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# Covenant-Lite: An Evolution, Not a Revolution

- **The leveraged loan market has grown at an 11% CAGR over the past five years, and 80% of loans outstanding are now covenant-lite. In addition, the protection for covenant-heavy loans has weakened, and issuer-friendly terms have increased across the loan market. These changes have attracted the attention and scrutiny of regulators, central banks, and politicians globally, as they point to the leveraged loan market as a potential catalyst for the next downturn.**
- **We believe that elevated demand for leveraged loans, driven by the increase in institutional investors, notably CLOs, is responsible for the decline in covenant protection. These investors have largely supplanted banks as buyers of leveraged loans. In fact, in revolvers, where banks are still the primary investors, there is typically some form of maintenance covenant.**
- **From a macro perspective, we believe the risks posed by the decline in covenant protection are likely overstated.**
  - **First, much of the increased loan issuance is replacing issuance that would have come in the bond market. As the loan market has grown significantly over the past few years, the high yield bond market has shrunk, with issuers favoring loans over bonds. Loans still come with protections that are better than or, at worst, equal to those included in bonds; the transition from bonds to cov-lite loans does not represent an aggregate decline in covenant protection.**
  - **Second, the very demand-side changes that have led to the decline in covenants also reduce the systemic concerns associated with the loan market. Although it has driven a worsening in covenant quality, a buyer base that is more institutional and less structurally intertwined with the financial system (like banks historically have been) sharply lowers contagion risk.**
- **Even though we do not foresee any major macro implications from the decline in covenant protection, recent trends in the loan market are likely to weigh on returns. While we calculate the true returns from maintenance covenants at less than a quarter point historically, other changes in market structure are problematic. We expect recoveries to be 5-10pts lower for loans in the next cycle because of higher leverage through the first liens and less bond debt behind the senior secured lenders, in addition to the lack of covenants. With default rates likely to be similar to the past, this implies greater losses, which is consistent with our thesis that today's loan cohort has incorporated some characteristics of the bond market.**

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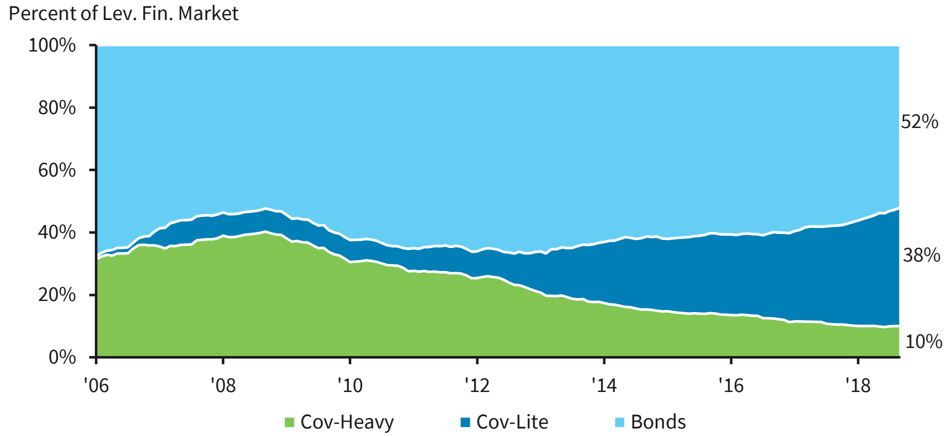
FIGURE 1

