Collateral Thinking

The rolling blackout

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Leveraged Loan Strategy
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Top of the stack

A rolling blackout is the least disruptive way for credit to align to a new rates regime. As the rates shock steadily makes its way through the credit ecosystem, sectors respond at varying lags. This way we avoid a cathartic purge, preventing large mark to market losses and high peak default rates. We still land up cleaning out untenable capital structures, but on a stretched-out timeline, allowing workouts to generate higher recoveries and lower credit losses. This is possible only in a non-recessionary environment and is already underway.

Q1 earnings wrap + Q2 estimates

In Q1, companies delivered a higher proportion of beats vs Q4. Revenue and adjusted EBITDA growth declined but held up better than expected. As we look to Q2, issuers have provided a stronger forward guidance vs last quarter. However, dispersion underneath remains high with most upside coming from BB issuers, while B3 and below issuers continue to see challenges.

Notably, today we are at an inflection point where business headwinds are shifting away from supply to demand. We see a collapse in input costs reported by issuers but foresee growing revenue challenges. We think Q1 represents a temporary relief point before revenue headwinds take over as the next chapter in the declining fundamental story amongst lower quality credits. To change this narrative, we need to see a bounce in real toplines – not our base case. In this report, we take a sector-based approach to analyzing fundamental performance, to identify where opportunities and challenges lie.

Market Technicals

In three weeks ending May 26th, demand for loans totaled $9.6bn, a decline from $14bn demand seen in prior three weeks. Retail flows were negative at -$2.3bn, a decrease of $0.5bn. Coupon payments and CLO creation declined by $3.1bn and $0.7bn respectively.

Rating Actions

In the past month, we have seen rating actions across 35 distinct issuers. A total of 25 issuers were downgraded by 37 notches and 10 issuers upgraded by 11 notches. In terms of sectors, Technology and Financials each contributed 30% and 13% of total downgrades in the past month whereas Transportation, Financials and Energy contributed 27%, 15%, and 14% to upgrades respectively.

Return Performance

Loans in the LCD index returned -0.12% in three weeks ending May 26th, down from the 0.22% cumulative return seen prior three weeks. Across asset classes, YTD loan returns are at 4.1%, HY YTD returns are at 3.7% and IG YTD returns are at 2.9%.

Primary Activity

YTD global and US issuance totals $98.1bn and $88bn, with a total of 175 and 135 loans launched respectively in the primary market thus far. In total, they trail YTD 2022 issuance by 44% and 42% respectively.

Exhibit 1: Loan performance

YTD Loan return is at 4.1%

Index	Level	1wk Δ	2wk Δ	YTD Rtn
All Loan	92.9 pts	-0.1	-0.2	4.1%
BBs	97.2 pts	-0.1	-0.2	3.0%
Bs	93.9 pts	-0.2	-0.2	4.6%
CCCs	77.8 pts	+0.2	-0.8	6.3%

Source: S&P LCD

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Exhibit 2: HY performance

YTD HY return is at +3.7%

Index	Level	1wk Δ	2wk Δ	YTD Rtn
US HY	469 bps	+1	-06	3.7%
BBs	310 bps	+3	-04	2.9%
Bs	496 bps	-2	-07	4.0%
CCCs	1072 bps	-11	-18	6.2%

Source: BofA Global Research

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Exhibit 3: Fund flows ($mn)

YTD loan inflows are at -45,044mn

Asset	1wk	2wk	YTD	LTM
Loans	-472	-1,141	-13,371	-45,044
US HY	+582	-1,528	-7,935	-20,108
US IG	+3,943	+3,491	+84,136	-64,476

Source: EPFR Global

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Top of the stack

Markets have priced in a high probability of another rate hike. Several macro indicators have surprised to the upside: New home sales (highest since Mar'22), JOLTS (openings increased to 10mn), and the establishment payrolls (+339k vs 195k expected). Micro variables (loan issuer earnings) also seem to be turning. This dataflow has led many to wonder if we have bottomed out, and if fundamentals are poised to improve from here.

We think any optimism will be temporary in the context of leveraged credit. The best-case scenario for our market is if inflation recedes without creating a significant economic slowdown- a low probability outcome in our opinion. The two most likely scenarios to us are: decreasing inflation paired with a recession, or sticky inflation paired with high rates. Another scenario is stagflation- a combination of decreasing earnings, yet higher rates. While unlikely to unfold at broad economic level (Fed will cut rates if it sees broad economic weakness), we can envision this scenario within leveraged credit.

We live in a world of high dispersion- with a large divide between the haves and the have-nots. Below-IG issuer earnings have sustained meaningful impact from inflation and end-user demand weakness (discussed in main section below). At the same time broad economic readings point to a still robust economy, driving inflows into public equities which are generally higher quality portfolios than HY bonds or loans. As such we could see a situation where below-IG issuer earnings continue to deteriorate but sticky inflation keeps the fed from cutting rates. This stagflationary backdrop is another low-probability outcome, and represents the worst case scenario for our market.

Let's take the two most likely scenarios above. If the economy heads into a recession, rates will likely be cut, but leveraged credit spreads should increase into it, offsetting some benefit. If the economy bounces back, rates will remain elevated, again offsetting some spread compression. On an index level, a bounce-back will lead to a rally, and vice-versa. But underneath the surface, there will be a wide dispersion, with highly levered issuers carrying the burden of credit risk. Notably, both scenarios end with higher cost of capital vs a few years ago, keeping liquidity pressures on these issuers intact. Outside of economic conditions that generate positive real revenue growth, such issuers could languish. This is the basis of our expectation that the optimism is temporary and downgrades and defaults will continue to materialize amongst lower-quality issuers.

The case for a rolling blackout

Cumulative defaults through this cycle will likely end up in the 15% zip code (Default and loss pressures in the current cycle). However, default experience will depend on the economic trajectory. In a recession, a bell curve with 6-7% peak default rates in '24 is likely. In a higher for longer rates scenario, we expect a constant churn of 3-4% a year. This is what we refer to as a "rolling blackout" - where lights go out on each block at a time, never the entire city.

In our view, a rolling blackout is the least disruptive way for credit to align to a new rates regime. As the rates shock steadily makes its way through the credit ecosystem, sectors respond at varying lags. This way we avoid a cathartic purge, preventing large mark to market losses and high peak default rates. We still land up cleaning out the untenable levered structures, but on a stretched-out timeline, allowing workouts to generate higher recoveries and lower credit losses.

We think this is possible only in a non-recessionary environment and is already underway. First came the Healthcare sector with its earnings squeeze in a post COVID world. As rates increased, Real Estate succumbed. Then as consumption slowed, flaws in Chemicals, Autos, and Capital goods surfaced. Then came the Tech selloff, and now Financials have rolled over. Simultaneously, Cable, Media, Telecoms, and Retail have been in decline. This leaves Services, Travel/Leisure and Gaming as sectors that still have legs, buoyed by being focal points of consumer spending. With time, in a higher-for-longer rates backdrop, the lights will likely go out on them too. Key point being that some of the former sectors such as Capital goods, Autos and some Healthcare providers have had time to turn around by now thus keeping aggregate level of defaults manageable thus far. If we manage to skirt a recession, we could plausibly come full circle this way.

