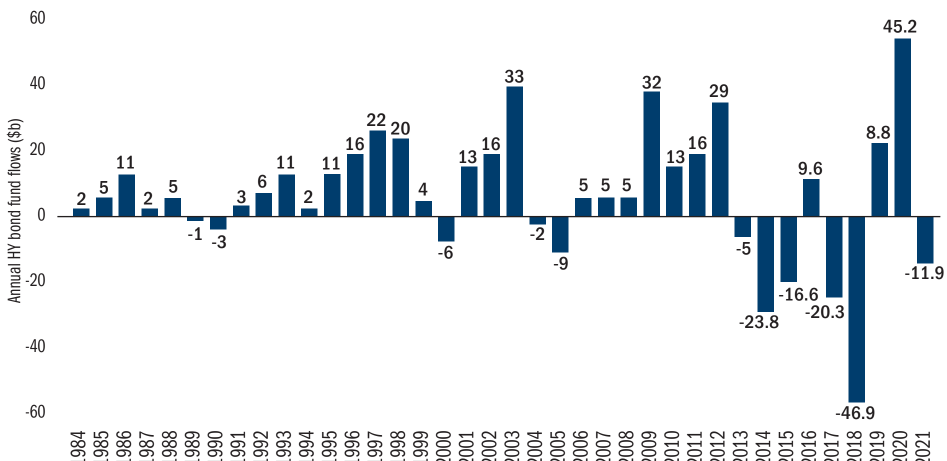
Issuer	Ticker	Carbon intensity (tC02e/$m sales)	Index weight (%)	Contribution to index carbon intensity	Percent of index carbon intensity
Vistra Operations	VST	8,269.1	0.40	33.2	10.7
Occidental Petroleum	OXY	1,289.9	2.22	28.6	9.2
Calpine	CPN	5,361.5	0.44	23.7	7.6
NRG Energy	NRG	3,300.2	0.37	12.2	3.9
Carnival Corp	CCL	1,125.5	0.92	10.4	3.3
First Energy Corp	FE	1,461.8	0.65	9.5	3.1
Royal Caribbean	RCL	1,132.8	0.63	7.1	2.3
EQM Midstream	EQM	1,248.5	0.56	7.0	2.3
DCP Midstream	DCP	1,374.8	0.44	6.1	2.0
Cleveland-Cliffs Inc	CLF	2,012.7	0.28	5.7	1.8
		Top 10 issuer totals:	**6.92**	**143.6**	**46.2**

Source: MSCI, Blackrock Aladdin.

High-yield flows

- Retail flows were much less volatile as compared to prior year but were negative, ending the year at -$13 billion.
- Following unprecedented weekly swings in 2020, 2021 produced only one top-twenty retail outflow ($5.3 billion for the week ending March 10) and inflow ($3.8 billion for the week ending April 7).

Annual high-yield bond fund flows



Source: Columbia Threadneedle Investments based on data from J.P. Morgan. As of 12/31/21.

