Collateral Thinking

The last among equals

Bank of America Merrill Lynch

20 June 2018

Top of the stack

A few weeks ago we published our views on new money supply which we think will maintain a healthy pace, balancing incremental demand. In this edition of Collateral Thinking we focus on the other half of new issue activity – repricings. As a major contributor to primary market volumes, repricing activity remains the last among equals, at least in terms of its appeal to investors. And for understandable reasons. The prevailing issuer-friendly environment has been putting pressure on nominal spreads and investors are receiving lesser compensation for the same credit risk. As such, investors have been on edge about repricing activity given its drag on portfolio returns.

Market technicals

CLO creation has remained strong in recent weeks and for the week ended 8th June, it stands at $2.2bn. YTD CLO issuance of $56.4bn is considerably higher than the 2017 YTD issuance of $39.7bn. Adding coupons of $1.2bn and retail flows of $427mn to CLO volume, the gross demand stood at $3.8bn for the week ended 8th June. The net issuance continues to come in strong and was recorded at $9.9bn for the week ended 8th June, following values of $8.1bn and $1.5bn for the weeks ended 1st June and 25th May, respectively.

Topical: Repricing activity to retreat

We think repricing activity will subside to 20% of the index over the next 12 months, a noticeable decline from the 50% levels observed over the last 12 months. This would translate to about $200bn in repricings over the next year. We use a combination of several factors to explain loan demand, such as proportion of loans trading above par, CLO arbitrage levels, real yields and the shape of the yield curve. We also believe that most of the repricings will be concentrated in the 200bps-250bps spread bucket going forward, for a coupon shaving of ~40bps, leading to a small drag on returns.

Performance

After a quiet period in May, loan performance has picked up. Loans in the LCD index returned 5bps for the week ended 15th June, following returns of 17bps and 4bps for the weeks ending 8th June and 1st June, respectively. On a YTD basis, loans in the LCD index have delivered 2.28%. Investors favored lower rating categories during this period with BB, B and CCC rating category loans returning 2bps, 6bps and 39bps respectively, for the week ended 15th June. CCC loans continue to impress, with returns of 69bps and 36bps for the weeks ending 8th June and 1st June, respectively and YTD return of 5.09%.

Primary market activity

Global loan issuance was recorded at a 16-month high value of $66.7bn in May, and the trend of strong issuance has continued so far in June as well. For the week ended 15th June, issuance was recorded at $16.3bn. Issuance was $11.5bn, $8.9bn and $4bn for the weeks ending 8th June, 1st June and 25th May, respectively. YTD issuance of $253.9bn is now approximately 88% of the 2017 YTD issuance of $288bn. The issuance for BB, B and CCC rated loans stood at $2.4bn, $6.3bn and $495mn, for the week ended 15th June. Non-rated issuance came in at $7.1bn for the week ended 15th June.

Refer to important disclosures on page 12 to 14. 11882623

Timestamp: 20 June 2018 06:00AM EDT

BofA Analytics
— DATA DRIVEN —

Leveraged Loan Strategy
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Table 1: Loan performance

Index	Level	1wk Δ	2wk Δ	YTD Rtn
All Loan	98.4 pts	-0.1	-0.0	+2.3%
BBs	99.9 pts	-0.1	-0.1	+1.8%
Bs	99.1 pts	-0.1	-0.0	+2.4%
CCCs	88.7 pts	0.2	0.6	+5.1%

Source: S&P LCD

Table 2: HY performance

Index	Level	1wk Δ	2wk Δ	YTD Rtn
US HY	334 bps	-5	-15	+0.7%
BBs	232 bps	-3	-07	-1.2%
Bs	354 bps	-7	-18	+1.6%
CCCs	675 bps	-3	-35	+4.5%

Source: BofA Merrill Lynch Global Research

Table 3: Fund flows ($mn)

Asset	1wk	2wk	YTD	LTM
Loans	+539	+427	+10,341	+3,856
US HY	+538	-1,357	-16,811	-25,876
US IG	+1,762	+1,018	+82,236	+289,585

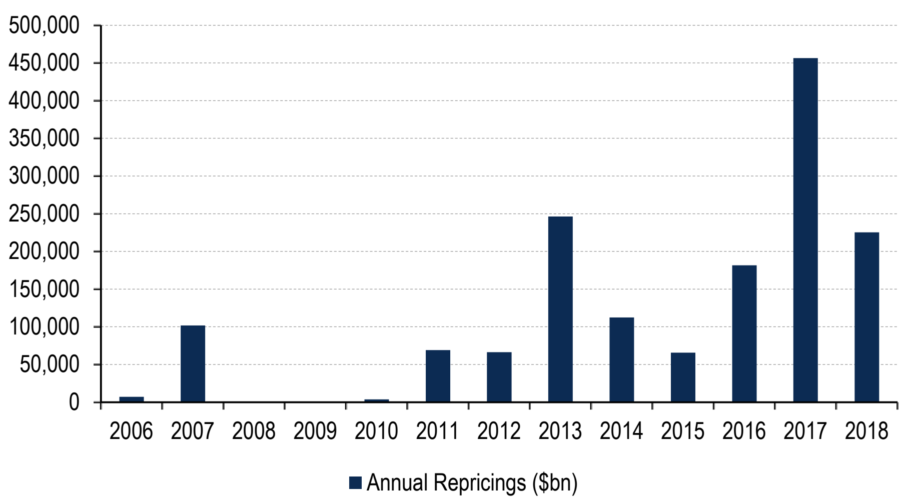
Source: EPFR Global

Top of the stack

A few weeks ago we put out our views on new money supply, which we believe will maintain a healthy pace, balancing incremental demand. In this edition of Collateral Thinking we focus on the other half of new issue activity– repricings. As a major contributor to primary market volumes, repricing activity remains the last among equals, at least in terms of its appeal to investors. And for understandable reasons. Prevailing issuer-friendly environment has been putting pressure on nominal spreads, and investors are being compensated lesser for the same credit risk. As such, along with a concern about overall supply adequacy, investors have also been on edge about repricings given their drag on portfolio returns.

