

US Credit Research and Strategy

Revolver Draws and the Effect on Banks and Corporate Spreads

Corporate revolver drawdowns have picked up and are likely to remain elevated. We believe the banking system is equipped to meet this demand from a capital and liquidity perspective. The negative signaling effect and CDS technical from loan hedging desks should continue to weigh on corporates that utilize their facilities.

For the first time since 2008, revolver draws have been stealing headlines as corporates rush to secure liquidity ahead of significant business uncertainty. Beyond the underlying stress that is driving these draws, questions have been raised about banks' ability to meet the funding demand and the implications for capital ratios and asset quality. For both corporates and banks, we believe 2008/09 has some applicability, but caution that markets have changed so much in that timeframe that the consequences could be different. Some of these key changes:

- Banks are operating with materially higher capital ratios that can more easily withstand the
 increase in RWAs related to revolver draws, and metrics hold up well in even our severe
 stress case for revolver draws of 50% of committed lines. The TCE ratio for our 25 bank
 aggregate has increased from 3.8% at 4Q08 to 7.6% at 4Q19.
- While total commercial paper outstanding is substantially below 2008 levels, non-financial CP has grown 56% (Figure 2) from crisis level peaks, and revolver draws may be used to help with rolling CP, especially for lower-rated issuers that may not be covered by the new CPFF.
- The incentive to draw a revolver is first and foremost based on liquidity provisioning. In 2008, many companies drew to make sure they could get credit from banks that were under stress. We do not believe that incentive exists today and do not expect that banks will be able use material adverse effect or change (MAE or MAC) language to prevent most revolver draws.
- Negotiating leverage with banks is also a factor mainly for high yield corporates in deciding
 to draw revolvers strategically. Earnings have yet to decline materially for most companies;
 therefore, they should have full access to their revolvers, but they might not following a
 quarter or two of challenging results. For leveraged borrowers with covenant-lite loans, the
 incentives may have changed the most in the past decade, as they now typically have
 revolvers with covenants that kick in only above a certain draw threshold (usually 30-40%).

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FOCUS #virus #liquiditysqueeze

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Steve Wang +1 212 526 4620 steve.wang2@barclays.com BCI, US Bank loan hedging desks were somewhat less active in the unsecured CDS market prior to
this episode, but some will still look to buy additional protection when revolvers are drawn,
and we have seen this already. Credits that drew revolvers have widened significantly, with
many of their CDS curves underperforming and flattening.

FIGURE 1. Sector Distribution (Class 4) of Untapped Revolvers Available in Investment Grade Corporate Universe

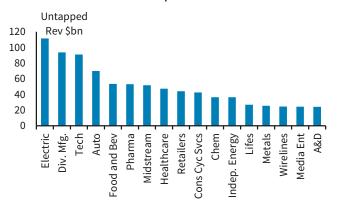
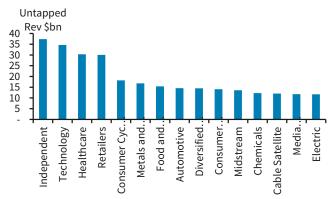


FIGURE 2. Sector Distribution (Class 4) of Untapped Revolvers Available in Leveraged Finance Universe



Note: For issuers in the Bloomberg Barclays US Corporate Index.

Source: Bloomberg, Barclays Research

Note: For issuers in the Bloomberg Barclays High Yield and S&P/LSTA Leveraged Loans Index.

Source: Bloomberg, Barclays Research, S&P LCD

FIGURE 3. Select Companies That Tapped Revolvers to Shore up Liquidity in the Past Week

Borrower	Class 4 Sector	Action	Ratings
AB InBev	Food & Bev	Drew down \$9b revolver	Baa1/A-/BBB
Boeing	A&D	Drew down \$6.3b term loan	Baa1/BBB/A-
Southwest Airlines	Airlines	Drew down \$1bn revolver	Baa1/BBB+/A-
Air Lease Corp.	Fin Cos	Drew down part of \$6b revolver	BBB
AerCap Holdings	Fin Cos	Drew down \$4b revolver	Baa3/BBB/BBB-
Royal Carribean Cruises	Leisure	Increase revolver by \$550m	Baa2/BBB-
Kraft Heinz Foods	Food & Bev	To draw down \$4b revolver	BB+/BB+
Hilton Worldwide	Lodging	Drew down \$1.75b loan	Ba1
United Airlines	Airlines	New \$2b 364-day term loan	Ba2/BB/BB
Wynn Resorts	Gaming	Drew down part of \$850m revolver	BB
L Brands	Retailer	Drew down \$950m revolver	Ba3/BB-/BB-
Boyd Gaming	Gaming	Drew down \$660m revolver	B1/B+
Norwegian Cruise Line	Leisure	New \$675m revolver	

