Collateral Thinking

The risk of contagion

28 February 2020

Leveraged Loan Strategy
United States

BofA Data Analytics

Neha Khoda
Credit Strategist
BofAS
+1 646 855 9656
neha.khoda@bofa.com

Angelina Xu
Credit Strategist
BofAS
+1 646 855 6274
angelina.xu@bofa.com

Top of the stack

The spread of COVID-19 has added to existing macroeconomic headwinds, and downside risks have increased. Leveraged credit ETFs have seen record redemptions, our economics team has cut the global growth forecast to the lowest since 2009, and the rates market is pricing in three rate cuts. We think the macroeconomic backdrop is likely to get worse before it gets better. As such we think loan spreads could widen out to 600bps in the near term. Headwinds for the loan market come from the potential of a) muted corporate earnings b) retail outflows c) possible contagion from other asset classes.

We think it's prudent to lighten up on riskier paper with the intention of pivoting towards select BB and high single-B names that fall to attractive valuations in sympathy. The proportion of loans trading par and above has swiftly dropped from 60% in January to 35% today, with more than half that distance covered just in the last 3 days. We think this trajectory is likely to continue, likely creating opportunities to buy over the next few weeks. However, we prefer layering into higher quality paper first as B3 and below paper could fall before becoming attractive again.

Our 500bps spread target remains intact because of our expectation that the economic impact of the disease will be transitory, leading to a meaningful rebound once we are over the hump. Given the fluid nature of the situation, we remain in a wait and watch mode, and may revisit our numbers should economic disruption and the ensuing earnings decline appear to be longer lasting or difficult to reverse.

Market technicals

Over the last four weeks, cumulative demand for loans has totaled $10.4bn (vs $6.2bn for the previous four-week period), signaling a small pickup in the market. New issuance has totaled $52.3bn last four weeks. On the YTD basis, supply has outweighed demand by $36.5bn as of Feb 21st. Retail funds have swung to outflows after temporary inflows earlier this year, as investors have become more cautious.

Performance

Loans in the LCD index returns were flat during the last four weeks. Lower quality has outperformed within rating categories, highlighted by a 29bp gain within CCCs during the week ending in Feb 14th, though they have come under pressure since then. The most liquid loans as per the LCD Leveraged Loan 100 benchmark have returned a cumulative -21bps during the last four weeks, underperforming the broader All Loans index.

Primary market activity

Impacted by the increased uncertainty and volatility in the global market, primary market activity slowed down in the past few weeks. MTD issuance is at $39.4bn, posting a 40% decrease compared to January issuance of $64.7bn. YTD, half of the total new money was raised for refinancing ($51.0bn), while issuances for acquisition-related financing (27%) and LBO (19%) also increased.

Table 1: Loan performance

Index	Level	1wk Δ	2wk Δ	YTD Rtn
All Loan	96.3 pts	-0.4	-0.4	+0.3%
BBs	99.0 pts	-0.4	-0.4	-0.0%
Bs	97.4 pts	-0.4	-0.4	+0.5%
CCCs	82.6 pts	-1.1	-0.8	+0.7%

Source: S&P LCD

Table 2: HY performance

Index	Level	1wk Δ	2wk Δ	YTD Rtn
US HY	427 bps	+70	+68	+0.0%
BBs	265 bps	+61	+60	+0.3%
Bs	434 bps	+82	+76	-0.1%
CCCs	1066 bps	+82	+85	-0.4%

Source: BofA Global Research

Table 3: Fund flows ($mn)

Asset	1wk	2wk	YTD	LTM
Loans	-230	-118	-30,616	-35,446
US HY	-155	+2,239	+11,203	+17,692
US IG	+6,953	+7,808	+186,886	+327,965

Source: EPFR Global

Refer to important disclosures on page 13 to 15.
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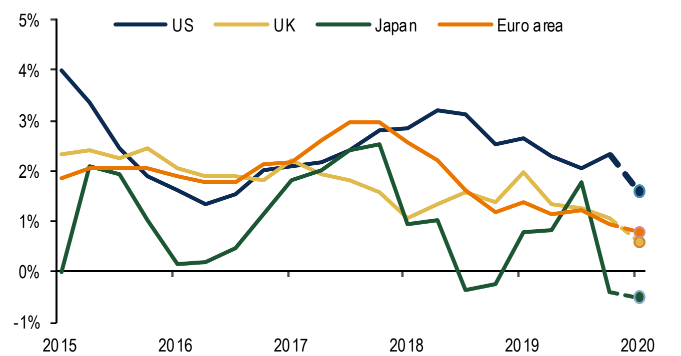
Timestamp: 28 February 2020 07:20AM EST

Top of the stack

The loan market has been hovering in +/- 20bps range of our 500bps target for the last 11 weeks. Now with COVID-19 adding to a range of existing macroeconomic headwinds, downside risks have noticeably increased. There have been major redemptions in the leveraged ETF space with both HYG and SRLN posting record one-day outflows this past week, our economics team has downgraded their global growth forecast to 2.8%, the lowest since 2009 (Chart 1), and the rates market is already pricing in 3 rate cuts (Chart 2).