So far this year we have seen $225bn in repricings over and above the new supply volume of $250bn. Thast compares to the full calendar year totals of $450bn in repricings and $500bn in new money supply last year. As we had mentioned in our last piece, the volume of refinancings and repricings has exceeded our expectations- while we were expecting about 15% of the market to get repriced in the last 6 months, about 25% turned over instead. Although stronger out the gate, we believe repricings will slow down meaningfully over the next few months.

Chart 1: Rise of repricings



Source: S&P LCD

Our model suggests that repricing activity should subside to 20% of the index over the next 12 months, a noticeable decline from the 50% levels observed over the last 12 months. This would translate to about $200bn in repricings over the next year. We use a combination of several factors to explain loan demand, such as proportion of loans trading above par, CLO arbitrage levels, real yields and the shape of the yield curve. On the whole our model is able to explain over 75% of the variation in repricing activity and has strong t-stats for each of the 4 variables involved. We also believe that most of the repricings will be concentrated in the 200bps-250bps spread bucket going forward for an coupon shaving of ~40bps, contributing a small drag on returns.

Game of Loans

Market Technicals

CLO creation has remained strong in the recent weeks and for the week ended 8th June, it stands at $2.2bn. The YTD CLO issuance of $56.4bn is considerably higher than the 2017 YTD issuance of $39.7bn. Adding coupons of $1.2bn and retail flows of $427mn to CLO volume, the gross demand stood at $3.8bn for the week, ended 8th June. The net issuance continues to come in strong and was recorded at $9.9bn for the week ended 8th June, following values of $8.1bn and $1.5bn, for the week ended 1st June and 25th May, respectively. Repayments totaled $11.9bn for the week ended 8th June, which took the net supply figure in the negative territory, far below the $3.8bn demand. However, the pattern reverses on YTD basis, as supply outweighed demand by $631mn, as of the week ended 8th June..

Table 4: Weekly Technicals ($mns)

	YTD	6/8/2018	6/1/2018	5/25/2018
Retail flows (a)	10,341	427	84	611
CLO creation (b)	59,080	2,190	2,560	3,710
Coupons (c)	23,618	1,219	1,219	1,240
Demand (a+b+c)	**93,038**	**3,836**	**3,863**	**5,560**
Issuance Ex-repricings (d)	214,129	9,916	8,127	1,466
Repayments (e)	120,460	11,932	7,005	3,790
Supply (d-e)	**93,669**	**-2,016**	**1,122**	**-2,324**
Demand net of Supply	**-631**	**5,852**	**2,741**	**7,884**

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

Performance by segment

After a brief quiet period in May, the performance of loans has picked up again in the past couple of weeks. Loans in the LCD index returned 5bps for the week ended 15th June, following the returns of 17bps and 4bps for the weeks ending 8th June and 1st June, respectively. On YTD basis, loans in the LCD index have delivered 2.28%. Investors chased lower rating categories during this period with BB, B and CCC rating category loans returning 2bps, 6bps and 39bps respectively, for the week ended 15th June. CCC loans continue to impress, with returns of 69bps and 36bps for the weeks ending 8th June and 1st June, respectively and YTD return of 5.09%. 2nd Lien Loans have also delivered consistent positive returns of 23bps, 17bps and 14bps, for the weeks ended 15th June, 8th June and 1st June respectively. The 100 most liquid names fell slightly behind the market during this period and delivered 2bps for the week ended 15th June. On YTD basis, this grouping has returned 2.08%..

Table 5: Total Returns (price plus coupon return), bps

	6/15/2018	6/8/2018	6/1/2018	5/25/2018
All Loans	5	17	4	0
BB	2	13	1	-2
B	6	16	3	1
CCC	39	69	36	9
2nd Lien	23	17	14	17
LL100	2	22	0	-2
Middle Market	0	-12	-22	-65