Source: Bloomberg, Barclays Research

Who Is Drawing and Why

Revolvers represent one of the cheapest sources of financing for most companies, as banks extend credit at levels below where they might typically lend in committed form in order to build deeper relationships with corporates. The undrawn revolver has a minimal commitment fee (usually 10-20bp) and then a higher spread over Libor (typically 3m) once drawn. In the high grade market, the average spread is 120bp, and the tenor of those outstanding today is fairly short, at 3.2 years. For high yield, revolvers tend to be five years at issuance, as they are often attached to seven-year term loans as part of the same facility.

Unfortunately, there are no indices of revolvers that correspond to the Bloomberg Barclays Corporate or High Yield Indices or any equivalents. However, we were able to take the constituents of those indices and match revolver information to come up with estimates of the

undrawn commitments for the investment grade and leveraged finance universes. For high yield-rated companies, we include issuers not only in the High Yield Index, but also the S&P LSTA Leveraged Loan Index. We find that there are almost \$1.2trn of untapped revolvers for issuers in the Corporate Index, and more than \$800bn is from BBB issuers (Figure 4). This skew in ratings is even more negative than in the overall investment grade market, where BBBs represent approximately half of the amount outstanding. In leveraged finance, the number for committed revolvers is closer to \$500bn, with undrawn capacity around 85% of the total. Note that these numbers will not match up perfectly with the committed undrawn amounts when we discuss banks below, as those commitments are not restricted to issuers in these universes.

In times of stress, the low cost of revolver financing is even more attractive relative to other sources. The initial list of companies that have drawn their revolvers was concentrated in some of the industries most heavily affected by COVID-19 (Figure 3). This included predominantly airlines, aircraft lessors, aircraft manufacturers, cruise operators, and gaming and lodging companies. By looking at the revolvers outstanding across the high grade and high yield markets, we can get an idea of what percentage of the total pool of uncommitted financing these industries and others that are highly susceptible represent. In general, cyclical and leisure-related industries do not currently account for the highest portion of undrawn revolver commitments (Figures 1 and 2). We have not seen a significant amount of drawdowns by retailers yet, although L Brands made a sizable draw Tuesday and some other high yield issuers have followed. While the largest high grade retailers are less likely to follow suit, we expect to see more from BBB and below retailers. In addition, while the OEMs have substantial liquidity (*High Grade Automotive: Liquidity Deep Dive*), they have large committed facilities and, in an extended downturn, could tap those lines, particularly given news that production is being curtailed.

Compared with the other companies in Figure 5, the \$9bn and \$4bn draws by InBev and Kraft Heinz are more surprising to us, as they are in less cyclical industries. However, the uncertainty for InBev is understandably high considering the closures of restaurants and bars across Europe and the US. This highlights to us that drawdowns may actually be larger than during the financial crisis. For investment grade companies, the average EBITDA decline during that period was only 15%, whereas certain industries may be faced with several months of declines that are much steeper than that, and with uncertainty about the speed of the recovery. Even if FY EBITDA declines end up being less substantial than those during the financial crisis, the nature of this crisis — a very sharp reduction in sales/earnings even, if it is temporary — increases the risk of revolver drawdowns, in our opinion.