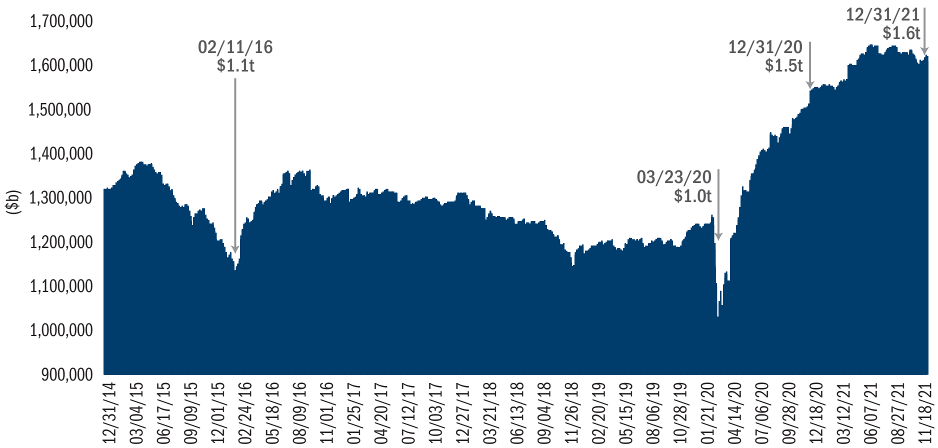
Index changes

- The market value of the high-yield asset class increased 4% over the year to $1.61 trillion and saw an intra-year record high of $1.63 trillion in early July.
- The issuer count increased 11%, adding a net 94 issuers (measuring unique tickers) and now totals 954.
  - Referencing the ICE BofA U.S. HY Index year-end data, the HY issuer count peaked in 2014 at 1,087 issuers.
- Natural turnover remained considerable over the year although to a lesser degree than prior year.
  - The ICE BofA U.S. HY Index began the year with approximately $1.44 trillion of par value and ended with $1.53 trillion.

- Throughout the year the market received $483 billion of new issuance and $10 billion of fallen angels. Combined, these two represent approximately 35% of beginning par value, which is significant decline from 2020 levels.
- These contributions were offset by approximately $452 billion of calls/tenders/maturities/rising stars/defaults.
  - Calls/tenders: $278 billion, maturities: $5 billion, rising stars: $59 billion, defaults: $4 billion.

High yield market value

(ICE BofA U.S. HY Index — $b)

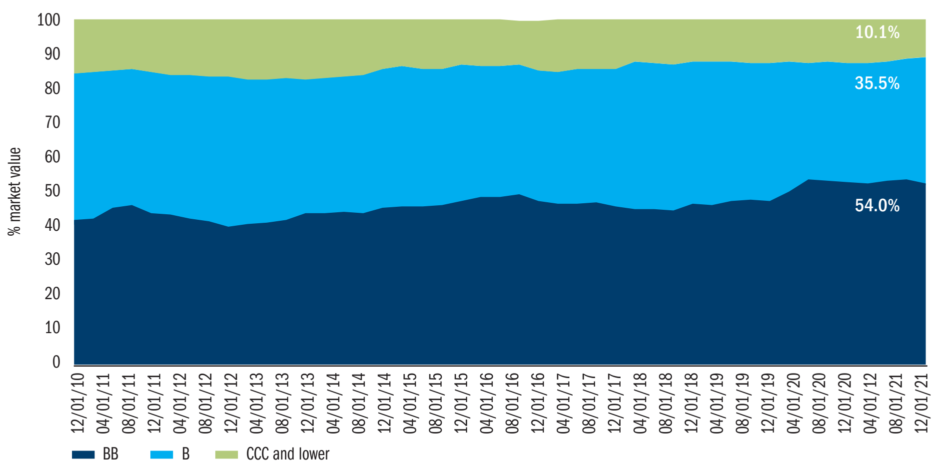


Source: Columbia Threadneedle Investments based on data from ICE. As of 12/31/21.
Past performance is not a guarantee of future results.

- The rating allocation of the high-yield market was relatively stable over the year. The BB portion of the ICE BofA U.S. HY Cash Pay Constrained Index declined to 54% from 56% to begin the year.
- The CCC portion of the market declined to 10.1% from 11.9% over the year.