Chart 1: Fading GDP growth, % yoy



Source: BofA Global Research, BEA, UK Office of National Statistics, Cabinet Office of Japan, Statistical Office of the European Communities

Chart 2: Markets pricing in 3 rate cuts over next 12 months

Source: Bloomberg

We think the macroeconomic backdrop is likely to deteriorate further before bouncing back. As such we think that loan spreads may widen out to as much as 600bps from here, before stabilizing in the back half of the year. We are not changing our spread target because of our expectation that the economic impact of the disease will be transitory, which could lead to a meaningful rebound once we are over the hump. Given the fluid nature of the situation, we remain in a wait and watch mode, and may revisit our numbers should economic disruption and the ensuing earnings decline appear to be longer lasting or difficult to reverse.

The whack-a-mole economy

Our economy cannot catch a break. We spent a better part of this business cycle in a soft patch, and finally when green shoots began to emerge globally late last year, we have been dealt with a series of economic blows. First, it turns out that the damage to business confidence from years of trade war uncertainty was deeper than realized. Further, Boeing's halt in production of its 737 Max model has negatively impacted global supply chains and is depressing equity market earnings; US-Iran tensions are still simmering; and political volatility is likely to remain elevated in an election year. Now, in the wake of the rapidly evolving Coronavirus situation, we have a new concern. Though China spread seems to be plateauing, transmissions in South Korea and Europe are on the rise. The discovery of clusters of community spread (without an epidemiological link and hence untraceable) in new countries, has made the situation more concerning.

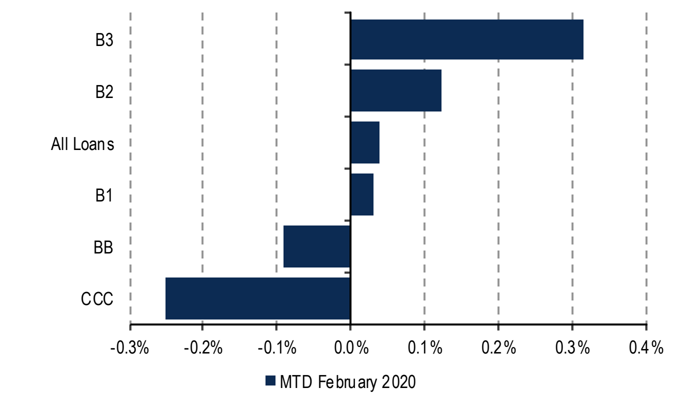
For those expecting an instant snap back after the health crisis passes, China serves as a good example, in our view. Although the Chinese government has been encouraging the resumption of normal activities, the recovery since the extended Lunar New Year holiday has been very slow, and it may be a few months before normalcy returns. Given that many countries around the world, including the US, are seemingly at the very beginning of the COVID-19 wave, it could logically keep financial markets anxious. In a nutshell, we think things are likely to get worse before they get better.

The keyword here is *better*. Our base case still remains that the global economy will recover from the Coronavirus jolt, albeit our Economists now believe that it will play out in a "U-shape" rather than a "V-shape". The underlying US economy remains on a strong footing and has the capacity to withstand a few hiccups. In January, core CPI grew 2.5% YoY, the economy added 225k jobs, average hourly earnings rose by 3.1% yoy and labor force participation rate improved to 63.4%, suggesting a strong consumer and labor force. Our Econ team's big-data analysis of the US business cycle suggests that the aggregate performance of the US economy has been akin to the country being in a "Boom" since November 2019, though that is likely to dampen going forward. Note that while the pace of recovery may have changed, the direction has not. The big question is whether or not the economic damage inflicted through the duration of the virus outbreak will be reversible. For now the answer is a Yes, but we'll know more over the next few weeks.

Loan valuations

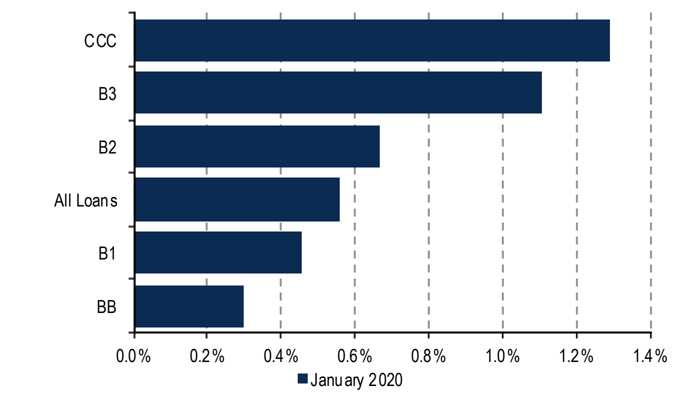
Influenced by the changing macro backdrop, loan spreads which had been grinding tighter since Dec, have taken a breather this month. Current loan 2yr DM is 520bps, ~30bps off the tights reached a month ago. In terms of ratings, while January saw investors reaching down the credit spectrum for yield, riskier loans are lagging as investors are becoming more cautious (Chart 3). The monthly return profiles below show that divide.