For high yield companies, we could also see greater draws because of more energy exposure and sponsors that are pushing private equity-backed corporates to be proactive about liquidity. News reports mention Carlyle and KKR as sponsors that have pushed corporates in their portfolios to be aggressive about conserving liquidity.¹

Revolver Draws a Catalyst for Spread Widening

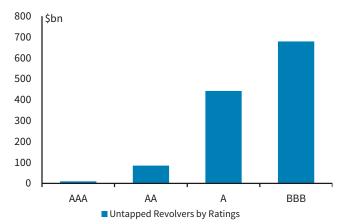
The market's reaction to companies that have drawn revolvers over the past few days has been uniformly negative. Figure 5 shows the cash and CDS spread widening of credits following announcements that that they have drawn on committed facilities – both instruments have underperformed the broader market following the events. The signal of this action is clearly negative, as it could be perceived as a sign that the fundamental deterioration is worse than feared. In addition, the CDS reaction is technically driven, with loan desks hedging their increased exposure to these companies (following the draws) through the derivatives market. We would have expected CDS to underperform cash and CDS curves to flatten given the hedging

¹ https://finance.yahoo.com/news/blackstone-urges-companies-hurt-virus-190158024.html

technical (hedges are often put on through shorter-dated CDS), and while this has been the case for some tickers, it has not happened across all companies.

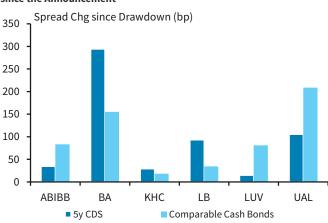
There is usually a stigma to drawing on revolvers and adverse spread reaction as mentioned above, as it may signal a loss of access to primary markets for the issuer. However, in the current environment, where funding access for most issuers is challenged, we believe this stigma will dissipate as more companies drawdown. Indeed, fundamentally, in an environment where liquidity is increasingly at a premium, adding liquidity to the balance sheet is prudent risk management, limiting the company's need to access funding at potentially stressed levels. Less issuance, especially at significantly wider spreads, should also be positive for the existing debt of the issuer. Considering the relative low cost of the revolver debt as well, the negative carry is negligible for most issuers. Consequently, in instances of revolver draws when the issuer's debt widens (or has widened) significantly, especially relative to CDS, we would be biased to be long the cash bonds.

FIGURE 4. Untapped Revolvers in Investment Grade by Ratings



Source: Bloomberg, Barclays Research

FIGURE 5. Performance of 5y CDS versus Comparable Cash Bonds since the Announcement



Source: Bloomberg, Barclays Research

Can Banks Handle the Revolver Drawdowns?

We estimate that the Big 6 US banks have \$1.9trn of unfunded commercial loan commitments and that the regional banks in our 25-bank aggregate have an additional \$0.8trn. Revolver drawdowns have implications for risk-weighted assets, liquidity, and asset quality.

Implications for Risk Weights and Capital

Under Basel III standardized approach, there is a 50% conversion factor for non-cancellable unfunded commitments with an original maturity of over one year that is not dependent on ratings. We believe the vast majority of the \$2.7bn of unfunded commercial commitments fit into this category. RWAs for commercial loans are 100% under the standardized approach (generally the binding constraint given its use in CCAR). So the current RWAs on the \$2.7trn of unfunded commercial commitments is around \$1.35trn, and a drawdown of 100% of revolvers would increase RWAs by an incremental \$1.35trn.

While the industries most affected by restrictions in the movement of people, such as travel, leisure, and other consumer discretionary, are most likely to draw on their revolvers, companies in other industries with recurring revenue streams, such as utilities, are less likely to need to draw. We model a base-case stress scenario with a 30% drawdown on committed facilities

While advanced approaches RWAs are likely to increase relative to standardized as a result of stress in their exposures, we assume that standardized capital remains the binding constraint.

(Figure 6) and a severe stress scenario with a 50% drawdown (Figure 7) and find that the effects are manageable from an RWA and capital perspective even in the severe stress scenario. Both of these cases are likely in excess of drawdowns during the financial crisis, which we believe were 15-20% based on anecdotal evidence. The effect on CET1 ratios would be about 85bp for money center banks and regional banks, though there is a range of outcomes between 30 and 110bp. Still, banks would maintain buffers above their CET1 requirements (including SCB estimates) of an average of 60bp for Big 6 banks and 200bp for regional banks.

The corporates drawing on their revolvers are weighted towards IG credits, which should limit the immediate impact on asset quality and provisions even under CECL, in our view. Given there is only two weeks left in the first quarter, there will be limited benefit for 1Q net interest income from the incremental lending, but incremental interest income should grow in 2Q if these loans remain outstanding.