**Cov-Lite Loans Still Represent Less Than 40% of Leveraged Finance Markets**




Source: Bloomberg Barclays Indices, S&P LCD

## Leverage Lending Markets Are an Area of Increased Concern

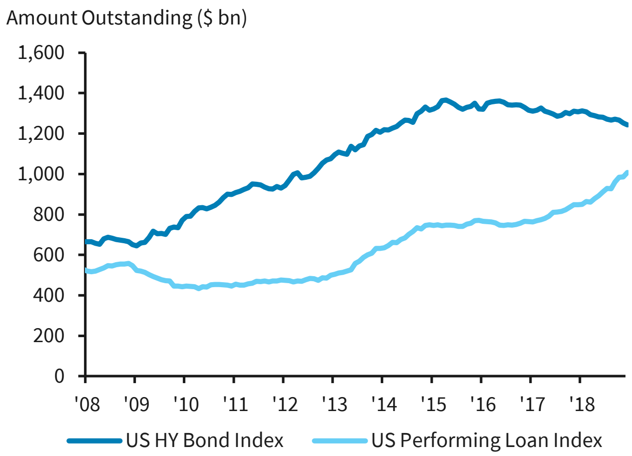
The rapid growth of the leveraged loan market has led to increased skepticism from investors and non-investors alike. The loan market, specifically the loosening of covenant restrictions, has been cited by politicians and regulators as a potential problem. In fact, several current Federal Reserve Board members, Bank of England Governor Carney, Former Fed Chair Yellen, and Senator Elizabeth Warren have all raised concerns about the leveraged loan market. For example, Yellen said that there had been a "huge deterioration" in lending standards ("Regulators Sound the Alarm About Leveraged Loan Markets, *Reuters*, October 30, 2018), while Warren made comparisons between today's loan market and pre-crisis market excesses. Recently, the Shared National Credit (SNC) Program, a semiannual review of large syndicated loans (conducted by the Federal Reserve, FDIC, and Comptroller of the Currency) stated that "risks associated with leveraged lending activities are building" and that "many leveraged loan transactions possess weakened transaction structures" (Federal Reserve).

We think these concerns are likely overstated. It is true that covenant protection has declined – both through the rise of covenant-lite issuance and through the drop in the number of covenants in traditional covenant-heavy loans. However, we believe that the same factors responsible for deteriorating covenant protection also reduce the systemic implications of the shift. Specifically, a sharp rise in institutional, non-bank investors, such as CLOs, has not only supplanted banks as the main owners of loans, but also increased the overall demand for loans. Issuers have taken advantage of this to shift away from bonds and reduce the amount of covenant protection that they provide to loan investors. But this very shift in the ownership of loans reduces the systemic implications of the decline in covenants – the systemic risk in the loan market was due to high levels of bank participation, not the risks posed to other investors.

This is not to say that investors can ignore the changes in the loan market. We expect the return characteristics of the loan and bond markets to converge somewhat as issuers shift into loans. This means lower recoveries and likely more bond-like downside if the credit cycle turns. However, loans still have more covenant protection – and security – than bonds. We do not expect anything like full convergence. Instead, we expect loan recoveries to decline 5-10pts from prior cycles.

FIGURE 2

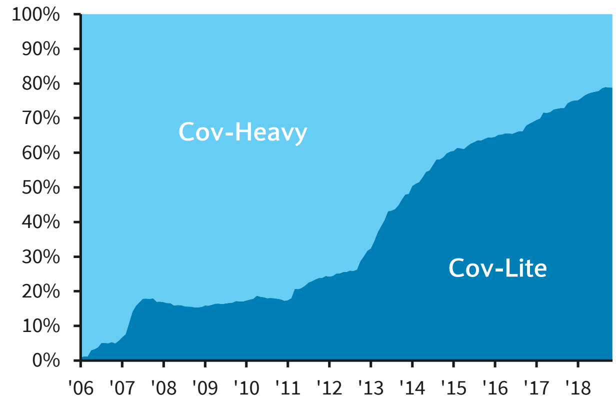
**The Loan Market Has Grown Significantly in Recent Years**




Source: Bloomberg Barclays Indices, S&P LCD

FIGURE 3

**Cov-Lite Loans Now Represent Roughly 80% of the Loan Market**




Note: Above is for the S&P LSTA Leveraged Loan Index

Source: Bloomberg Barclays Indices, S&P LCD

## Defining Cov-Lite: It Does Not Mean No Covenants

Broadly, covenant-lite ("cov-lite") loans have bond-like incurrence covenants, while covenant-heavy loans have maintenance tests. The latter require the issuer to meet financial requirements (such as leverage and/or coverage levels) at periodic intervals, often at quarterly or semi-annual earnings releases. They are always enforceable and not "springing" under certain scenarios. Conversely, for cov-lite loans' incurrence covenants, financial restrictions are enforceable only in certain scenarios such as additional debt issuance, dividend payments, share repurchases, mergers, acquisitions, or asset sales. For example, the "cov-heavy" CenturyLink term loan B maturing in 2025 includes maintenance tests for maximum leverage and minimum interest coverage ratio tests "as of the last day of any fiscal quarter" (Street Diligence).

Given the use of incurrence, rather than maintenance, covenants, cov-lite loans are frequently referred to as "bond-like." Generally, though, cov-lite loans are secured financing, but often carry additional covenants relative to their high yield bond peers, which are roughly 80% unsecured.