Chart 3: MTD February return profile



Source: BofA Global Research, S&P LCD, ICE Indices

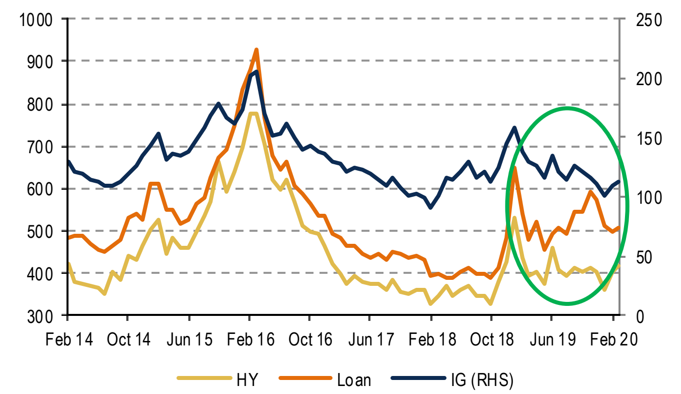
Chart 4: January return profile



Source: BofA Global Research, S&P LCD, ICE Indices

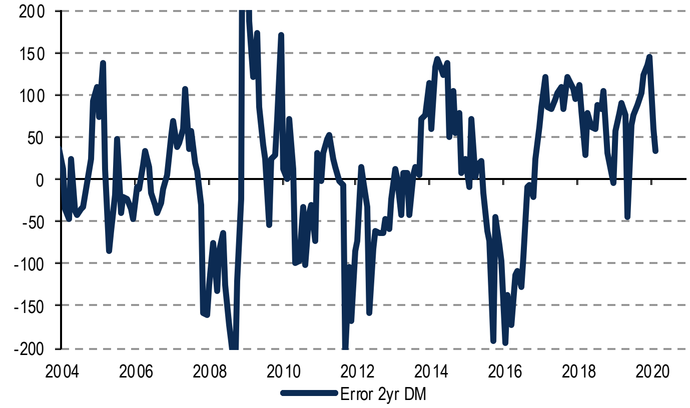
In terms of relative value, since loans did not rally to the extent that HY and IG did over the last 12 months (Chart 4), they have lesser to lose to begin with. While loans have widened 8% (40bps) since their Jan tights, the retracement in HY and IG has been comparatively starker. Currently at 115bps, IG has widened more than 10% from the 2019 year end tights (101bps in December) and HY has retraced over 15% (360bps in December, 427bps currently).

Chart 4: Loans did not rally as much as HY and IG in 2019



Source: BofA Global Research, S&P LCD, Bloomberg

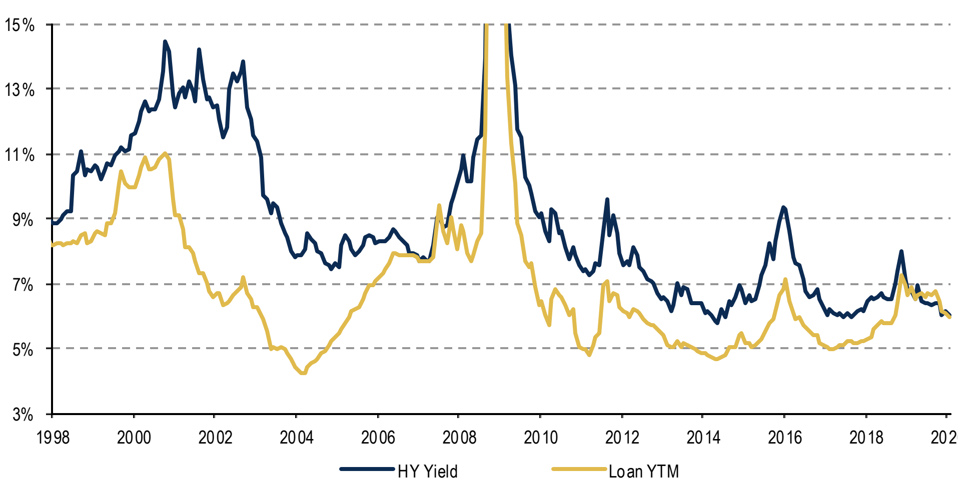
Chart 5: Loan-bond relative value has collapsed to 34bps



Source: BofA Global Research, S&P LCD

Given the large move in HY spreads, the large dislocation that our relative value model pointed to at the end of last year has now been corrected. Chart 5 shows the difference between the actual and fair-value loan spreads estimated based on their long-term relationship with HY spreads (error term). The higher the error term, the more undervalued loans are vs HY bonds. This metric has decreased from 150bps in December 2019 to 34bps currently, indicating that the dislocation has rapidly closed, bringing both asset classes more in line. Looking at yields, HY bond yields have ticked up slightly while loan YTM has edged down, bringing the two yields to ~6%, correcting another anomaly that had been existing since June 2019, only the 2nd time in history that this has happened.

Chart 6: Loan yields similar to HY now



Source: BofA Global Research, S&P LCD, ICE Indices

On an absolute basis, we think loan spreads will remain under pressure in the near term, especially in the B3 and CCC space. While our long-term spread target remains at 500bps, we think loan spreads could widen out to touch 600bps in the interim. Headwinds for the loan market come in the form of a) potentially muted corporate earnings growth in Q1 and Q2, b) retail outflows, c) contagion from other asset classes.