FIGURE 6. 30% Drawdown

	30% drawdown scenario								
\$bn	RWA increase	Total RWAs	CET1 ratio	Change in CET1 ratio	Est. Min. CET1 with SCB	Buffer			
BAC	67	1,560	10.7%	-0.5%	9.5%	1.2%			
С	62	1,228	11.2%	-0.6%	10.5%	0.7%			
GS	22	586	12.8%	-0.5%	13.0%	-0.2%			
JPM	61	1,576	11.9%	-0.5%	10.6%	1.3%			
MS	17	411	15.8%	-0.7%	14.6%	1.2%			
WFC	56	1,302	10.7%	-0.5%	9.0%	1.7%			
		30%	drawdown sce	enario					
\$bn	RWA increase	Total RWAs	CET1 ratio	Change in CET1 ratio	Min CET1 with SCB	Buffer			
СМА	5	73	9.5%	-0.6%	7.0%	2.5%			
CFG	11	154	9.3%	-0.7%	7.7%	1.6%			
FHN	2	39	8.8%	-0.4%	7.0%	1.8%			
FITB	11	153	9.0%	-0.7%	7.0%	2.0%			
HBAN	3	90	9.6%	-0.3%	7.0%	2.6%			
KEY	7	138	8.9%	-0.5%	7.0%	1.9%			
MTB	6	109	9.2%	-0.5%	7.0%	2.2%			
NTRS	1	71	12.5%	-0.2%	7.0%	5.5%			
PNC	20	361	9.0%	-0.5%	7.0%	2.0%			
RF	5	111	9.2%	-0.5%	7.1%	2.1%			
TFC	27	403	8.9%	-0.6%	7.0%	1.9%			
USB	21	412	8.7%	-0.5%	7.0%	1.7%			

9.6%

-0.6%

7.0%

2.6%

Source: Company filings, Barclays Research

3

60

ZION

FIGURE 7, 50% Drawdown

50% drawdown scenario							
\$bn	RWA increase	Total RWAs	CET1 ratio	Change in CET1 ratio	Est. Min. CET1 with SCB	Buffer	
BAC	111	1,604	10.4%	-0.8%	9.5%	0.9%	
С	103	1,269	10.9%	-1.0%	10.5%	0.4%	
GS	37	601	12.5%	-0.8%	13.0%	-0.5%	
JPM	101	1,617	11.6%	-0.8%	10.6%	1.0%	
MS	28	422	15.3%	-1.1%	14.6%	0.7%	
WFC	93	1,339	10.4%	-0.8%	9.0%	1.4%	
50% drawdown scenario							

\$bn	RWA increase	Total RWAs	CET1 ratio	Change in CET1 ratio	Min CET1 with SCB	Buffer
CMA	8	76	9.1%	-1.0%	7.0%	2.1%
CFG	18	161	8.9%	-1.1%	7.7%	1.2%
FHN	3	40	8.5%	-0.7%	7.0%	1.5%
FITB	19	161	8.6%	-1.1%	7.0%	1.6%
HBAN	5	92	9.4%	-0.5%	7.0%	2.4%
KEY	12	143	8.6%	-0.8%	7.0%	1.6%
MTB	10	113	8.9%	-0.8%	7.0%	1.9%
NTRS	2	72	12.4%	-0.3%	7.0%	5.4%
PNC	33	374	8.7%	-0.8%	7.0%	1.7%
RF	9	115	8.9%	-0.8%	7.1%	1.8%
TFC	44	420	8.5%	-1.0%	7.0%	1.5%
USB	35	426	8.4%	-0.7%	7.0%	1.4%
ZION	6	62	9.2%	-1.0%	7.0%	2.2%

Source: Company filings, Barclays Research

Is There Enough Liquidity for Banks to Service This Much Demand?

A 50% drawdown would require the Big 6 banks to provide \$950bn of liquidity to corporates. This group had \$2.25trn of high-quality liquid assets at year-end 2019, of which \$1.85trn is cash and government securities. This understates the true capacity of banks to fund commitments, as there are also FHLB facilities available at many banks and certain excess liquidity at the bank is not captured in consolidated LCR. In addition, the Fed has lowered the rate on the discount window to 0.25% and encouraged banks to borrow as long as 90 days with the ability to roll over. Since performing loans are eligible collateral, this is an incremental source of liquidity for banks to fund drawdowns. Finally, the \$700bn (and potentially growing) of incremental Treasury and agency MBS purchases will inject liquidity into the financial system that should end up as deposits on the largest bank balance sheets.