Topical: Q1 earnings wrap + Q2 estimates

As the Q1'23 earnings season wraps up, we take stock of fundamental health of leveraged issuers. We do this by tracking the headline numbers reported by our sample of public loan issuers. We also peruse guidance announcements and individual earnings transcripts to understand issuers' forward trajectory and enumerate cost and demand headwinds faced by them. In this report we take a sector-based approach to identify where opportunities and challenges lie.

In Q1, we saw companies deliver a higher proportion of beats vs Q4. Revenue and adjusted EBITDA growth declined per our forecasts, but held up better than expected. Capital Goods led all sectors in percentage of issuers beating revenue and EBITDA consensus, whereas Telecoms lagged. Travel and Gaming delivered the largest YoY revenue and adj EBTDA growth respectively, while Chemicals was the worst performer in both. Despite the outperformance, issuers barely got rewarded on beats but instead got penalized on misses as reflected by the post earnings price action.

As we look to Q2, issuers have provided a stronger forward guidance vs last quarter. However, dispersion underneath remains high and most of the upside is coming from BB issuers, while B3 and below issuers continue to see challenges. Today, we are at an inflection point where business challenges are shifting away from supply side to demand side. We see a collapse in headwinds reported by issuers on overall input costs. However, we think companies are likely to still battle higher debt costs and lower revenues going forward.

On balance, we think Q1 represents a temporary relief point before revenue headwinds take over as the next chapter in the declining fundamental story amongst lower quality credits. In Q2 we expect YoY revenue growth to decline to 3% levels, and YoY adjusted EBITDA growth to turn negative. To change that narrative, we would need to see a bounce in real toplines – not our base case at the moment.

Revenue and EBITDA beats increase in Q1'23

In Q1, companies delivered stronger earnings results than expected. Of the 270+ issuers that have reported so far, 50% beat revenue consensus and 60% beat Ebitda consensus, both up from the 37% and 53% levels seen in the previous quarter. On the flip side, 13% of reported issuers missed revenue consensus and 21% missed Ebitda consensus, both of which slightly decreased compared to 14% and 25% respectively in Q4'22.

Exhibit 4: Earnings beats/misses Q1'23 vs Q4'22
More than half of issuers delivered beats in both revenue and EBITDA

	Revenue		Ebitda		Both	
	Beat	Miss	Beat	Miss	Beat	Miss
Q1 2023	50%	13%	60%	21%	37%	6%
Q4 2022	37%	14%	53%	25%	26%	7%

Source: BofA Global Research, Bloomberg, LCD

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Capital Goods lead while Telecoms lag

Exhibit 5 below demonstrates earnings beats/misses by sector. We have greyed-out the non-representative sectors which only have limited sample sizes. Capital Goods led all sectors with 77% of issuers beating revenue consensus and 77% beating EBITDA consensus. Issuers in this sector delivered a solid quarter thanks to improved input component and labor availability which led to higher production and lower costs. Some issuers also reported that their price pass-throughs exceeded their material and freight cost increase, improving price-to-cost ratios.

The strength of the Autos sector continued in Q1'23 as 73% of companies reported Revenue beats and 91% reported EBITDA beats, the highest among all sectors. Issuers see strong consumer demand amid low inventories, keeping car prices elevated. Some issuers mentioned that the easing supply chains have started to help ramp up production rate, boosting overall sales in the quarter. In addition, car rental companies attributed their strong quarter to the demand of broader travel industry, especially the return of business activity and the increase of international inbound travel. This is consistent with observations in the Travel/Leisure sector, which delivered the third best performance in both Revenue and EBITDA beats (67% and 78% respectively).

Telecoms stand out as the worst performing sector with only 11% of issuers beating Revenue consensus and 56% missing. The sector has seen revenue declines in the areas of voice, video, and network access due to weaker demand. This in turn softens demand for upstream fiber optic and copper connectivity providers as their book-to-bill ratios drop because of customer inventory adjustments.

Real Estate and Chemicals are also at the bottom of the spectrum in terms of Revenue beats/misses. High interest rates have impacted consumer sentiment and housing affordability in the Real Estate sector, while labor shortage and wage inflation eat into the earnings. Chemicals continued to struggle in Q1'23 as manufacturing malaise persisted, dragging down demand. However, easing of supply chain issues has helped cut raw material costs, leading to a higher percentage in EBITDA beats within the sector.

Drivers of better than expected earnings

We look at QoQ change in the proportion of issuer beats by sector to identify those with largest improvements. Autos leads with additional 56% increase in revenue beats and 17% decrease in revenue misses, followed by Gaming and Capital Goods with a ~40% increase in revenue beats. On the other hand, Telecoms and Financials are the biggest laggards, with issuer beats incrementally down 19% and 17% respectively vs Q4. Chemicals posted the largest increase in percentage of EBITDA beats (32%). Financials again lagged with a 18% decrease and is the only sector with double digit decline in Ebitda beats in Q1 vs Q4.

Exhibit 5: Q1'23 earnings beats/misses by sector

Capital Goods and Autos led sectors in revenue beats whereas Telecoms and Real Estate lagged

	Revenue							Ebitda						
Sector	**Issuers reported**	**Miss**	**%Miss**	**%Miss Chg**	**Beat**	**%Beat**	**% Beat Chg**	**Issuers reported**	**Miss**	**%Miss**	**%Miss Chg**	**Beat**	**%Beat**	**% Beat Chg**
Metals	2	0	0%	-25%	2	100%	25%	2	0	0%	-50%	2	100%	75%
Utilities	3	0	0%	-67%	3	100%	67%	3	2	67%	0%	1	33%	0%
Capital Goods	13	2	15%	1%	10	77%	41%	13	3	23%	-5%	10	77%	27%
Autos	11	0	0%	-17%	8	73%	56%	11	1	9%	-8%	10	91%	16%
Travel	18	1	6%	6%	12	67%	25%	18	3	17%	1%	14	78%	15%
Services	19	2	11%	0%	12	63%	16%	19	3	16%	-5%	10	53%	5%
Food Producers	10	1	10%	1%	6	60%	5%	10	2	20%	2%	8	80%	16%
Retail	20	3	15%	0%	11	55%	13%	20	6	30%	2%	13	65%	5%
Gaming	7	0	0%	0%	4	57%	43%	7	2	29%	0%	3	43%	14%
Energy	11	3	27%	19%	6	55%	13%	9	1	11%	-9%	7	78%	8%
Transportation	2	1	50%	50%	1	50%	0%	2	0	0%	0%	0	0%	-100%
Healthcare	33	3	9%	3%	16	48%	12%	33	7	21%	-9%	20	61%	18%
Technology	46	1	2%	-6%	22	48%	9%	46	7	15%	-3%	24	52%	-5%
Cable/Media	23	-	-	-	8	35%	6%	23	7	30%	1%	12	52%	6%
Financials	15	5	33%	15%	5	33%	-17%	14	4	29%	-10%	4	29%	-18%
Chemicals	9	3	33%	-13%	3	33%	10%	9	2	22%	-16%	7	78%	32%
Real Estate	19	5	26%	5%	5	26%	-7%	14	3	21%	-1%	6	43%	-7%
Telecoms	9	5	56%	36%	1	11%	-19%	9	3	33%	13%	5	56%	-4%
Packaging/Paper	1	1	100%	0%	0	0%	0%	1	0	0%	-50%	1	100%	100%
Total	**271**	**36**	**13%**	**-1%**	**135**	**50%**	**13%**	**263**	**56**	**21%**	**-4%**	**157**	**60%**	**7%**