Although they lack maintenance covenants, cov-lite loans still typically provide investors with protection when a company needs to borrow additional uncommitted capital. As S&P noted recently, "cov-lite in and of itself is not a sign of credit risk" but rather simply means that "the loan market has adopted a bond market approach to covenants" (*Cov-lite in context: The structure's rise, by the numbers*, December 12, 2018).

Revolvers, which are still typically held by banks, often have maintenance covenants even when broadly syndicated term loans from the same issuer do not, ensuring that tests apply even for borrowing committed capital. In fact, per *Covenant Review*, the vast majority (roughly 75% in 2018) of sponsor-backed loans have a springing financial maintenance covenant test, typically at a 30-35% revolver draw. For non-sponsor-backed loans, this number is lower (roughly one-third had springing covenants in 2018), but roughly two-thirds of loans issued over the past two years still have some form of restriction on borrowing additional debt in this form. This rate for both sponsor- and non-sponsor-backed deals has increased from 2017 levels, implying a trend of somewhat more creditor-friendly protections. The constraints that revolvers have are often as restrictive as those that cov-heavy protection would provide.

## Loan Covenants Have Weakened across the Board

### Cov-Lite Loans Now Dominate the Market…

The growth of the loan market stands in stark contrast to the decline of the high yield bond market in recent years. As Figure 2 shows, the high yield bond market has shrunk 6% (from $1.32trn to $1.24trn) since the end of 2015, while the S&P LSTA Performing Leveraged Loan Index has increased 30% (from $0.77trn to $1.01trn) over the same period. Simultaneously, the loan market has transitioned in recent years to be dominated by cov-lite loans, which now make up roughly 80% of the market. This rate has risen steadily since 2011, while it had previously hovered below 20% (Figure 3).

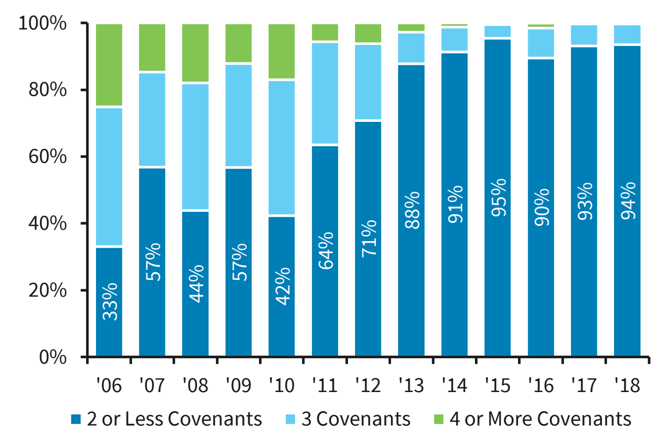
### …and Cov-Heavy Loans Have Looser Covenants

The loan market has also experienced a degradation of investor protection within the covenant-heavy universe. Currently, 94% of cov-heavy first-lien loans have two or fewer covenants, a significant change from pre-crisis levels, when three or more covenants were common (Figure 4). In fact, the average number of covenants stands at just 1.3, the lowest level in history. For reference, this is roughly half the levels that prevailed pre-crisis (2.6 in 2006-07) and immediately post-crisis (2.7 in 2010). For loans issued for LBO purposes, this evolution is even more significant, with 100% of first-lien covenant-heavy LBO loans issued with two or fewer covenants, relative to 52% in 2006-08 and 32% in 2010.

The rate of specific covenants on cov-heavy first-liens shows a noticeable decline in protection for investors (Figure 5). For example, more than 40% of these loans issued both before and after the crisis had capital expenditure covenants, yet only 2% issued in 2018 have similar covenants. In addition, in 2010, more than 50% of these new issues had interest coverage limits and 19% had senior debt/EBITDA restrictions; currently, those levels are 12% and 6%, respectively. At this point, investors with covenants basically have one lever to pull, which is typically a total leverage covenant. As a result of the decline in covenants, first-lien new issue leverage has continued to increase, reaching 4.2x at the end of 2018, more than a turn higher than a decade ago.