It appears clear to us that the banking system has the liquidity to meet potential revolver draws. Beyond the available sources of liquidity, we note that the cash provided to corporate depositors does not leave the financial system. Corporates that draw proactively are likely to park the proceeds back at the bank(s) that runs their cash management programs or invest them in short-term Treasuries. As a result, the cash will either be redeposited directly in the banking system or through the asset manager that sells the Treasuries to the corporate. There can be net providers and receivers of cash in this process, and we think that banks with large commercial banking presences and cash management businesses are most likely to benefit.

Beyond meeting actual funding demand from clients, banks must maintain compliance with various liquidity requirements, including internal liquidity stress testing and the public liquidity coverage ratio (LCR), which measures a bank's high quality liquid assets (HQLA) relative to stressed liquidity needs over a 30-day period. The average assumed drawdown in the LCR on credit and liquidity facilities is about 22% for the Big 6 banks. In our severe stress scenario of 50%, there would be an incremental \$0.5trn outflow, which would appear to overwhelm the

current \$0.4trn buffer to the 100% requirement, but we believe that deposit inflows would help offset this stressed drawdown. The Federal Reserve has encouraged banks to utilize their liquidity management buffers, and we think it would be incrementally helpful for it to make clear if and by how much banks could operate below a 100% LCR without incurring additional regulatory scrutiny.

CPFF and PDCF Should Limit Draws for Higher-Quality Issuers

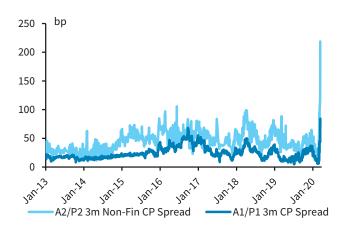
As discussed above, certain industries most affected by COVID-19 are likely to have larger revolver draws. Another potential screening mechanism for revolver draws is commercial paper outstanding in relation to revolver size (*IG Food/Beverage, Consumer Products, Tobacco: Looking through the Liquidity Lens*), as companies with larger balances might seek to draw more quickly, especially as the commercial paper market has widened substantially (Figure 8). The increase in non-financial commercial paper is substantial, at 56% since 2008, and at first glance causes some concern in terms of how companies have financed themselves (Figure 9). However, we note that CP is actually much smaller than the amount outstanding of non-financial investment grade bonds in the Corporate Index today, at 9% relative to 16% at YE08. We are also likely overcounting the amount of true corporate CP outstanding, as SSA CP is bucketed with non-financials in the Fed data, and we believe that it would be much greater today than in 2008. Finally, the duration of the investment grade bond market is at all-time highs, as companies have pushed their issuance even further out the curve.

Still, almost \$320bn of CP that needs to be actively rolled is concerning in the market we have witnessed in the past week. At the peak of the recent dislocation, levels in the CP market exceeded the costs of revolver borrowings for many issuers, which could lead some of the less obvious corporates to tap undrawn credit lines. This is where the CPFF should, in theory, assuage some fears and allow corporates to save revolving credit lines for other purposes.

The goal of the CPFF is to be a backstop, similar to the role it served in the aftermath of the credit crisis. The CPFF is geared toward the highest-quality issuers, with the ability to own the greatest amount outstanding per issuer in the past year for A1/P1 issuers at a charge of OIS+200bp and a fee of 10bp on the maximum amount of its CP that the CPFF SPV may own (US Money Markets: CPFF 2.0). As shown in Figure 8, these levels are in excess of where many issuers are funding in the CP market even under today's stress, so it still may make sense for issuers with truly temporary liquidity needs to tap revolvers that are cheaper even if they see spreads backup to the level of the CPFF. For cyclicals, where the degree of uncertainty with respect to cash flow needs are even higher, we are likely to see revolvers saved for those purposes and the CPFF used if needed. Also, we note that on most up days in the market in the past 10 days, investment grade bond issuance has been substantial, with Tuesday's \$28bn the highest day since November. The use of proceeds has been focused on front-end bond maturities for the most part, but some issuers may eventually refinance CP with bonds instead of the CPFF or by tapping revolvers.