Exhibit 5: Q1'23 earnings beats/misses by sector
Capital Goods and Autos led sectors in revenue beats whereas Telecoms and Real Estate lagged

Revenue	Ebitda

Source: BofA Global Research, Bloomberg, LCD

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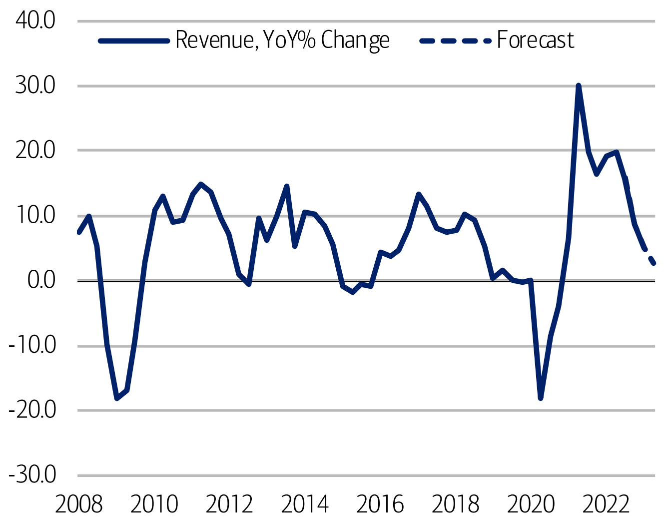
YoY earnings growth declines, but at a rate slower than expected

In Q1'23, revenue and adjusted EBITDA growth continued on its downward trend, both finishing around ~5% levels, lower compared to the 9% and 8% levels seen in Q4'22 respectively (Exhibit 6, Exhibit 8 and Exhibit 7). While the trajectory was per our expectations, the decline was marginally slower than our projections in [Q1 earnings outlook](), bolstered by the outsized beats this quarter. Note that the 5% revenue growth is on a nominal basis, so adjusting for 5%+ inflation, real growth is already flat.

Looking forward, we are watching closely whether issuers will remain resilient and continue to outperform in Q2, or the bounce-back this quarter is temporary. Based on expectations of GDP growth, PMI, and S&P/Russel earnings, we expect YoY revenue growth to drop to ~3% levels in Q2, and adjusted EBITDA growth to turn negative, ending up in the -2% to -4% zone.

Exhibit 6: YoY % Revenue changes
Revenue growth is already flat YoY after adjusting 5%+ inflation



Source: BofA Global Research, Bloomberg, LCD

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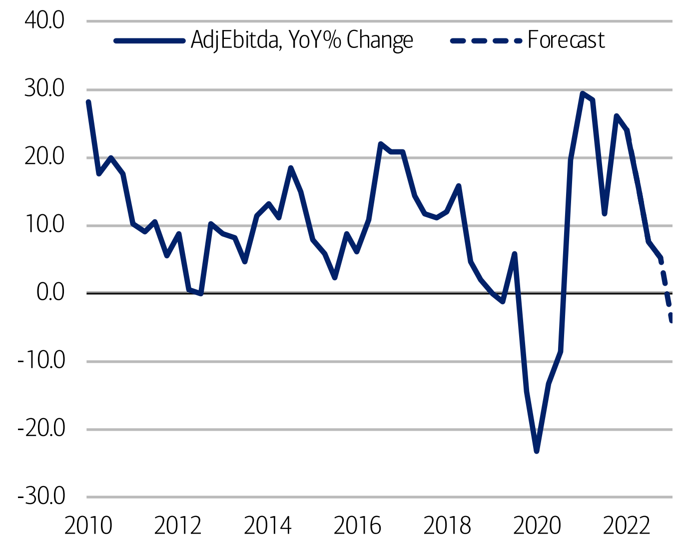
Exhibit 7: YoY % Adjusted EBITDA changes
YoY adjusted EBITDA growth could end near the -2% to -4$ zone in Q2



Source: BofA Global Research, Bloomberg, LCD

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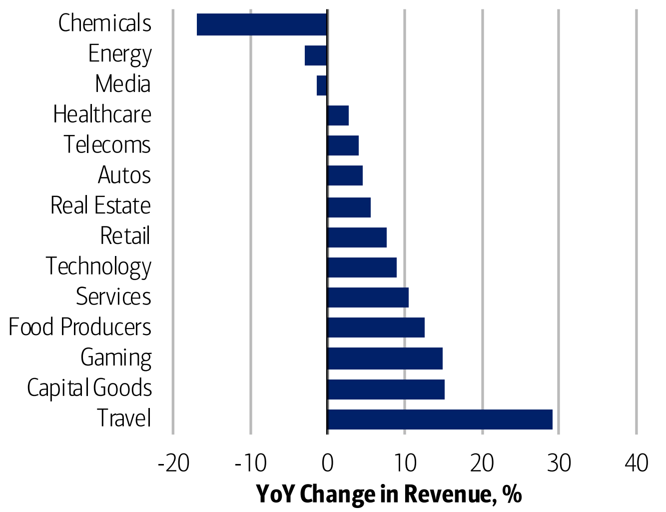
Travel tops revenue growth, while Chemicals lag

In Exhibit 8 and Exhibit 9 below, we further breakdown the YoY revenue and adjusted EBITDA growth by sector. Travel, Gaming and Capital Goods finished on top this quarter in both categories. For Travel and Gaming, pend-up demand post Covid has been the biggest catalyst driving growth, while Capital Goods was buoyed by factors mentioned earlier in this report.

Chemicals has exhibited dismal performance for several quarters due to weak demand and slowdown of manufacturing activity, and fittingly leads all sectors in revenue and ebitda contraction. Energy is the second worst performer but by a large margin. This sector is coming off of a record earnings streak since 2021 due to strong demand, Russia-Ukraine war and the OPEC put.