Rating allocation

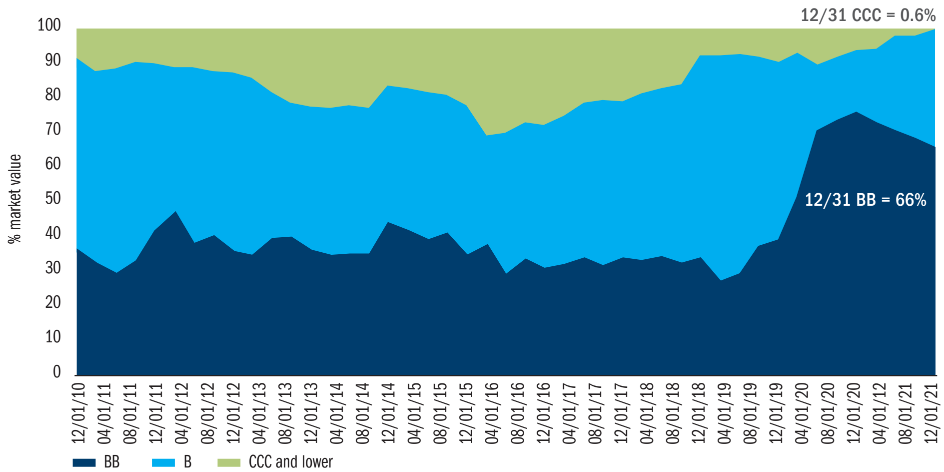
(ICE BofA U.S. HY Cash Pay Constrained Index)



Source: Columbia Threadneedle Investments based on data from ICE. As of 12/31/21.
Past performance is not a guarantee of future results.

- The energy sector changed noticeably over the last two years with many marginal companies defaulting and new fallen angels entering the sector. This was particularly evident within the exploration and production (E&P) subsector, which saw its percentage of BB-rated issuers increase to 76% in 2020 after beginning the year at 39%.
- With $15 billion of rising stars from E&Ps in 2021, the BB-rated portion declined to 66%. Still well above the prior decade average.
- Also notable, the CCC-rated portion of E&Ps declined to only 0.6% from 6.6% over the course of 2021, primarily driven by rating upgrades.

Energy exploration and production rating allocation
(ICE BofA U.S. HY Energy E&P Index)



Source: Columbia Threadneedle Investments based on data from ICE. As of 12/31/21.
Past performance is not a guarantee of future results.

- There were fewer notable industry weight changes over the year as compared to prior year:
  - Services saw the largest change with its weight increasing by 166bps over the year. The change was driven not only by new issuance but also by an ICE classification change that moved approximately 60bps of market value from basic industry, largely building materials distributors into services.
  - Conversely, the largest decline was -1.33% within basic industry which was driven by the ICE classification change above in addition to two sizeable rising stars in ArcelorMittal (MTNA) and CF Industries (CF).
  - The media sector weight declined by 1.00% with the upgrade of Netflix (NFLX) to investment grade being the most notable driver.
  - Tech and electronics declined by 0.92% driven primarily by the investment-grade upgrades of Dell (DELL), Western Digital (WDC) and Verisign (VRSN).

Industry changes
(ICE BofA U.S. HY Cash Pay Constrained Index)

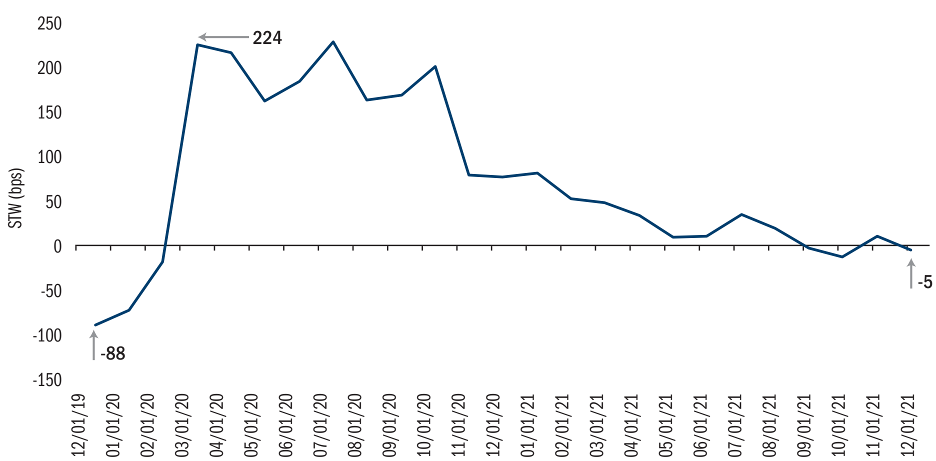
Industry	Weight % 12/31/20	Weight % 12/31/21	Change	Industry	Weight % 12/31/20	Weight % 12/31/21	Change
Automotive	3.94	3.80	-0.15	Leisure	6.22	6.40	0.18
Banking	1.35	1.37	0.02	Media	9.35	8.36	-1.00
Basic industry	9.25	7.94	-1.31	Real estate	4.37	4.21	-0.16
Capital goods	6.57	5.96	-0.61	Retail	4.94	5.27	0.33
Consumer goods	5.05	4.81	-0.24	Services	4.55	6.20	1.66
Energy	13.55	13.41	-0.15	Technology & electronics	5.13	4.21	-0.92
Financial services	4.14	4.94	0.80	Telecommunications	6.66	7.08	0.41
Healthcare	9.05	9.97	0.92	Transportation	1.49	1.83	0.34
Insurance	1.16	1.38	0.23	Utility	3.23	2.87	-0.37