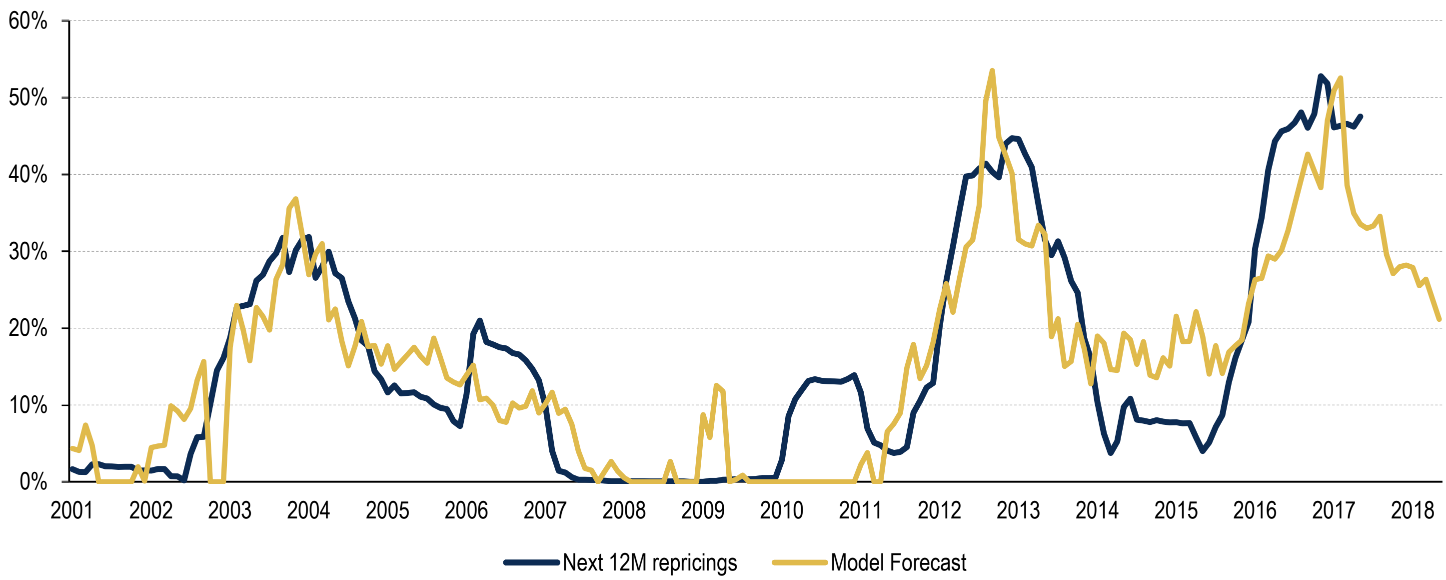
Source: S&P LCD
Middle market defined as $50mn EBITDA or less. LL100 composed of the 100 largest issuers (by face value) in the S&P LCD Leveraged Loan Index.

Topical: Repricing activity to retreat

Over the span of the last few decades, as the loan market has grown, repricings have gotten faster and more furious. Case in point the rising peaks in the chart below which displays the proportion of the loan market getting repriced on a forward-looking 12 month basis. Issuers were first able to shave their coupons en masse in the 2002-2004 period when at the highest point, 30% of the index was repriced over a span of one year. Since after the GFC, we have seen two such repricing waves punctuated with a mini-credit cycle in between- one over 2012-2013 period, and another one starting in 2016. The most recent wave which has been continuing since mid-2016, has seen the highest concentration of repricings in a single year, reaching 52% of the index. We think that this is poised to change over the course of 2018 and into next year.

In getting to our findings we used an improved version of the model that we first published in January. The latest version of our model differs from the previous one in a few important ways. First, we have a larger prediction window – we are now forecasting repricing activity over the next 12 months as opposed to over the next 6 months. Second we have introduced variables that improve the explanatory power of the model (r-squared). And third, we have increased the overall relevance of the explanatory variables in our analysis (t-stats).

Chart 2: Predicted vs realized repricing activity (% of loan market repriced over the next 12 months)



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

Based on prevailing values of variables, our model suggests that repricing activity should subside to a ~21% churn rate over the next 12 months, a noticeable decline from the 48% observed over the last 12 months. Which translates to about $200bn in repricings over the next 1 year. On the whole our model is able to explain over 75% of the variation in repricing activity and has strong t-stats for each variable. We note that there may be periods of time when actual repricing levels may diverge from model forecasts, but we generally see them converging after a few months. This is seen occurring at the top of the repricing cycle such as today, when the model points to a sharp turn downwards but actual numbers on ground take time to converge.

Since our objective is to forecast future repricing activity, we measure how the variables today affect total repricings over a forward-looking period of 12 months. Further, to incorporate market growth, we normalize the data by expressing repricings as a percentage of loan universe outstanding. Since repricings naturally happen in the backdrop of high loan demand, we try to understand what drives loan demand in choosing our model factors. Finally, we remove both recessions from our dataset so that it doesn't skew our findings. Below we discuss the final set of variables along with the conceptual reasons why they make an important contribution to our model.

Proportion of the loan market trading above par

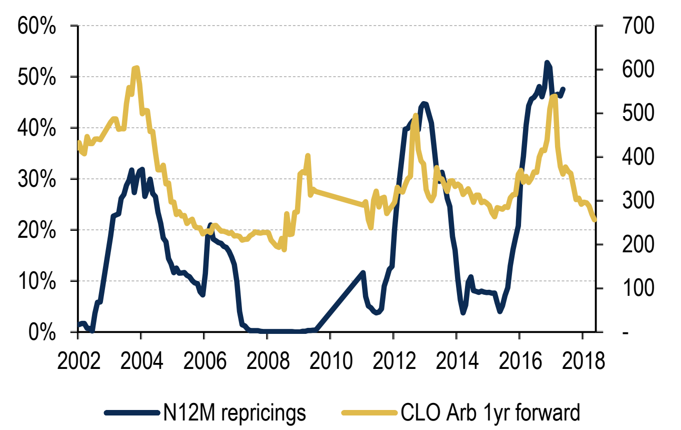
For issuers whose loans are trading at yields below where they were issued, it makes sense to tap the market to reprice them. Logically, then the proportion of the loan market trading above par should drive the volume of repricings, and hence the proportion of index churn as a result. Of course there is fees involved in the process and we think issuers generally prefer to shave at least 20-30bps for it to make economic sense to reprice existing loans.