Exhibit 8: YoY % Revenue changes by sector
Travel is biggest winner; Chemicals is biggest loser



Source: BofA Global Research, Bloomberg, LCD

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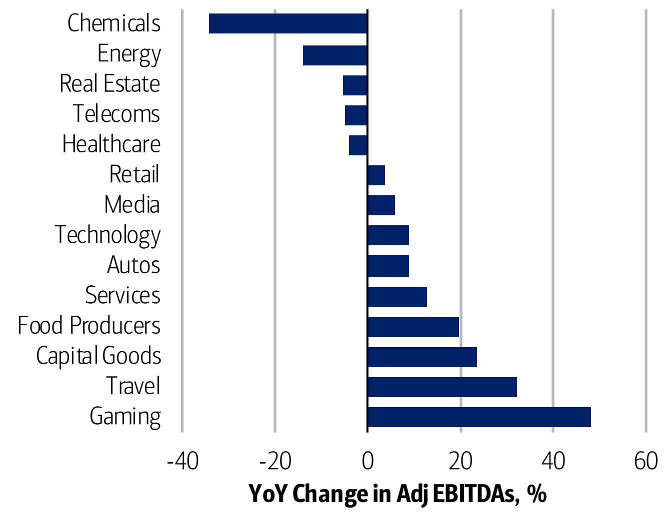
Exhibit 9: YoY % Adjusted EBITDA changes by sector
Gaming and Travel win; Chemicals and Energy lose



Source: BofA Global Research, Bloomberg, LCD

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2Q'23 earnings outlook

Q2 guidance more bullish, but high dispersion underneath

In Exhibit 10 we summarize quarterly revenue guidance that issuers have provided for Q2'23 vs. Q1'23. Here we focus on revenues as opposed to EBITDA due to small sample size of the latter and because we believe end user demand is likely to drive companies' earnings performance in the coming quarters.

Overall, we see a more bullish stance from issuers for Q2. 41% of issuers expect higher revenues in Q2'23 while 23% expect lower revenues. This is in sharp contrast to the 22% and 49% numbers reported last quarter, indicating meaningful improvement in issuer circumstances.

However, this optically rosier picture comes with high dispersion underneath. Most of this guidance improvement is coming from the in-sample BB issuers. In particular, the percentage of bullish issuers in BB1 increased from 9% last quarter to 63% this quarter, the biggest jump among all rating buckets. BB2 and BB3 saw 25% and 20% increase respectively, far exceeding the 5% observed for B1/B2 bucket. On the contrary, for B3/CCCs, the percentage of bullish issuers actually dropped from 50% to 43%. We see a similar story across rating buckets for percentage of issuers holding a bearish view.

As such, lower quality issuers are likely to remain under liquidity pressure in a high cost of debt environment. Since the public loan sample set is heavier on the BB side but B3s are the largest part of the loan index, we conclude overall market level fundamental challenges will remain in the foreseeable future.

Exhibit 10: Quarterly revenue guidance Q2'23 vs Q1'23
Most of the guidance improvement comes from BB issuers

	Q2'23		Q1'23	
Rating	**Bullish**	**Bearish**	**Bullish**	**Bearish**
BB1	63%	13%	9%	55%
BB2	43%	14%	18%	35%
BB3	47%	20%	27%	53%
B1/B2	30%	30%	25%	61%
B3/CCC	43%	29%	50%	17%
Total	**42%**	**22%**	**23%**	**49%**

Source: BofA Global Research, Bloomberg, LCD

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We also track 2023 annual guidance that companies provided in Q4'22 and Q1'23 and summarize this in Exhibit 11. In general issuers remain optimistic about their 2023 outlook, with 72% of issuer bullish on revenue and 63% bullish on EBITDA. It is interesting to note that despite the turnaround of quarterly guidance from bearish-heavy to bullish-heavy as seen above, issuers' annual guidance deteriorated, with 19% being bearish in revenues today vs 14% last quarter.

Exhibit 11: Annual guidance as of Q2'23 vs Q1'23
2023 annual guidance did not change much from Q4'22 to Q1'23

	Revenue		Ebitda	
	Bullish	**Bearish**	**Bullish**	**Bearish**
Q1'23	72%	19%	63%	24%
Q4'22	75%	14%	62%	22%

Source: BofA Global Research, Bloomberg, LCD

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Cost headwinds by sector

We track four major cost headwinds afflicting public loan issuers today and going forward – input costs, FX drag, supply chain issues, and rising interest rates –we summarize this by sector in Exhibit 12 to understand where issues could persist in the future.

Overall, we see a significant decrease in the percentage of issuers reporting cost headwinds across the four major categories. The percentage of issuers likely to be impacted by at least one headwind has dropped to 43% vs 72% in Q4'22. Zooming into each headwind category, issuers highlighting rising input costs dropped from 48% to 17% in Q1 from Q4, FX drag dropped from 33% to 16%, supply chain issues dropped from 27% to only 5%, and rising interest rates dropped 24% to 13%. All these numbers are meaningfully lower compared to what companies reported last quarter, indicating a less challenging cost-related backdrop for issuers in the rest of 2023.

Drilling down further, Food Producers, Capital Goods and Real Estate are the top three sectors where each has close to 70% of constituent issuers facing at least one headwind. Capital Goods also leads sectors in FX drag and supply chain issues, whereas Real Estate tops the table in drag from rising interest rates. Gaming has the highest proportion of issuers facing challenges in rising input costs. Technology has the second highest percentage of issuers reporting headwinds from FX given their high foreign sales exposure.

On the positive side, Energy, Chemicals and Telecoms emerged as the least impacted sectors this quarter, with no more than 20% companies reporting headwinds under each individual category. The main themes in this earning season as mentioned by the C-suites from these sectors have been lesser supply chain and logistic disruptions, as well as improving component and labor availability, which contribute to a more stable pricing environment and better price cost positions for the issuers.

Exhibit 12: Cost headwinds reported by issuers across sectors

There is a significant decrease in the percentage of issuers reporting headwinds across the four major categories

Sector	Total Issuers	Input cost		FX Headwinds		Supply chain		Rising interest rate		At Least One		
		Count	%	Count	%	Count	%	Count	%	Count	%	%change
Metals	2	0	0%	0	0%	1	50%	1	50%	2	100%	25%
Food Producers	10	4	40%	2	20%	0	0%	0	0%	7	70%	3%
Capital Goods	13	2	15%	5	38%	3	23%	3	23%	9	69%	-31%
Real Estate	18	2	11%	1	6%	0	0%	10	56%	12	67%	4%
Financials	15	1	7%	0	0%	1	7%	7	47%	9	60%	10%
Services	19	5	26%	5	26%	0	0%	2	11%	11	58%	-15%
Autos	11	4	36%	3	27%	2	18%	2	18%	6	55%	-45%
Transportation	2	1	50%	0	0%	0	0%	0	0%	1	50%	-50%
Travel	18	5	28%	2	11%	1	6%	2	11%	8	44%	-29%
Gaming	7	3	43%	0	0%	0	0%	0	0%	3	43%	-43%
Healthcare	35	8	23%	6	17%	1	3%	1	3%	15	43%	-35%
Retail	20	6	30%	4	20%	0	0%	3	15%	8	40%	-27%
Technology	48	0	0%	14	29%	3	6%	3	6%	18	38%	-39%
Utilities	3	1	33%	0	0%	0	0%	0	0%	1	33%	0%
Cable/Media	27	4	15%	1	4%	0	0%	3	11%	8	30%	-45%
Telecoms	12	2	17%	0	0%	1	8%	0	0%	2	17%	-53%
Chemicals	9	0	0%	1	11%	0	0%	0	0%	1	11%	-66%
Energy	12	1	8%	0	0%	0	0%	0	0%	1	8%	-20%
Packaging/Paper	2	0	0%	0	0%	0	0%	0	0%	0	0%	-100%
Total	**283**	**49**	**17%**	**44**	**16%**	**13**	**5%**	**37**	**13%**	**122**	**43%**	**-29%**

Source: BofA Global Research, Bloomberg, LCD

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Looking at the QoQ change in the proportion of issuer facing at least one headwind across sectors, Chemicals excels with a 66% decrease, the largest among all sectors. Issuers from this sector have seen significant improvements in raw material costs and supply chain issues, which explains the sector's outperformance in EBITDA presented in Exhibit 5. Autos also saw 45% incremental improvement. In contrast, Financials, Food Producers and Real Estate are the only sectors that have positive changes in the percentage of issuers facing at least one headwind, though the magnitude of increase is low with Financials at 10% and the other two sectors at single digits.