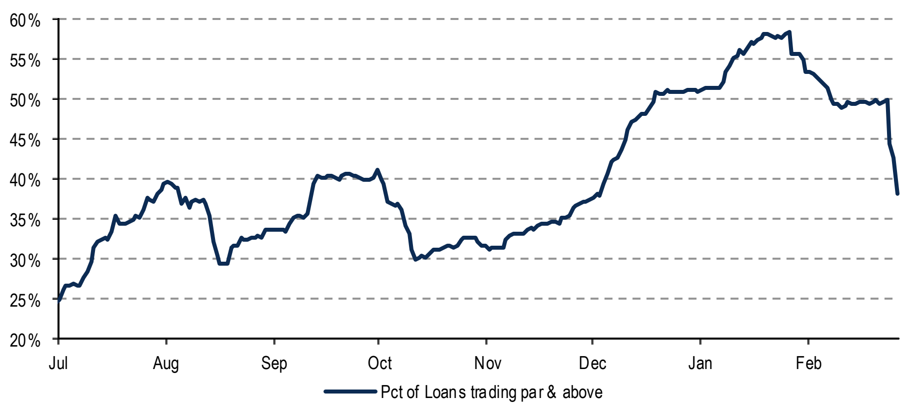
We have addressed the first risk earlier on. On the subject of technicals, ETFs have reacted fiercely, and given enough time, potentially they could lead to outflows from open end funds as well. Expectations of rate cuts have already reached -75bps, and chances are that a portion of that will be met once the true extent of economic impact becomes apparent to the official sector. This will further dampen demand from the yield-sensitive retail community. Granted that retail plays a much smaller role in the loan market today, but there aren't many replacement options given that Japanese money is still sitting out of the market. Finally, there is also a significant spillover risk from other asset classes such as equities and HY that have a higher beta to loans, and have registered larger corrections from their peaks.

What we think here

Going forward, we remain in a wait and watch mode. The Coronavirus situation is a wild card. Its contagiousness combined with the ability to spread in a stealth mode (without patients being symptomatic) poses a serious threat of disrupting everyday lives in the US, should the government take extreme measures in a proactive or reactive manner. At the same time there is a chance that as more becomes known about the virus (mortality rate, incubation period, medical intervention), concerns alleviate and the ultimate impact softens. We think it will take some time for the markets to assess the true economic fallout from the virus. Until then it remains prudent to remain cautious and nimble.

We think it makes sense to lighten up on riskier paper and accumulate cash, with the intention of pivoting towards select BB and high single-B names that fall to attractive valuations in sympathy, as we navigate the coronavirus. The proportion of loans trading above par has already dropped from 60% in January to 35% today, with more than half that distance covered just in the last 3 days. We think this trajectory is likely to continue, creating opportunities to buy in over the next few weeks. However, we prefer layering into higher quality paper first as B3 below paper has ways to fall before it looks attractive again.

Chart 7: Proportion of loans trading at or above par



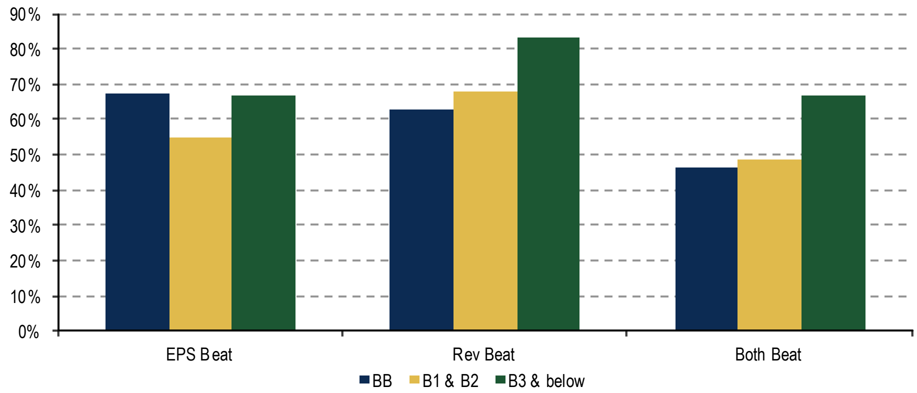
Source: BofA Global Research, S&P LCD, LPC

The softer market, in our view, dampens our repricings expectations in 1H20. However, as long as the fallout remains transitory, and the economy bounces back from the COVID-19 epidemic, the underpinning of a future repricings wave remains intact, albeit the timing might shift to the 2nd half of this year. All told, our concerns don't reflect the end of a cycle. We believe that this blip will just temporarily redirect demand towards safer yields, and as the situation improves, the reach will once again percolate down the credit spectrum. As such, for the time being, we consider any major selloffs as opportunities to buy into solid credits in the belly of the ratings curve.

Q4 earnings Update

Now that 55% of loan issuers we track have reported Q4 earnings, we take a peek at how earnings are turning out. Both EPS and revenue beats were better than 3Q, as 64% reported EPS beats (vs 56% in 3Q) and 63% reported revenue beats (vs 50% in 3Q). The elevated business confidence and increased end demand from the "Phase-1" deal between China and the US helped improve the fundamentals. Lower rating category issuers outperformed higher rating categories (Chart 8). Among the issuers that reported earnings in Q4, 67% of B3 & below issuers reported both EPS and revenue beat, compared to 48% of B1 & B2 issuers and 46% of BB issuers.

Chart 8: Q4 2019 loan issuer beats by rating category



Source: BofA Global Research, Bloomberg

Sector-wise, manufacturing-related sectors (Capital Goods, Transportation) and commodity-related sectors (Utilities, Materials) generated the highest EPS beats (Table 4). Retail topped all other sectors in terms of revenue beats, likely attributable to the holiday season sales boost. Financials, Healthcare and Technology the three biggest loan sectors, are currently in the better half of the leader board in terms of both EPS and Revenue beats.