CLO arbitrage levels

This variable happens to be one of the most important predictors of repricings. Conceptually, higher CLO arbitrage, defined as the difference between asset and liability spreads in the CLO market, should incentivize CLO managers to put money to work. Consequently, new demand for loans is created as more CLOs get priced. What's worthy of noting is that the reaction is not instantaneous- there is a lead time to when movements in CLO arbitrage start affecting loan demand (and hence repricings) - the lead time that is the most correlated to repricings is about one year (Chart 3). This is perhaps longer than one would initially think, but between observing market trends, getting the necessary approvals and ramping up the portfolio, one year lead time looks conceivable to us.

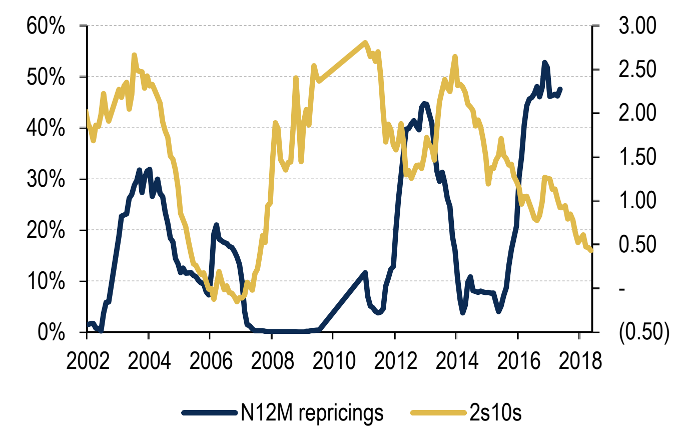
Another point to note is that while generally CLO arbitrage spreads are calculated using a weighted average of secondary as well as primary spreads on the asset (loan) side, we opted to limit the calculation of asset spreads based solely on the secondary market to avoid dealing with months when no loans were priced. We find that doing so doesn't compromise the amount of information that is feeding into our analysis. In fact this factor is one of two strongest explanatory variables in our model.

Chart 3: Next 12m repricings,% or market (LHS) vs CLO arb, bps (RHS)



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

Chart 4: Next 12m repricings,% or market (LHS) vs 2s10s curve, % (RHS)



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

10-yr real rates

The way arbitrage levels are relevant for CLO managers, real yields are relevant for CLO investors. The growth of CLO AUM to over $500bn today has been a function of the dearth of yield globally. CLO tranches provide a meaningful pickup of spreads over libor compared to similarly rated loans, at the cost of lower liquidity and a longer holding period. To measure the availability of other suitable investment options for CLO investors to route their money, it makes sense therefore to use 10yr treasury yields as proxy. Additionally, we use real 10yr yields calculated by subtracting 10yr breakevens from the 10yr treasury rates, given that the inflation backdrop has changed so meaningfully over the last few years. Along with CLO arbitrage, this measure has the most relevance to predicting repricings.

Yield curve

Finally, we use the 2s10s yield curve to incorporate front end rates in our analysis. Conceptually we think that doing so is important because issuers can get away with repricing their coupons lower amid rising LIBOR (and therefore front-end rates). A flattening yield curve is most suited to repricing activity because it means that there is decreasing alternatives for CLO investors looking to park their money over 5-7 years, and at the same time increasing demand from retail investors looking for floating rate assets such as loans in light of rising LIBOR (Chart 4).

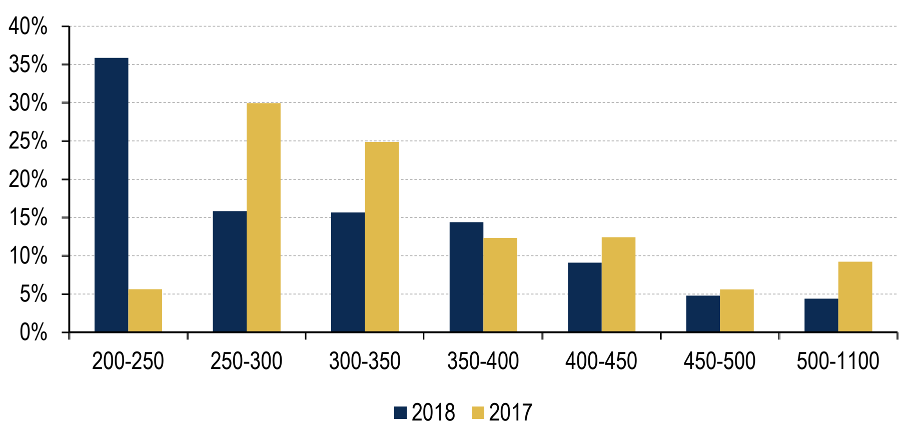
Today, two of the above model factors – loans trading above par, and CLO arbitrage spreads – are lower than were 2 years ago. In combination with higher10yr real yields today, these measures are putting downward pressure on future repricing volumes. However the yield curve has flattened, countering some of that pressure. On balance, the outcome is tilting in favor of lower repricings over the next 12 months, to the effect of 20pct of the loan market.

Size of the repriceable universe

Admittedly the proportion of credits trading above 200bps that are rated B1 and above and are at least 6 months from their date of issuance is near its cyclical lows now that we are well into the repricing wave. That in of itself should keep a lid on repricing activity. Noticing patterns from last year and comparing to what has been repriced this year, we find that most of the repricing activity has been concentrated in the better credits already trading at relatively tight levels. And we think this is going to continue.