Demand scorecard by sector

With cost pressures easing, the next shoe to drop in the fundamental story is revenues. To understand topline pressures Exhibit 13 represents a demand scorecard we created by parsing companies' earnings presentations and transcripts to collect information related to demand trends observed by issuers in the quarter and going forward. We assign a numeric score 1 to issuers seeing a softening demand, a score 2 to moderate demand, and a score 3 to strong demand. The final sector score is the average of all the individual issuer scores within the sector. The higher the score is, the stronger demand issuers in general see in the sector. Anything below 2 reflects softening demand.

Healthcare and Autos top the demand scorecard with at least 40% issuers seeing strong demand and no issuer facing softening demand. These two sectors have had pent-up unfulfilled demand due to previous supply chain issues and are on their way to recovery. Travel is still being buoyed by strong post-pandemic demand and the return of business travel. The upcoming summer season is also a catalyst that boosts the sector to its third rank on the scorecard.

On the other hand, Real Estate is showing the mist demand challenges among sectors. Rising interest rates have put pressure on consumer sentiment and affordability, which in turn has led to declines in existing home sales and new constructions. Retail and Services are also seeing weaker demand relative to other sectors as consumers start to gradually feel the pain of historic high inflation and become less willing to spend, especially on discretionary goods and services.

Exhibit 13: Demand scorecard by sector

Healthcare sees the strongest demand from issuers reported whereas Real Estate ranks the lowest

Sector	Issuers reported	Softening	Moderate	Strong	Score
Healthcare	13	0	7	6	2.46
Autos	5	0	3	2	2.40
Travel	14	2	7	5	2.21
Telecoms	7	1	5	1	2.00
Gaming	5	0	5	0	2.00
Utilities	3	1	1	1	2.00
Cable/Media	12	6	1	5	1.92
Technology	40	6	33	1	1.88
Financials	9	4	3	2	1.78
Energy	8	3	4	1	1.75
Capital Goods	11	3	8	0	1.73
Food Producers	9	4	4	1	1.67
Chemicals	6	2	4	0	1.67
Services	14	5	9	0	1.64
Retail	15	8	6	1	1.53
Transportation	2	1	1	0	1.50
Real Estate	14	13	1	0	1.07
Metals	2	2	0	0	1.00
Packaging/Paper	1	1	0	0	1.00
Total	**190**	**62**	**102**	**26**	**1.81**

Source: BofA Global Research, Bloomberg, LCD

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Challenges and opportunities

Though declining costs paint an optimistic picture for Chemicals and Energy costs going forward, the biggest challenge for them is their revenues. As seen in Exhibit 8 and Exhibit 9, these two sectors have posted the worst performance in ebitda and revenue growth in Q1 with demand unlikely to change materially going forward as seen in the demand scorecard.

In contrast, Autos have done handsomely on both metrics- not only has the sector's cost headwinds shrunk by 45%, it also registers in the revenue expansionary territory in the scorecard, setting it up well for Q2. Healthcare is seeing the most incremental strength in demand, but still has reasonable labor and wage headwinds. With wages softening, there is potential for improvement there.

On the flip side, Real Estate has downsides in both supply and demand. It is one of the only three sectors that saw a net increase in cost headwinds, and also scores the worst in terms of demand going forward. Financials and Food producers are also dogged by similar circumstances presaging fundamental challenges ahead.

Market response to issuer earnings and guidance

Price action post earnings

Next we dissect loan price action immediately post company announcement of earnings or guidance revisions to understand the evolving investor reaction function. Today the reward for beating estimates and guiding upwards is limited, whereas the penalty for missing estimates and guiding downward is higher.

Exhibit 14 shows the 1-day and 3-day average loan price moves of companies immediately after their Q1 earnings announcement. We see how loans of issuers with a revenue/EBITDA beat barely get rewarded, but they get punished if the issuers miss. On average loan prices dropped 0.17pt 1 day after reporting a revenue miss, and 0.15pt after reporting an EBITDA miss. On a 3-day horizon, the price drop for missed revenue is slightly higher at 0.19pt compared to 1-day, whereas response to missed EBITDA is more extreme at 0.3pt, 2x the 1-day price drop. Also, as one would expect, price action is generally more magnified when companies beat/miss on both metrics simultaneously.

Exhibit 14: Average loan price moves of issuers post earnings beat/miss
Earnings miss causes significant price moves while beats barely moves price anywhere

	Revenue		EBITDA		Both	
Avg Price Chg (pts)	**Beat**	**Miss**	**Beat**	**Miss**	**Beat**	**Miss**
1 Day	-0.03	-0.17	-0.01	-0.15	0.03	-0.25
3 Day	0.01	-0.19	-0.03	-0.30	0.05	-0.33

Source: BofA Global Research, Bloomberg, LCD, Markit

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Price action post guidance revisions

Exhibit 15 shows the price actions post guidance revision. Similar to what we see in Exhibit 14, price reactions here also skew towards penalizing more than rewarding. On average, there was a -0.13pt 1-day decline and -0.24pt 3-day decline for issuers that revised down the revenue guidance. Price actions are even more amplified when it comes to EBITDA guidance, where issuers on average saw a -0.5pt decline 1 day after a downward revision and a -0.54pt decline 3 days after.

Exhibit 15: Average loan price moves of issuers post guidance revision
Price reactions again skew towards penalizing more than rewarding

	Revenue		EBITDA	
Avg Price Chg (pts)	**Up**	**Down**	**Up**	**Down**
1 Day	0.01	-0.13	-0.01	-0.50
3 Day	0.06	-0.24	0.00	-0.54

Source: BofA Global Research, Bloomberg, LCD, Markit

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Market Technicals

In the three weeks ending May 26th, demand for loans totaled $9.6bn, a decline from the $14bn of demand seen in the prior three weeks ending May 5th. This decline was mainly driven by a $3.1bn decrease in coupon payments between the two three-week periods, while CLO creation dropped $0.7bn and retail flows also decreased $0.6bn. YTD net demand has outweighed supply by $82.1bn versus the $31.7bn of net demand seen this time last year. Note that this table doesn't account for demand channels such as SMAs (Separately Managed Accounts) and alternate asset vehicles.