Table 4: Q4 2019 loan issuer beats by sector

	Face Outstanding	All reporting issuers	Issuers reported	% reported	EPS Beat	Rev Beat	Both Beat
Utilities	23,319	4	1	25%	100%	100%	100%
Financials	125,306	18	12	67%	100%	75%	75%
Capital Goods	51,854	18	12	67%	83%	75%	67%
Retail	85,866	21	5	24%	60%	80%	60%
Healthcare	145,090	27	12	44%	75%	75%	58%
Technology	173,948	28	21	75%	62%	76%	52%
Telecoms	47,441	13	8	62%	63%	75%	50%
Services	110,870	29	13	45%	54%	69%	46%
Autos	37,213	18	11	61%	64%	55%	45%
Real Estate	53,258	15	7	47%	57%	71%	43%
Chemicals	50,504	14	8	57%	75%	38%	38%
Cable/Media	96,142	28	8	29%	38%	63%	38%
Transportation	32,271	4	3	75%	67%	67%	33%
Gaming	34,827	11	3	27%	33%	33%	33%
Energy	58,087	14	7	50%	43%	43%	29%
Materials	42,545	8	3	38%	67%	33%	0%
Food Producers	37,776	8	2	25%	100%	0%	0%
All	1,206,317	278	136	49%	66%	65%	49%

Source: BofA Global Research, Bloomberg

Market Technicals

Over the last four weeks, cumulative demand for loans has totaled \$10.4bn (vs \$6.2bn for the previous four-week period), signaling a small pickup in the market. New issuance has totaled \$52.3bn last four weeks. CLO formation remained soft with CLO arbitrage ticking downwards since November 2019. On the supply side, last four weeks saw heavy new issuances of \$15.9bn, \$16.3bn, and \$27.1bn for the weeks ending in Feb 7th, Jan 31st, and Jan 24th respectively. On the YTD basis, supply has outweighed demand by \$36.5bn as of Feb 21st. Retail funds saw the comeback of outflows after temporary inflows earlier this year, as investors have become more cautious facing the uncertain macro backdrop.

Table 5: Weekly Technicals ($mns)

	YTD as of 2/21/20	2/14/20	2/7/20	1/31/20	1/24/20
Retail flows (a)	-536	-103	-292	-380	-235
CLO creation (b)	6,135	733	3,354	1,673	406

Table 5: Weekly Technicals ($mns)

	YTD as of 2/21/20	2/14/20	2/7/20	1/31/20	1/24/20
Coupons (c)	8,328	976	1,893	1,520	843
Demand (a+b+c)	**13,927**	**1,606**	**4,955**	**2,813**	**1,014**
Issuance Ex-repricings (d)	80,701	4,245	15,971	16,430	27,051
Repayments (e)	30,261	NA	14,650	4,510	1,653
Supply (d-e)	**50,439**	**NA**	**1,321**	**11,920**	**25,398**
Demand net of Supply	**-36,512**	**NA**	**3,634**	**-9,107**	**-24,384**

Source: S&P LCD, EPFR Global.
Values in $mn. Weekly coupon values are estimated by dividing each month's coupon payment by 4.

Performance by segment

Loans in the LCD index returns were flat during the last four weeks. 2nd liens outperformed MTD with weekly returns of 18bps, 23bps, and 31bps for the weeks ending in Feb 21st, Feb 14th and Feb 7th respectively. Within ratings, lower quality has outperformed, highlighted by a 29bp gain within CCCs during the week ending in Feb 14th, though they have come under pressure since then. The most liquid loans as per the LCD Leveraged Loan 100 benchmark have returned a cumulative -21bps during the last four weeks, underperforming the broader All Loans index.

Table 6: Total Returns (price plus coupon return), bps

	2/21/2020	2/14/2020	2/7/2020	1/31/2020
All Loans	11	12	-5	-23
BB	3	7	-8	-17
B	14	13	-2	-26
CCC	9	29	-16	-37
2nd Lien	18	23	31	-9
LL100	9	16	-15	-31
Middle Market	16	10	13	2

Source: S&P LCD
Middle market defined as $50mn EBITDA or less. LL100 composed of the 100 largest issuers (by face value) in the S&P LCD Leveraged Loan Index.

Primary market activity

Impacted by the increased uncertainty and volatility in the global market, primary market activity slowed down in the past few weeks. MTD issuance is at $39.4bn, posting a 40% decrease compared to January issuance of $64.7bn. YTD, half of the total new money was raised for refinancing ($51.0bn), while issuances for acquisition-related financing (27%) and LBO (19%) also increased. Technology ($18.2bn) and Healthcare ($17.0bn) continued to dominate the primary market YTD, as a combined 38% of total new issuance amount was in these two sectors. The largest deal last week came from Bausch Health in a $5.1bn refinancing offering.