Source: Columbia Threadneedle Investments based on data from ICE. As of 12/31/21.

COVID impacted sectors

- Despite the emergence of two new COVID-19 variants, delta and omicron in 2021, the additional compensation received by negatively impacted COVID sectors steadily declined over the year. In fact, by the fourth quarter these sectors traded in-line with non-impacted sectors.
- We define COVID sectors as those most directly negatively impacted by the pandemic. They include air transportation, gaming, hotels, recreation and travel and theaters and entertainment. Energy is excluded from both COVID and non-COVID categories.

Spread-to-worst: COVID vs. non-COVID sectors
(ICE BofA U.S. HY Cash Pay Constrained Index)

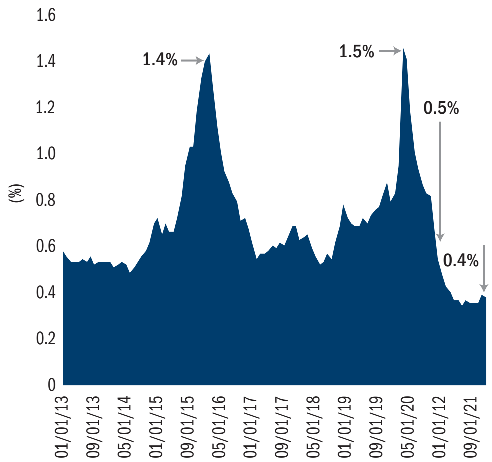


Source: Columbia Threadneedle Investments based on data from ICE. As of 12/31/21.

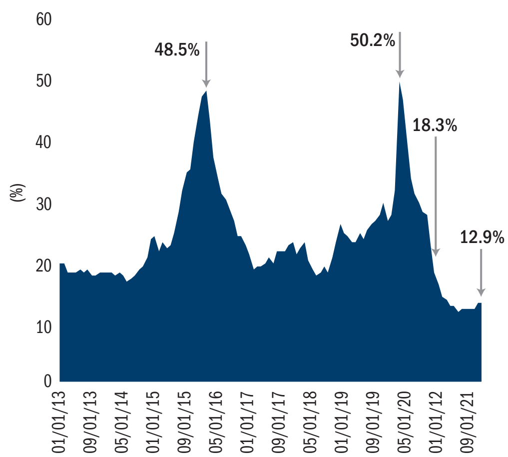
Spread dispersion, duration and maturity

- Dispersion continued to decline over the first half of the year and generally remained at historically low levels through year end.
- The "tail," as defined by the highest-yielding 300bps of market value, is yielding just under 13% as of 12/31/21, down from 18% at year-end 2020 and 26% at year-end 2019. Tail YTW peaked at 50% in March 2020.

Tail contribution to YTW
(ICE BofA U.S. HY Cash Pay Constrained Index)



Tail YTW
(ICE BofA U.S. HY Cash Pay Constrained Index)



Source: Columbia Threadneedle Investments based on data from ICE. As of 12/31/21.