Exhibit 16: Weekly Technicals ($mns)
Demand net of supply is at $82.1bn

	YTD as of 5/26/2023	**5/26/23**	**5/19/23**	**5/12/23**	**5/5/23**
Retail flows (a)	-13,777	-690	-1,028	-584	-215
CLO creation (b)	45,759	1,263	2,941	1,891	2,457
Coupons (c)	47,442	1,218	2,760	1,867	4,984
Demand (a+b+c)	79,423	1,791	4,672	3,174	7,226
Issuance Ex-repricings (d)	87,960	2,415	3,294	3,775	2,750
Repayments (e)	90,635	7,766	3,051	8,699	1,511
Supply (d-e)	-2,675	-5,351	243	-4,924	1,239
Demand net of Supply	82,098	7,142	4,429	8,098	5,987

Source: BofA Global Research, LCD

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Rating Actions

In the past month, we have seen rating actions across 35 distinct issuers. A total of 25 issuers were downgraded by 37 notches ($23.2bn total notional) and 10 issuers upgraded by 11 notches ($9.9bn total notional). Of the downgrades, the $770mn L +250 loan from CBS Radio and $574mn L+425 loan from Nautilus Power LLC were downgraded by three notches, the most among issuers. Of the upgrades, Merlin Entertainments Group had two loans upgraded by one notch, totaling $1.3bn.

In terms of sectors, Technology and Financials each contributed 30% and 13% of total downgrades in the past month by notional respectively. Of the upgrades, by notional amount, 27% was in Transportation followed by 15% in Financials and 14% in Energy. Seven distinct sectors experienced upgrades while thirteen distinct sectors experienced downgrades. Upgrades were outweighed by downgrades by $13.2bn.

Exhibit 17: Recent downgrades and upgrades
There was net downgrade activity of $13.3bn

Issuer	Ticker	Margin	Notional	Maturity	Sector	Rating Action	Current Rating	Previous Rating	Notches
CBS Radio	CBSR	250	770	11/18/2024	Media	Downgrade	CCC	B	-3
Nautilus Power LLC	ESSPWR	425	574	5/16/2024	Utilities	Downgrade	CCC	B	-3
Cincinnati Bell Inc	CBB	325	650	11/22/2028	Telecoms	Downgrade	B-	B+	-2
National Amusements Inc	NATAMU	250	300	5/8/2025	Media	Downgrade	B	BB-	-2
Shutterfly Inc	SFLY	500	890	9/25/2026	Retail	Downgrade	CC	CCC	-2
American Beacon Advisors	AMEBEA	375	306	4/30/2024	Financials	Downgrade	B-	B	-1
Arcis Golf LLC	ACSGLF	425	300	11/24/2028	Travel	Downgrade	B+	BB-	-1
Atlantic Aviation Corporation	ATLAVI	300	1,350	9/22/2028	Travel	Downgrade	B	B+	-1
Atlantic Aviation Corporation	ATLAVI	400	325	9/22/2028	Travel	Downgrade	B	B+	-1
Careismatic Brands	STAPAR	325	605	1/6/2028	Retail	Downgrade	CCC+	B-	-1
Catalent Pharma Solutions	CTLT	200	1,000	2/22/2028	Healthcare	Downgrade	BB+	BBB-	-1
Cyxtera Technologies	COLBUY	300	815	5/1/2024	Telecoms	Downgrade	CCC	CCC+	-1
Eagle-Picher Industries Inc	VECTRA	325	425	3/8/2025	Technology	Downgrade	CCC+	B-	-1
Focus Financial Partners LLC	FOCS	325	1,760	6/30/2028	Financials	Downgrade	B+	BB-	-1
Focus Financial Partners LLC	FOCS	250	650	6/30/2028	Financials	Downgrade	B+	BB-	-1
Hearthside Food Solutions LLC	HEFOSO	300	1,145	5/23/2025	Food Producers	Downgrade	CCC+	B-	-1
Hearthside Food Solutions LLC	HEFOSO	400	515	5/23/2025	Food Producers	Downgrade	CCC+	B-	-1
Hearthside Food Solutions LLC	HEFOSO	500	100	5/23/2025	Food Producers	Downgrade	CCC+	B-	-1
Imperva	IMPV	400	760	1/12/2026	Technology	Downgrade	CCC+	B-	-1
Kofax	KOFAX	525	1,346	7/20/2029	Technology	Downgrade	B-	B	-1
KREF Holdings X	KREFHO	350	298	9/1/2027	Financials	Downgrade	B+	BB-	-1
LaserShip, Inc.	LASSHI	450	675	5/7/2028	Transportation	Downgrade	CCC+	B-	-1
Mold-Rite Plastics LLC	MOLRIT	375	420	10/4/2028	Packaging/Paper	Downgrade	CCC+	B-	-1
Peraton	PERCOR	375	2,145	2/1/2028	Technology	Downgrade	B	B+	-1
Pitney Bowes	PBI	400	450	3/17/2028	Services	Downgrade	BB+	BBB-	-1
Plaskolite	PLASKO	400	645	12/15/2025	Chemicals	Downgrade	B-	B	-1
Rackspace Hosting Inc	RAX	275	2,300	2/15/2028	Technology	Downgrade	CCC+	B-	-1
Styron	TSE	250	750	5/3/2028	Chemicals	Downgrade	B	B+	-1
Styron	TSE	200	697	9/6/2024	Chemicals	Downgrade	B	B+	-1
Trilliant Food and Nutrition	TRFONU	350	270	9/30/2024	Food Producers	Downgrade	CCC+	B-	-1
American Traffic Solutions	AMETRA	325	650	3/24/2028	Transportation	Upgrade	BB	BB-	1
Apergy Corporation	CHX	325	625	6/7/2029	Energy	Upgrade	BBB	BBB-	1
Aristocrat Leisure Ltd	ALLAU	225	500	5/24/2029	Media	Upgrade	BBB-	BB+	1
Avantor Performance Materials Inc	AVTR	225	1,172	11/8/2027	Healthcare	Upgrade	BBB-	BB+	1
Cinemark USA Inc	CNK	175	660	3/31/2025	Media	Upgrade	BB	BB-	1
Medallion Midland Acquisition	MEDMID	375	735	10/18/2028	Energy	Upgrade	B+	B	1
Merlin Entertainments Group	MERLLN	325	1,162	11/12/2026	Travel	Upgrade	B+	B	1
Merlin Entertainments Group	MERLLN	325	173	11/12/2026	Travel	Upgrade	B+	B	1
PowerSchool Group LLC	SEVACQ	325	775	8/1/2025	Technology	Upgrade	B	B-	1
The Advisor Group	ADVGRO	450	1,485	7/31/2026	Financials	Upgrade	B	B-	1
XPO Logistics	XPO	175	2,003	2/24/2025	Transportation	Upgrade	BBB-	BB+	1

Source: LCD

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Return Performance

Loans in the LCD index returned -0.12% in the three weeks ending May 26th, down from the 0.22% cumulative return seen in the prior three weeks ending May 5th. CCC loans were the best performer during the three-week window, returning 53bps, outperforming both BBs (-6bps) and Bs (-29bps). Across asset classes, YTD loan returns are at 4.1%, HY YTD returns are at 3.7% and IG YTD returns are at 2.9%.