Table 7: Recent loan new issues

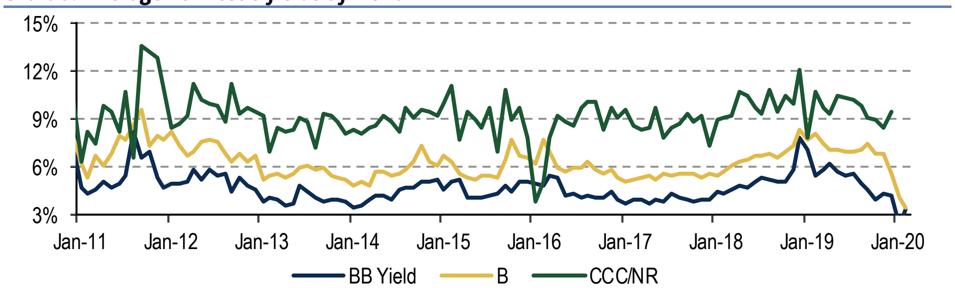
Launch Dt	Issuer	Deal Name	Size	New Inst. Money	Moody's	S&P	ABL	Cov Lite	Proceeds	Sector	Country
2/26/2020	Atlas Technical Consultants	Atlas Technical (3/20)	281	281	NR	NR	No	Yes	Acquisition	Building Materials	United States
2/25/2020	Boels	Boels (3/20)	1,810	1610	B1	BB-		NO	Acquisition-related	Services & Leasing	Netherlands
2/25/2020	Capstone Logistics	Capstone Logistics (TL 3/20)	395	395	B3	B-	No	No	Refinancing	Services & Leasing	United States
2/25/2020	Cook & Boardman	Cook & Boardman (Add-on 3/20)	75	75	B3	B	No	No	Acquisition	Building Materials	United States
2/25/2020	Duff & Phelps LLC	Duff & Phelps (TL 3/20)	1,550	1550	B2	B	No	Yes	LBO	Services & Leasing	United States
2/25/2020	Duravant LLC	Duravant (Add-on TL 3/20)	155	155	B2	B-	No	Yes	Acquisition	Manufacturing & Machinery	United States
2/25/2020	Gerflor Group	Gerflor (RC 3/20)	125	125	B2	B		NO	Acquisition-related	Home Furnishings	France
2/25/2020	Gerflor Group	Gerflor (TL 3/20)	850	850	B2	B		YES	Acquisition-related	Home Furnishings	France
2/25/2020	Service Logic	Service Logic (Add-on 3/20)	140	140	NR	NR	No	No	Acquisition	Manufacturing & Machinery	United States
2/24/2020	Alkermes Inc	Alkermes (3/20)	350	350	Ba3	BB	No	Yes	Refinancing	Healthcare	Ireland

Table 7: Recent loan new issues

Launch Dt	Issuer	Deal Name	Size	New Inst. Money	Moody's	S&P	ABL	Cov Lite	Proceeds	Sector	Country
2/21/2020	Allen Media LLC	Allen Media (Add-on 3/20)	25	25	Ba3	BB-	No	Yes	GCP	TV	United States
2/20/2020	Bausch Health	Bausch Health (3/20)	5,144	5144	Ba2	BB	No	Yes	Refinancing	Healthcare	Canada
2/20/2020	C.J. Foods	C.J. Foods (TL 3/20)	285	285	B2	B-	No	Yes	Acquisition	Food & Beverage	United States
2/20/2020	Hornblower Yachts Inc	Hornblower (Add-on 3/20)	25	25	B2	B	No	Yes	Refinancing	Entertainment & Leisure	United States
2/20/2020	Micro Focus	Micro Focus (EURO TL 3/20)	660	660	B1	BB-		YES	Refinancing	Computers & Electronics	United Kingdom
2/20/2020	Micro Focus	Micro Focus (US TL 3/20)	718	718	B1	BB-	No	Yes	Refinancing	Computers & Electronics	United Kingdom
2/20/2020	SnapAV	SnapAV (Add-on 2nd Lien 3/20)	100	100	NR	B	No	No	Acquisition	Computers & Electronics	United States
2/20/2020	SnapAV	SnapAV (Add-on TL 3/20)	290	290	B2	B	No	Yes	Acquisition	Computers & Electronics	United States
2/20/2020	Tosca Services	Tosca Services (3/20)	325	325	B2	B	No	Yes	Acquisition	Chemicals	United States
2/20/2020	Vistage Worldwide	Vistage (Add-on 3/20)	50	50	B2	B	No	Yes	Refinancing	Services & Leasing	United States

Source: S&P LCD

Chart 9: Average new issue yields by month

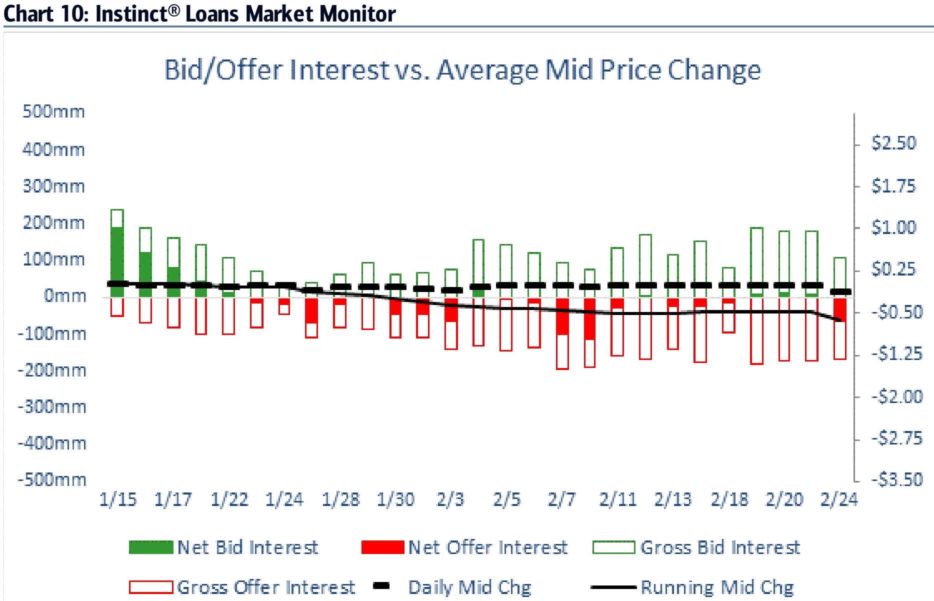


Source: S&P LCD

Instinct® Loans

To track market sentiment, we look at data from BofA's electronic loan trading platform, *Instinct®*, which clients use to trade some of the most liquid loans in the market. Demand trailed down as the uncertainties in the global economy remain strong and the recent Coronavirus deterioration in Japan and Korea put Asia under pressure. The daily mid changes barely stayed positive during this period and the running mid change fell down to the negative territory.