Consider the chart below which shows the distribution of repricing activity by spread buckets in the loan market. In 2017, 30% of the repriced credits belonged to the 250-300bps bucket – the highest amongst its peers. Comparatively this year a staggering 35% of repriced credits by volume have come from the 200-250bps spread range. The chart below includes repeat repricers- those loans which were originally in the 250-300bps bucket last year, and which managed to shave their again this year. Loans with coupons over 350bps have not seen much change in repricing activity which goes to show that investors are more willing to accept lower spreads for credits they know are stable and high quality.

Chart 5: Distribution of repricing activity by spread bucket

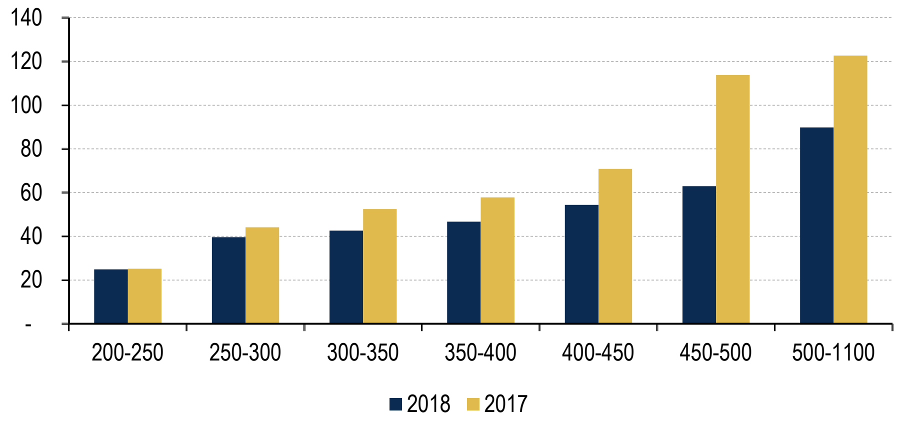


Source: BofA Merrill Lynch Global Research, S&P LCD

We think this is the bucket where the remainder of this year's spread compression is going to come from. In terms of actual dollars, YTD $80bn of loans in the $200-250bn range have been repriced. As of the time of this writing there are about ~$100bn loans still remaining in this bucket which are outside their 6-month call period, a large enough universe to support more repricing activity.

What has remained somewhat similar is the pattern of coupon savings for the issuer. As an issuer if you were one of the few ones to reprice a loan with an original spread over 500bps, your average coupon saving today would be 90bps, the highest in your peer group. However loans belonging to the same spread bucket saved 123bps a year earlier. This pattern of diminishing returns for the issuer is typical as the repricing cycle moves along signaling investor fatigue and wariness over accepting further spread cuts. This is another reason why we believe all things equal, repricing activity will retreat from today's levels.

Chart 6: Weighted average coupon savings by spread bucket



Source: BofA Merrill Lynch Global Research, S&P LCD

All told, issuers managed to shave off a weighted average of ~60bps in repricings last year vs 40bps YTD. Meanwhile the nominal spreads on the overall index also declined by 60bps last year and similarly, in our opinion, we will see a reduction in the 30-40bps range over the next on year, creating a small drag on returns. So while we believe that the total repriced volume over the next 12 months will decline, these deals are setting the bar for the primary market, which in effect translates to decreasing coupons for the overall index.

Primary market activity

Global loan issuance was recorded at a 16-month high value of $66.7bn in May and the trend of strong issuance has continued so far in June as well. For the week ended 15th June, the issuance was recorded at $16.3bn. The issuance was recorded at $11.5bn, $8.9bn and $4bn for the weeks ending 8th June, 1st June and 25th May, respectively. The YTD issuance of $253.9bn is now approximately 88% of the 2017 YTD issuance of $288bn. The issuance for BB, B and CCC rated loans stood at $2.4bn, $6.3bn and $495mn, for the week ended 15th June. Non-rated issuance came in at $7.1bn, for the week ended 15th June. Amongst the sectors, the top three issuing sectors were technology, healthcare and materials with issuances of $45.8bn, $32.9bn and $22.9bn respectively, for the week ended 15th June.

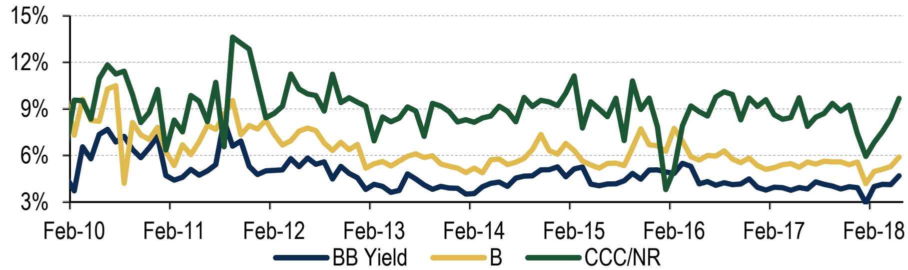
Two largest deals to hit the market were from Kindred At Home and GlobalFoundries. The former, a healthcare company intends to use the proceeds of its $2.2bn issue for acquisition, while GlobalFoundries, a tech firm has brought the $2.1bn deal to the market for general refinancing purposes. As per LCD, the amend-to-extend activity in the U.S leveraged loan market touched a 12-month high in the month of May, with the volume of deals reaching $10.3bn. In one such recent transaction, Bob's Discount Furniture completed a repricing and extension of its $257mn B term loan. As per the new contract, the spread has been revised from L+525 to L+475 and the maturity has been extended from February 2021 to August 2023.