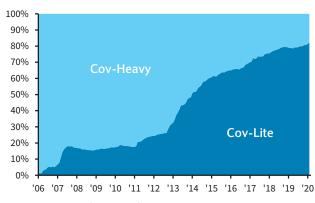
While there are some provisions in the CPFF for issuers that get downgraded to A2/P2, we believe that current A2/P2 issuers are more likely to draw on their revolvers for the purpose of refinancing CP than the higher-quality issuers that make up the majority of the market. For these issuers and higher quality ones, the reviving of the Primary Dealer Credit Facility (PDCF) could perhaps be as helpful as the CPFF (US Money Markets: PDCF II and capping rates). Since CP can be posted as part of the PDCF, we would expect an incremental source of demand from banks that could help tighten spreads.

FIGURE 8. Commercial Paper Spreads at the Wides since 2008



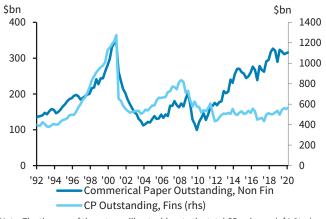
Source: FRB, Bloomberg, Barclays Research

FIGURE 10. Leveraged Loans by Covenant Type



Source: S&P LCD, Barclays Research

FIGURE 9. Commercial Paper Issued by Financials versus Non-Financials



Note: The the sum of these two will not add up to the total CP universe (~\$1.2trn), as there is asset-backed CP (ABCP), which is about \$250bn in outstanding. Source: FRB, Bloomberg, Barclays Research

FIGURE 11. Historical Recoveries

Debt Type	Dec '89 - Dec '92		Dec '08 - Aug '10		Outside of the Default Cycles**
All Revolvers	88%	81%	90%	91%	88%
Term Loans	87%	71%	71%	63%	82%

Source: Moody's, Barclays Research

Leveraged Issuers Have a Different Calculus

Revolvers in the leveraged finance market are quite different than those in the high grade market. To make up for the lower quality of the corporates, these revolvers are secured, which traditionally leads to a higher recovery. While banks rely on the low probability of default when they lend to investment grade companies, for high yield-rated entities, they are willing to extend credit based on the low probability of losses on default.

Much has been made in this cycle about the potential downward pressure on secured leveraged loans as a result of several factors including higher first-lien leverage and substantial covenant loopholes (Adjusting Loan Recoveries for EBITDA Adjustments). While we expect loan recoveries to be 10pts lower, we do not think the same downside exists for revolvers. Some revolvers fully share collateral with pari passu secured loans in many high-profile industries such as energy and retail, but these borrowing- or asset-based revolvers have certain collateral that is not accessible to other lenders. This has led to a substantial divergence in recoveries between revolvers and term loans that we expect to hold throughout this cycle more than in the past (Figure 11).

Another difference between leveraged loans and revolvers is that revolvers have not suffered the same deterioration in covenant packages as the broader leveraged loan market. It has been well publicized that the majority of the leveraged loan market is covenant-lite (Figure 10). However, for most of those companies, the corresponding leveraged loan has a revolver that kicks in at a certain drawn amount, typically 30-40%. Figure 12 uses data from Covenant Review to show the average springing covenant trigger and leverage tests. This presents an interesting incentive system for companies. For those not under major stress, it may make sense to draw 30% or less of their revolvers to have access to extra cash without adding restraints on leverage. For those that are more worried, they would likely not be in violation of the trailing leverage covenants if they drew the revolvers today, but could be if EBITDA declines in the future. This would lead to the need for an amendment, which we believe most companies would likely get, but they may feel that they have a better negotiating position if the revolver has been drawn. According to S&P LCD (Figure 13), even before the recent uptick in revolver draws, there was a pickup in amendments for more idiosyncratic reasons for pro rata loans, which include revolvers, since most term loans do not have maintenance covenants as discussed above. In summary, we think that companies will be reticent to draw above their springing thresholds at first, but those that need to will likely be able to secure amendments with their bank groups because of the strength of collateral behind the revolvers.

FIGURE 12. Revolver Springing Covenants

Year	Springing trigger	Net first lien maintenance covenant	Net FL maintenance covenant headroom (sponsored only)	
2017	32.34%	6.64	2.45	
2018	33.46%	6.80	2.70	
2019	34.64%	7.05	2.80	
LTM	34.21%	7.07	2.87	

FIGURE 13. Leveraged Loan Amendment Activity



Source: Covenant Review, Barclays Research

Source: S&P LCD, Barclays Research

Analyst(s) Certification(s):

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