Chart 10: Instinct® Loans Market Monitor



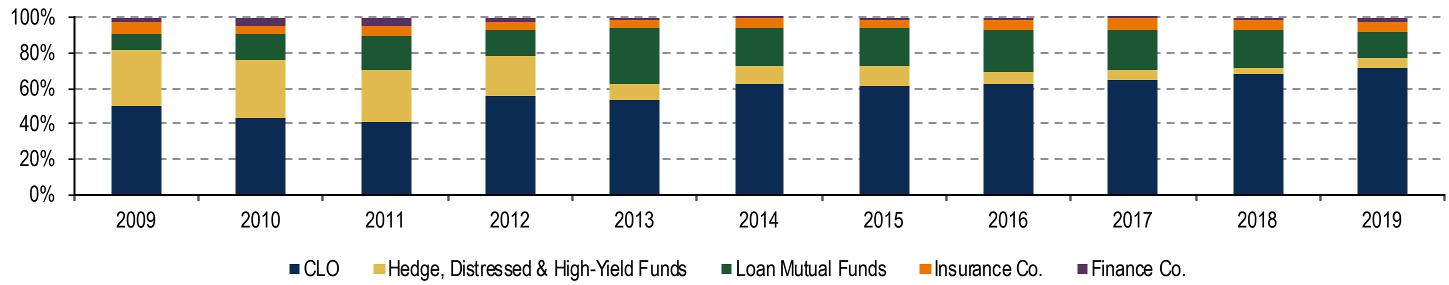
Source: BofA Instinct® Loans

Left y-axis shows bit/offer interest; right y-axis shows average mid-price change.

Appendix

CLOs are an important factor to consider in the loan market given they are the single biggest buyer of loans and represent 70% of the primary demand within this asset class. Loan retail funds are the second largest buyers although their participation has shrunk since the peaks of 2013. Since then, we have seen increasing activity from CLO managers. At the same time, hedge, distressed & high yield funds have played a lesser role in the primary market.

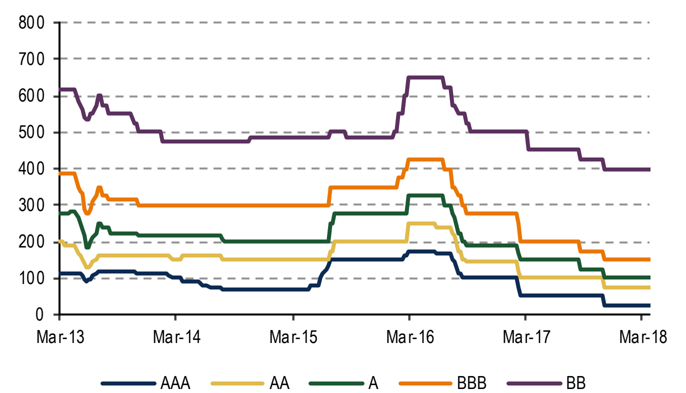
Chart 11: Primary institutional investor market by type



Source: S&P LCD

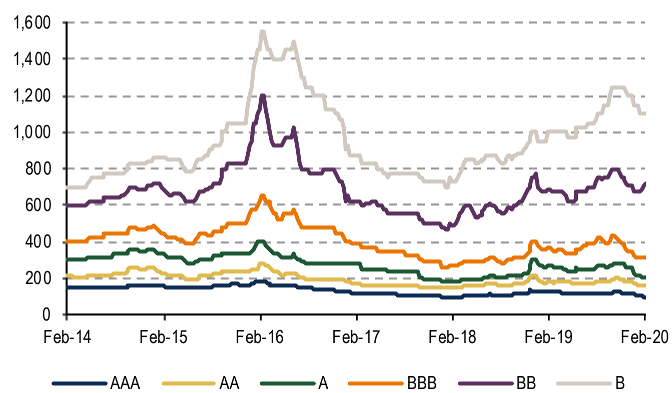
Three generations of CLOs exist today, CLO 1.0 (pre-crisis), and CLO 2.0/CLO 3.0 (post-crisis). The market is primarily driven by the latter. Below charts show CLO spread levels by tranches.

Chart 12: US CLO 1.0 indicative spread levels (bps)



Source: Intex

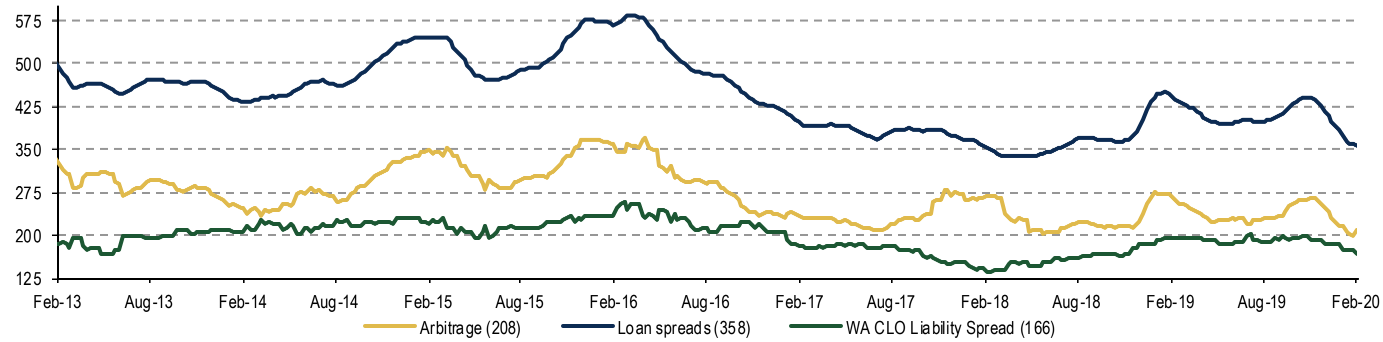
Chart 13: US CLO 2.0/3.0 indicative spread levels (bps)