Table 6: Recent loan new issues

Launch Dt	Issuer	Deal Name	Size	New Inst. Money	Moody's	S&P	ABL	Cov Lite	Proceeds	Sector	Country
6/14/2018	Cirque Du Soleil Inc	Cirque Du Soleil (Add-on 7/18)	95	95	B1	B+	No	Yes	Acquisition	Entertainment & Leisure	Canada
6/14/2018	Dhanani Group of Companies Inc	Dhanani (7/18)	420	420	B2	NR	No	Yes	Acquisition	Restaurants	United States
6/14/2018	Edelman Financial Group	Edelman Financial (2nd Lien 7/18)	495	495	NR	NR	No	No	Acquisition	Services & Leasing	United States
6/14/2018	Edelman Financial Group	Edelman Financial (7/18)	1560	1410	NR	NR	No	No	Acquisition	Services & Leasing	United States
6/14/2018	Edward Don & Company	Edward Don & Company (7/18)	210	210	B2	B	No	Yes	Refinancing	Services & Leasing	United States
6/14/2018	Excelitas Technologies Corp	Excelitas (Amend Add-on 7/18)	604	100	B2	B-	No	Yes	Acquisition	Computers & Electronics	United States
6/14/2018	Ufinet Telecom SAU	Ufinet (7/18)	525	525	NR	NR	No	Yes	Acquisition	Telecom Equipment	Spain
6/14/2018	Valtris Specialty Chemicals Inc	Valtris (2nd Lien 7/18)	105	105	Caa2	NR	No	Yes	Acquisition	Chemicals	United States
6/14/2018	Valtris Specialty Chemicals Inc	Valtris (7/18)	300	300	B3	NR	No	Yes	Acquisition	Chemicals	United States
6/14/2018	Value-Based Care Solutions	Value-Based Care (TL 7/18)	600	600	B2	NR	No	No	LBO	Computers & Electronics	United States
6/14/2018	Vestcom International	Vestcom (Amend Add-on TL 7/18)	430	90	B2	NR	No	Yes	Refinancing	Services & Leasing	United States
6/13/2018	Aveanna Healthcare	Aveanna (Add-on 7/18)	221	221	B2	B-	No	Yes	Acquisition	Healthcare	United States
6/13/2018	Invenergy LLC	Invenergy (7/18)	415	350	Ba2	B+	No	No	Refinancing	Utilities	United States
6/13/2018	Metro-Goldwyn-Mayer Inc	MGM (2nd Lien 7/18)	500	500	B2	NR	No	No	Refinancing	Film	United States
6/13/2018	Metro-Goldwyn-Mayer Inc	MGM (TL 7/18)	400	400	Ba2	BB+	No	No	Refinancing	Film	United States
6/13/2018	St. George?s University	St George's University (7/18)	885	885	NR	NR	No	No	Acquisition	Services & Leasing	Algeria
6/12/2018	BBB Industries LLC	BBB Industries (TL 7/18)	620	620	NR	NR	No	No	LBO	Automotive	United States
6/12/2018	BBB Industries LLC	BBB Industries (2nd Lien 7/18)	180	180	NR	NR	No	No	LBO	Automotive	United States
6/12/2018	Energizer Holdings Inc	Energizer (TL 7/18)	1000	1000	Ba1	BB+	No	Yes	Acquisition	Computers & Electronics	United States
6/12/2018	GlobalFoundries	GlobalFoundries (7/18)	2350	2100	NR	NR	No	No	Refinancing	Computers & Electronics	Singapore

Source: S&P LCD

Chart 7: Average new issue yields by month

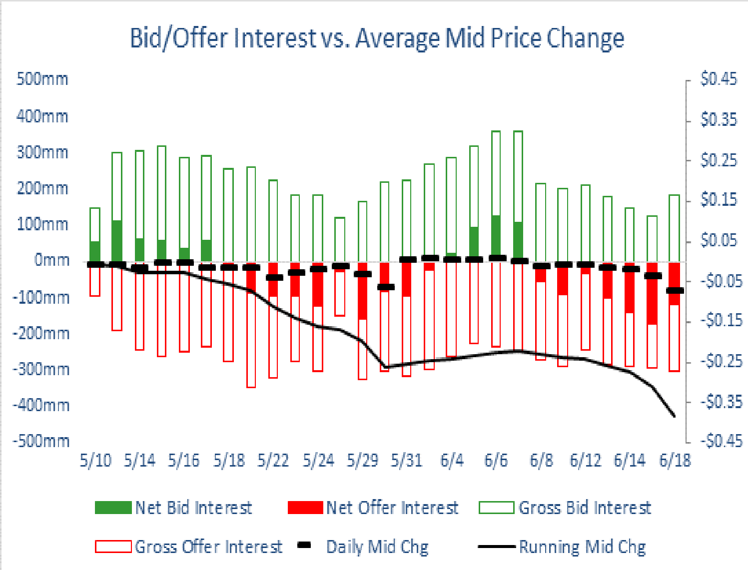


Source: S&P LCD

Instinct® Loans

To track market sentiment, we look at data from BofAML's electronic loan trading platform, *Instinct*®, which clients use to trade some of the most liquid loans in the market. Over the past two weeks, there has been a trend reversal from net bid interest to net offer interest. Similar pattern was observed between gross bid interest & gross offer interest and the latter's volume has remained around $300mn, over the past week. In this period, the daily mid changes has fallen below zero and mostly shied away from the positive region. The running mid change has dropped significantly and the year-to-date value for running mid change was -$0.39.