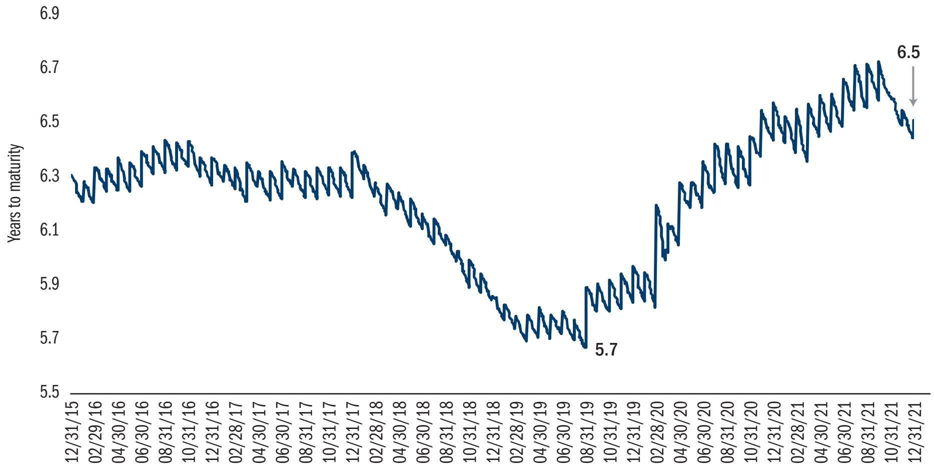
- The effective duration of the high-yield market increased approximately 0.4 years over 2021, leaving it in-line with 5- and 10-year averages.

Effective duration
(ICE BofA U.S. HY Cash Pay Constrained Index)

Source: Columbia Threadneedle Investments based on data from ICE. As of 12/31/21.

- The market's years to maturity ended 2021 largely unchanged at 6.5 years, which sits approximately 0.3 years above the 5-year average.

Years to maturity
(ICE BofA U.S. HY Cash Pay Constrained Index)



Source: Columbia Threadneedle Investments based on data from ICE. As of 12/31/21.

- The percentage of total bonds trading above their next call price has receded from all-time highs in part due to refinancing activity and increased interest rates, but remains elevated historically at 51.5%.
  - Adjusting for the approximately 15% of bonds in high yield that are non-callable, approximately 60% of callable bonds are trading above the next call price.

Trading above next call
(Bloomberg U.S. High Yield 2% Issuer Constrained Index)

Source: Columbia Threadneedle Investments based on data from Bloomberg. All data as of 12/31/21.

Bank loans

- The Credit Suisse Leveraged Loan Index returned 5.40%, slightly outperforming the ICE BofA U.S. HY CP Constrained Index return of 5.28%.
- Some of that outperformance is attributable to reduced impacts from interest rates but also due to a lower rated constituency. This was offset somewhat by the loan market having a smaller weight in the energy sector.

Leveraged loan return summary (%)*

	BL	BB	B	CCC
2021 return	5.40	2.89	5.17	14.60

By industry

Top performers	
Energy	14.0
Metals/minerals	12.4
Consumer non-durables	7.3
Gaming/leisure	6.9
Manufacturing	6.7

Bottom performers	
Utilities	1.7
Food/tobacco	3.3
Media/telecom	4.1
Financials	4.2
Housing	4.4

*Referencing the Credit Suisse Leveraged Loan Index.
Past performance is not a guarantee of future results.

- The comparability of yields in loans versus high yield is lower than in the past.
  - The loan market is lower rated from a credit perspective, there are substantial mismatches in industry composition (energy, technology, and services being meaningful examples), and the overlap of issuers is only about 25% by issuers but closer to 35% by market value.
- For reference, we have included a high-level rating, industry and issuer overlap comparison of the U.S. high yield and bank/leveraged loan markets (data as of 10/31/21).