Source: Intex

CLO arbitrage is a widely followed statistic in the loan market, and represents the theoretical spread that managers can capture by issuing CLOs. The below chart 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.

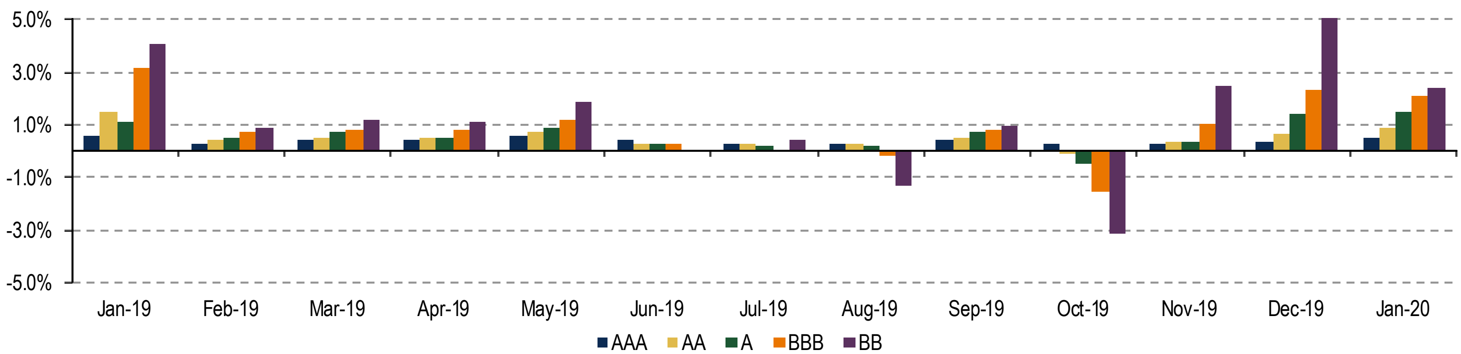
Chart 14: CLO arbitrage (bps)



Source: S&P LCD
Arbitrage: Loan asset spread - WA CLO spread X liability %.
Loan spreads (running avg 8wks) 60% new-issue B+/B, 20% sec B 20% sec BB.

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

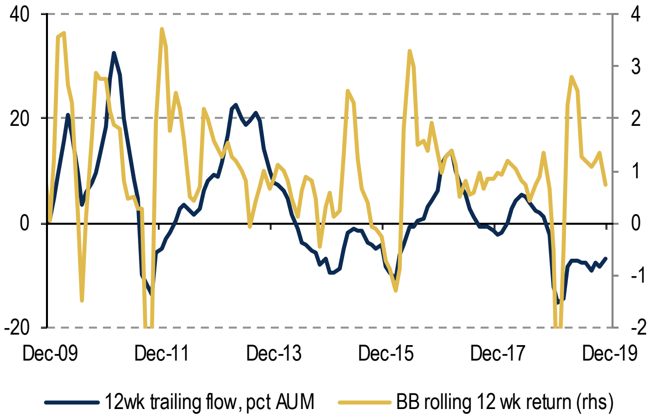
Chart 15: Monthly CLO 2.0 returns by rating



Source: PriceServe, Palmer Square CLO Indices, Bloomberg

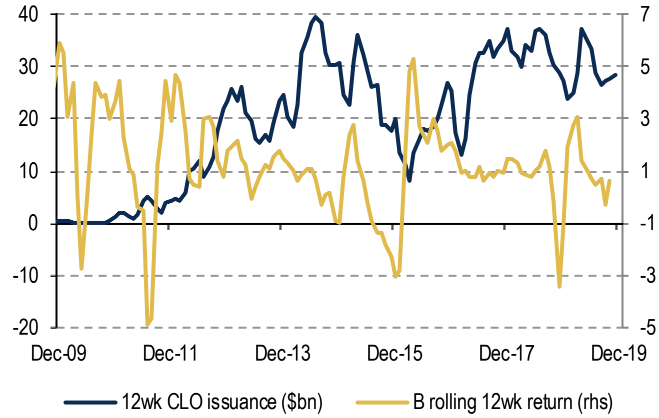
Since technicals play a big role in the loan market, following retail patterns is also essential. In general, we see that the performance of the BB section of the loan market correlates most with retail flows, while new CLO issuance seems to correlate to B Loan returns. This makes sense as mutual funds generally gravitate towards less risky investments while CLOs invest in single B rated assets on average. Chart 16 shows a measure of retail flows (12 week trailing retail flows as a percentage of outstanding AUM) vs. monthly BB Loan total returns, while Chart 17 depicts monthly CLO issuance vs. monthly B Loan total returns.

Chart 16: BB performance vs Loan retail flows



Source: S&P LCD, EPFR Global

Chart 17: B performance vs CLO creation



Source: S&P LCD, EPFR Global

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