Exhibit 18: Total Returns (price plus coupon return) bps
Loans returned -0.12% in the week ending May 26th

	5/26/2023	5/19/2023	5/12/2023	5/5/2023
All Loans	-13	1	0	-11
BB	-5	2	-4	-3
B	-23	-6	0	-18
CCC	22	41	-10	24
2nd Lien	23	-29	35	-21
LL100	-32	-8	-3	-13

Source: BofA Global Research, LCD

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Primary Activity

YTD global and US issuance totals $98.1bn and $88bn, with a total of 175 and 135 loans launched respectively in the primary market thus far. In comparison, YTD '22 brought in $174bn global issuance across 242 loans, and $152bn US issuance across 200 loans. In total, YTD 2023 Global and US issuance trails YTD 2022 issuance by 44% and 42% respectively. In terms of the composition of the types of deals financed in the past 30 days, 61% by notional amount was for refinancing, followed by 19% for acquisition and 13% for LBO.

Exhibit 19: Recent new loan issues
The largest recent new issue came from KinderCare Education LLC's $1.33bn deal

Launch Dt	Issuer	New Inst. Money	Moody's	S&P	ABL	Cov Lite	Proceeds	Sector	Country
5/24/2023	Emerald Expositions Holdings	415	B2	B	No	YES	Refinancing	Services & Leasing	United States
5/23/2023	Affidea Kft	170	B2	B		YES	Acquisition	Healthcare	Netherlands
5/23/2023	Phinia Inc	500	Ba1	BB+	No	YES	Acquisition	Automotive	United States
5/23/2023	UKG Inc	400	B1	B-	No	YES	Acquisition	Computers & Electronics	United States
5/22/2023	Entertainment Partners	150	B1	B+	No	YES	Acquisition	Services & Leasing	United States
5/22/2023	Inmar Inc	950	B3	B-	No	YES	Refinancing	Services & Leasing	United States
5/18/2023	Pediatric Associates LLC	100	B2	B	No	YES	Acquisition	Healthcare	United States
5/16/2023	Golden Entertainment	400	Ba3	BB	No	YES	Refinancing	Gaming & Hotel	United States
5/16/2023	Protective Industrial Products	150	B2	B-	No	YES	Acquisition	Manufacturing & Machinery	United States
5/16/2023	Solenis	500	B3	B-	No	YES	Acquisition	Chemicals	United States
5/16/2023	TTM Technologies Inc	350	Ba1	BB+	No	YES	Refinancing	Computers & Electronics	United States
5/15/2023	Wyndham Hotels & Resorts	1,144	Ba1	BBB-	No	YES	Refinancing	Gaming & Hotel	United States
5/15/2023	Cinemark USA Inc	650	Ba2	BB	No	YES	Refinancing	Entertainment & Leisure	United States
5/11/2023	IMA Financial Group	200	B3	B	No	YES	Acquisition	Insurance	United States
5/11/2023	MoneyGram International Inc	500	B2	B	No	YES	LBO	Services & Leasing	United States
5/10/2023	IU Group NV	70	NR	NR		YES	Refinancing	Computers & Electronics	Germany
5/9/2023	KinderCare Education LLC	1,325	B2	B	No	YES	Refinancing	Services & Leasing	United States
5/9/2023	Modulaire Group	150	B2	B		YES	Refinancing	Building Materials	United States
5/9/2023	Cvent	500	B2	B-	No	YES	LBO	Computers & Electronics	United States
5/8/2023	Alterra Mountain Company	500	B1	B+	No	YES	Refinancing	Entertainment & Leisure	United States
5/8/2023	Atlantic Aviation Corporation	750	B2	B	No	YES	Dividend	Aerospace & Defense	United States
5/4/2023	Focus Financial Partners LLC	500	B1	B+	No	YES	LBO	Services & Leasing	United States
5/4/2023	Ryman Hospitality Properties Inc	500	Ba3	BB-	No	YES	Refinancing	Real Estate	United States
5/3/2023	Aventiv Technologies	700	B3	B-	No	NO	Refinancing	Telecom	United States
5/3/2023	NGPL PipeCo LLC	90	Ba3	B+	No	NO	Dividend	Oil & Gas	United States

Source: LCD

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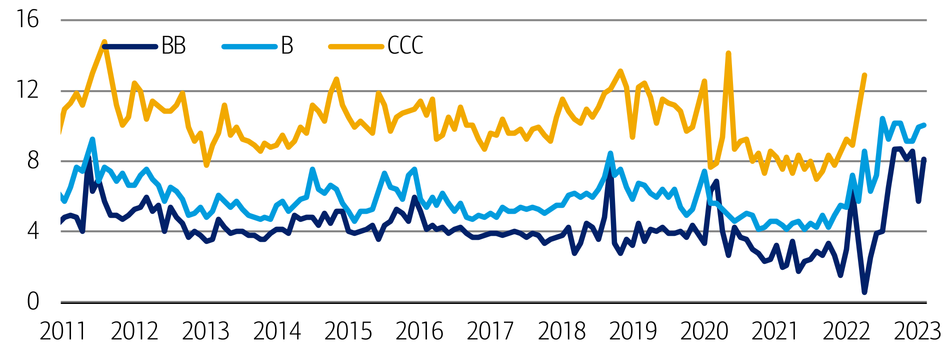
Exhibit 20: Average new issue yields by month
BB and B currently yield 8.2% and 10.1% respectively while there is not enough sample size for CCC



Source: BofA Global Research, LCD

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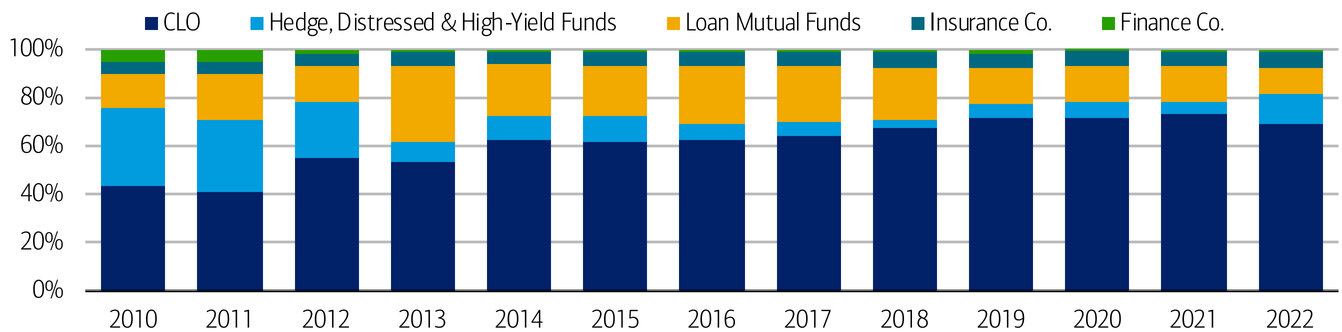
CLO Update