Comparison of U.S. high yield and U.S. leveraged loan markets (%)

	ICE U.S. HY Constrained	Credit Suisse Lev. Loan
BB	55.28	20.76
B	33.75	70.60
CCC and below	10.97	6.32
NR	0.00	2.32

Issuer overlap

Market value weighted overlap	
CS LL index	38.2
ICE BofA U.S. HY	32.5

Issuer weighted overlap	
Common issuers	285
CS LL index	21.2
ICE BofA U.S. HY	29.6

	ICE U.S. HY Constrained	Credit Suisse Lev. Loan
Automotive	3.85	2.42
Basic industry	7.89	10.30
Capital goods	5.99	7.18
Consumer goods	5.06	7.07
Energy	13.84	2.58
Financial services/banking	7.44	6.95
Healthcare	9.78	12.89
Media	7.78	3.93
Transportation	1.79	1.13
Real estate	4.25	0.00
Retail	5.14	2.80
Leisure	6.55	5.25
Services	6.03	11.65
Telco	7.35	9.00
Tech	4.24	14.57
Utility	3.02	2.28
Total	**100.00**	**100.00**

Source: ICE, Credit Suisse.

Investment grade bonds/other

Other fixed-income 2021 returns (%)

Investment grade*	-0.95	10-year treasury**	-3.51
AAA	-2.38	Bloomberg U.S. Agg	-1.54
AA	-1.44	Bloomberg Global Agg	-4.71
A	-1.77	JPM EM Corporate	-0.65
BBB	-0.19	ICE BofAML Euro HY Const.	3.40

* Referencing the ICE BofAML U.S. Corporate Index.
** Citi 10-year Treasury Index.
Past performance is not a guarantee of future results.

- Investment-grade bonds returned -0.95%, with the BBB-rated portion of the market outperforming amidst the interest rate move.
- European currency high yield (referencing the ICE BofA European Currency HY Constrained Index, HPC0) underperformed relative to U.S. high yield driven both by much lower energy sector weight (4.2%) and lower energy total return (2.13%) as compared to USD issuers.

Index descriptions:

The **ICE BofA U.S. HY Cash Pay Constrained Index** is an unmanaged index that measures the performance of high-yield bonds.

The **ICE BofA Merrill Lynch U.S. High Yield Constrained Bond Index** is a commonly used benchmark index for high-yield corporate bonds.

The **ICE BofA U.S. HY Energy E&P Index** tracks the performance of the U.S. dollar-denominated, below-investment-grade, corporate debt publicly issued by energy companies in the U.S. domestic market.

The **Bloomberg U.S. High Yield 2% Issuer Constrained Index** is an unmanaged index composed of U.S. high-yield, fixed-rate corporate bonds. Index weights for each issuer are capped at 2%.

The **BofA Merrill Lynch 10-Year T-Bill Index** is an unmanaged market index of U.S. Treasury securities that assumes reinvestment of all income.

The **ICE BofA Merrill Lynch U.S. High Yield Constrained Bond Index** is a commonly used benchmark index for high-yield corporate bonds.

The **Bloomberg Treasury Index** tracks the total return of U.S. Treasury notes.

The **Credit Suisse Leveraged Loan Index** provides broad and comprehensive total return metrics of the universe of syndicated term loans.

The **Bloomberg U.S. Aggregate Corporate Bond Index** consists of publicly issued, fixed-rate, nonconvertible, investment-grade debt securities.

The **Bloomberg Global Aggregate Bond Index** is an unmanaged, broad-based, market-capitalization-weighted index that is designed to measure the broad global markets for U.S. and non-U.S. corporate, government, governmental agency, supranational, mortgage-backed and asset-backed fixed-income securities.

The **JPM EM Corporate Debt Index** tracks total returns for traded external corporate debt instruments in emerging markets.

The **ICE BofA ML Euro HY Constrained Index** tracks the performance of EUR and GBP denominated below investment-grade corporate debt publicly issued in the eurobond, sterling domestic or euro domestic markets.

The **ICE BofA ML U.S. Corporate Index** measures market performance of USD-denominated investment-grade corporate debt publicly issued in the U.S. domestic market.

It is not possible to invest directly in an index.

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