Exhibit 1: Instinct® Loans Market Monitor

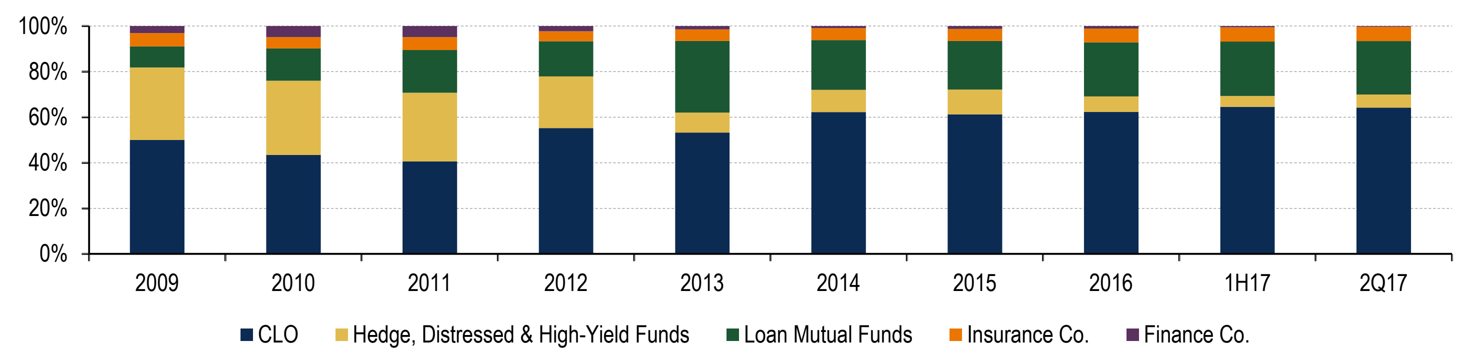


Source: BofA Merrill Lynch Instinct® Loans.
Left y-axis shows bif/offer interest; right y-axis shows average mid-price change.

Appendix

CLOs are an important factor to consider in the loan market given they are the single biggest buyer of loans and represent 60% 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.

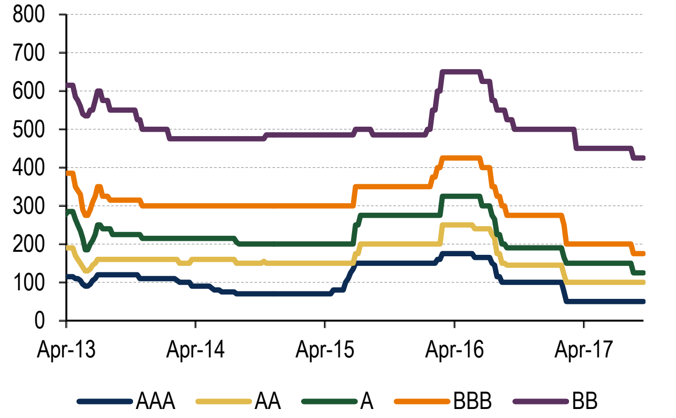
Chart 8: Primary institutional investor market by type



Source: S&P LCD

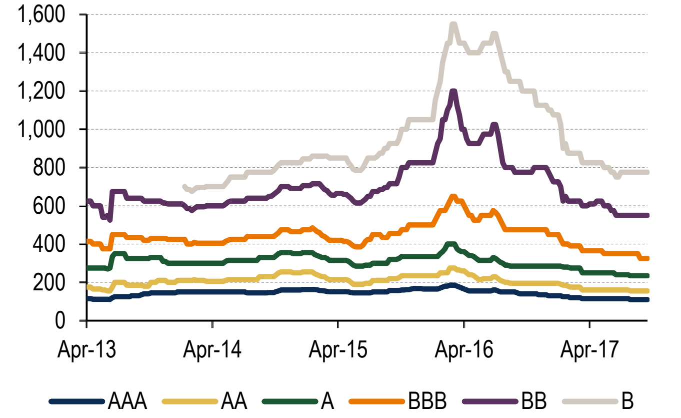
Three generations of CLOs exist today, CLO 1.0 (pre-crisis), and CLO 2.0/CLO 3.0 (post-crisis). The market is primarily driven by the latter. Below charts show CLO spread levels by tranches.

Chart 9: US CLO 1.0 indicative spread levels (bps)