CLOs are the largest buyers of loans and today represent close to 70% of the primary demand within this asset class. Loan retail funds are the second largest buyers – their participation has shrunk since the peaks of 2013 but has been increasing recently, coinciding with the rate move. At the same time, hedge, distressed & high yield funds have played a lesser role in the primary market

Exhibit 21: Primary institutional investor market by type
CLOs make up 69% of the primary institutional market



Source: BofA Global Research, LCD

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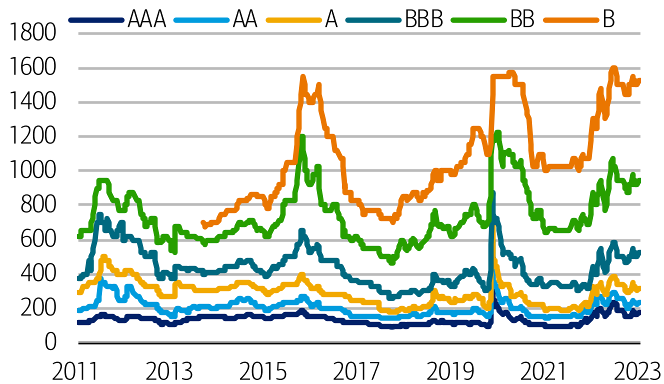
Exhibit 22 shows CLO spread levels by tranches. CLO arbitrage is a widely followed statistic in the loan market, and represents the theoretical spread that managers can capture by issuing CLOs. Exhibit 23 compares CLO asset (loan) spreads to the weighted average spreads of CLO liabilities. The difference between these two values is the theoretical arbitrage and represents the current attractiveness of creating new CLOs. A higher arbitrage number means a greater incentive for managers to bring new CLOs to the market, and thus provide incremental loan demand, and vice versa. Importantly, this arbitrage calculation puts more weight on the primary loan market.

Exhibit 22: US CLO 2.0/3.0 indicative spread level (bps)
Secondary CLO spreads have increased materially



Source: BofA Global Research

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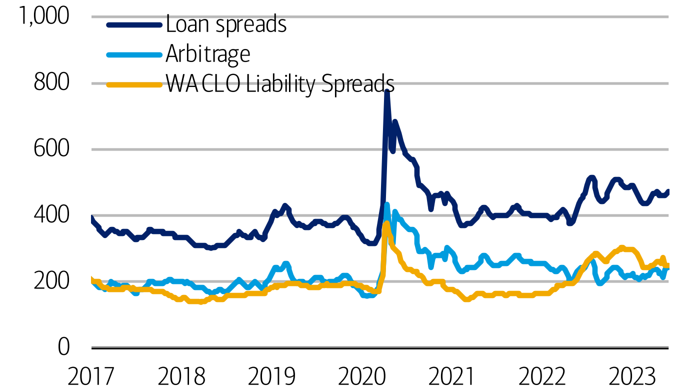
Exhibit 23: CLO Arbitrage (bps)
CLO arbitrage has been declining



Source: BofA Global Research, LCD
Arbitrage: Loan asset spread – WA CLO spread X Liability %
Loan spreads (running avg 4wks): 60% sec BB, 40% sec B
Until 3/4/22 Loan spreads (running avg 4wks): 50%new issue B+/B, 30% pri BB, 10% sec BB, 10% sec B

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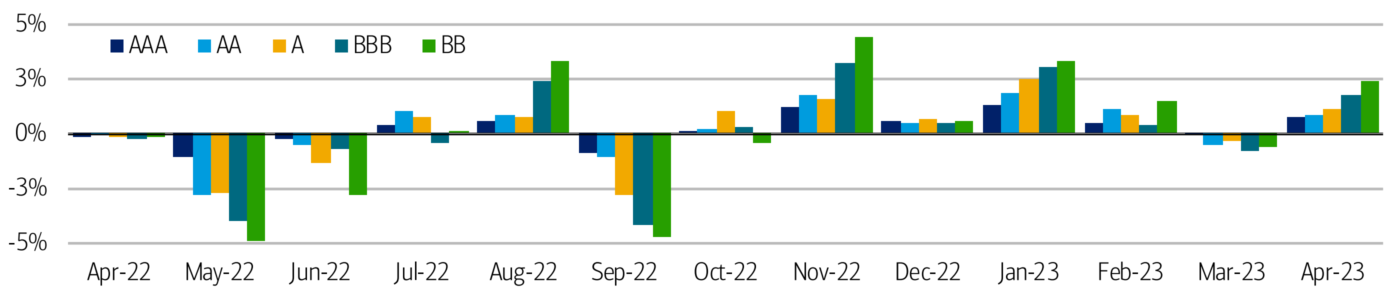
Exhibit 24 shows monthly CLO returns as defined by the Palmer Square CLO index (price plus coupon returns).

Exhibit 24: Monthly CLO 2.0 returns by rating
CLOs returned 0.9% in April



Source: BofA Global Research, PriceServe, Palmer Square CLO Indices, Bloomberg

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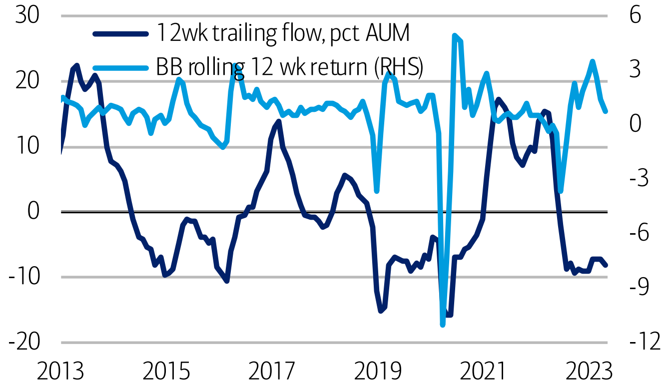
The following charts show demand trends within the loan market, correlated with returns within rating buckets. Exhibit 25 shows a measure of retail flows (12 week trailing retail flows as a percentage of outstanding AUM) vs. monthly BB Loan total returns, while Exhibit 26 depicts monthly CLO issuance vs. monthly B Loan total returns.

Exhibit 25: BB performance vs Loan retail flows
12wk trailing flow % of AUM with BB rolling 12k return



Source: LCD, EPFR Global

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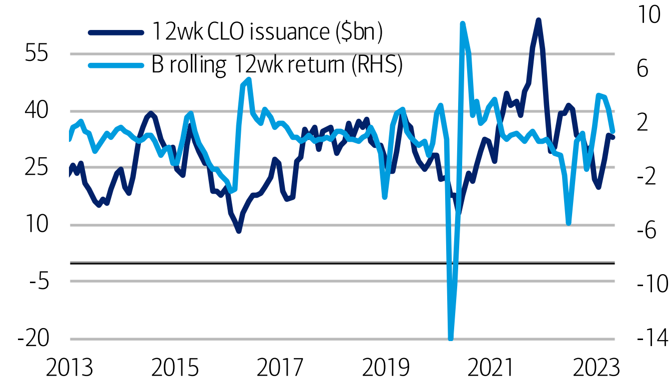
Exhibit 26: B performance vs CLO creation
12wk CLO issuance with B rolling 12wk return



Source: LCD, EPFR Global

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