Source: BofA Merrill Lynch Global Research

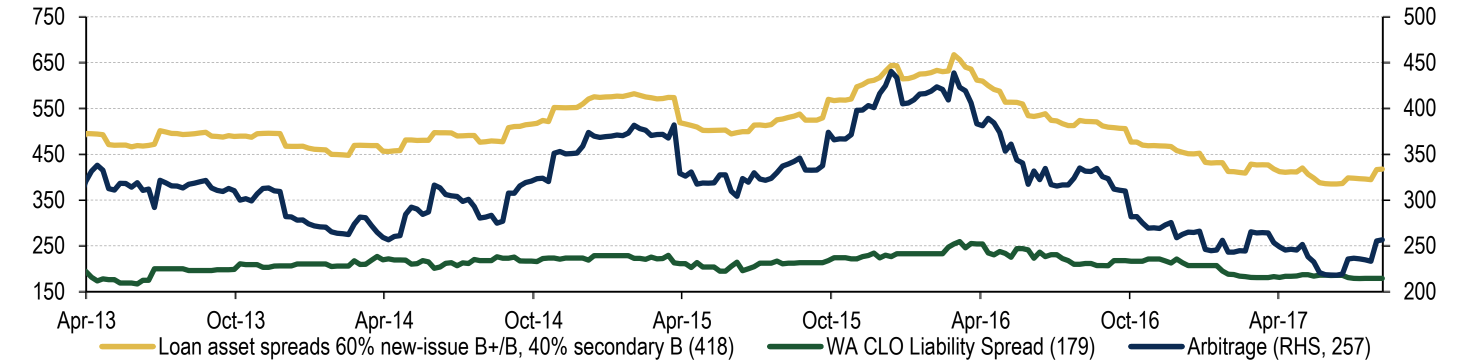
Chart 10: US CLO 2.0/3.0 indicative spread levels (bps)



Source: BofA Merrill Lynch Global Research

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.

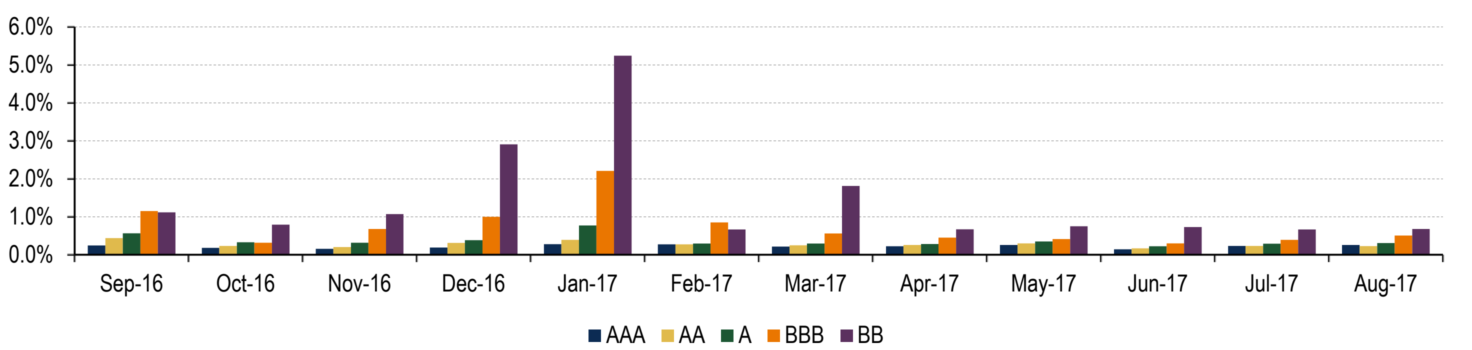
Chart 11: CLO arbitrage (bps)



Source: S&P LCD, BofA Merrill Lynch Global Research

Chart 12 shows monthly CLO returns as defined by the Palmer Square CLO index (price plus coupon returns).

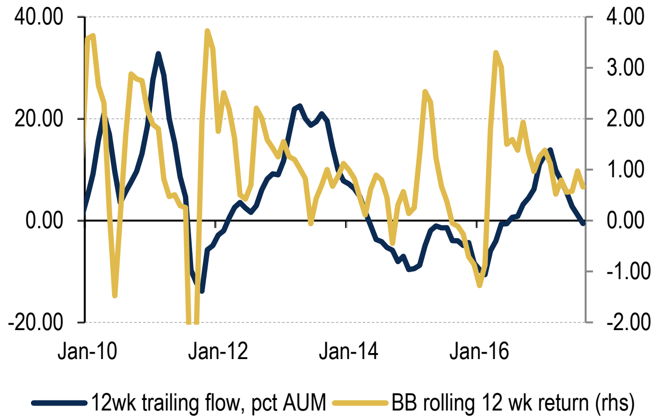
Chart 12: Monthly CLO 2.0 returns by rating



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

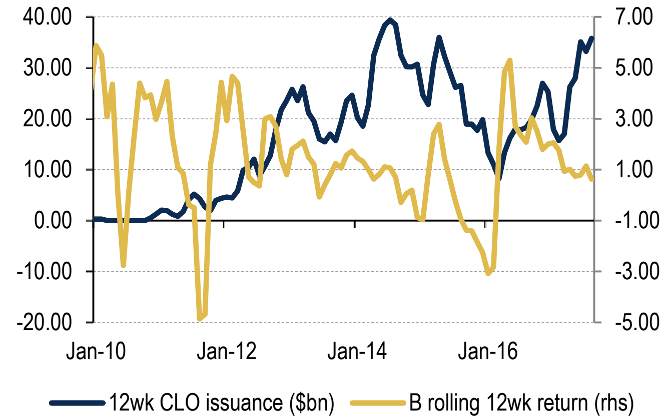
Since technicals play a big role in the loan market, following retail patterns is also essential. In general, we see that the performance of the BB section of the loan market correlates most with retail flows, while new CLO issuance seems to correlate to B Loan returns. This makes sense as mutual funds generally gravitate towards less risky investments while CLOs invest in single B rated assets on average. Chart 13 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 14 depicts monthly CLO issuance vs. monthly B Loan total returns.

Chart 13: BB performance vs Loan retail flows



Source: S&P LCD, EPFR Global

Chart 14: B performance vs CLO creation



Source: S&P LCD, EPFR Global

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