FIGURE 4

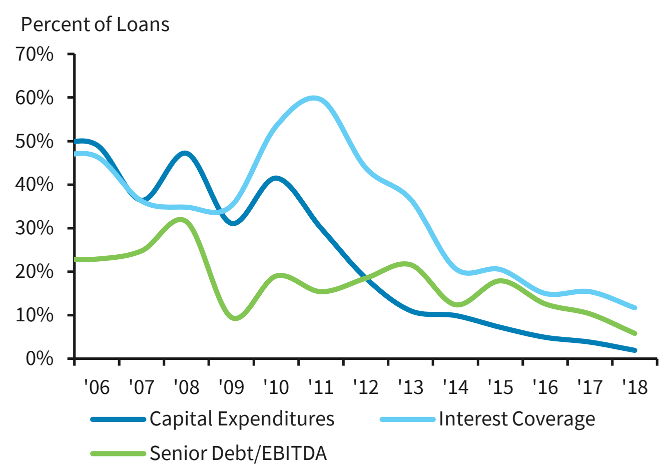
**More than 90% of New Issue Cov-Heavy First-Lien Loans Now Have Two or Fewer Covenants**




Source: Bloomberg Barclays Indices, S&P LCD

FIGURE 5

**The Frequency of Key Covenants Has Declined for New Issue First-Lien Cov-Heavy Loans**




Source: Bloomberg Barclays Indices, S&P LCD

In fact, as S&P noted, many recent deals, such as those brought by Refinitiv and Envision Healthcare, "included some of the most aggressive language that investors tolerated" (S&P LCD, December 21, 2018). Specifically, some recent LBO deals allowed private equity sponsors to pay themselves dividends without material restrictions, while also using their own definition of EBITDA. Per *Covenant Review*, sponsor-backed loans issued in 4Q18 had an average EBITDA adjustment as a percent of pro forma adjusted EBITDA of 26%, above the 23% for non-sponsor-backed loans. In addition, 57% of loans issued in the quarter with large sponsor backing had uncapped cost saving and synergy adjustments to EBITDA, much higher than the 9% for non-sponsor-backed loans.

While loan covenants have shifted more toward bond covenants and deteriorated more than bond covenants, based on their superior starting place, loan covenants will almost always be better than bond covenants for a new deal from an individual issuer and the market in general. Loans typically get first look at repayments, and excess cash flow sweeps still exist in most deals. A useful measure of covenant evolution is Moody's Covenant Quality Indicator (CQI), which rates bonds and loans based on their covenant packages at issue date using pre-defined, objective criteria, with 5.0 the weakest possible rating (loosest covenants) and 1.0 the strongest (tightest covenants).

The spread between loan and bond CQI has compressed, with a decrease in loan covenant quality outpacing that in bond covenant quality. The spread between the two now stands at 0.3, below the 2013-17 average of 0.5 (Moody's). While the increase in loan-only issuers means that the universe for CQI is different, given that it is new issue focused, we believe this represents a fair picture of market trends. Below, we discuss some of the other areas where covenants and credit agreements have become more issuer friendly. Some of these are likely to have a much greater effect than the much-hyped shift to cov-lite.

## Demand Technicals Have Driven This Shift

### The Loan Buyer Base Is Now Broad and Institutional

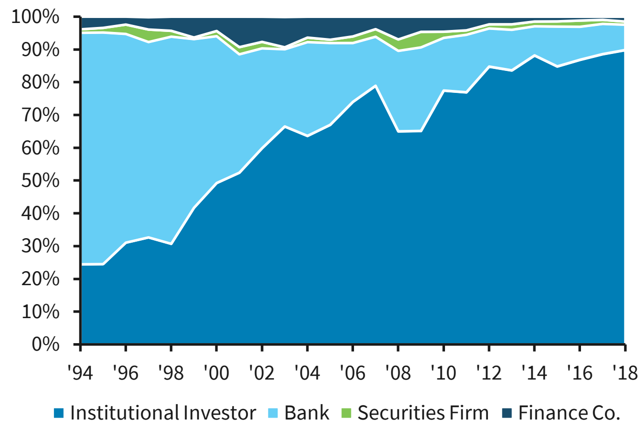
A notable change in ownership has accompanied the decline in covenant protection. The loan market buyer base, which was previously dominated by small bank groups that could easily come together to discuss amendments for borrowers, has become much broader in recent years (Figure 6). Today, the primary investors in leveraged loans are non-bank lenders that use committed capital and very little recourse leverage.

The universe of investors that are active in the market has been fairly limited historically but has grown significantly in recent years as loans were sold to more institutional investors. In fact, in 2018, there were more than 310 institutional loan groups, defined as groups that either participated in three or more loans or made $10mn of commitments. That number was roughly double 2009's level (Figure 7).

From an operational perspective, this change in ownership is likely contributing to the decline in covenants. With a small lender group, it was easy to set up credit agreements with maintenance covenants, since a response could be garnered quickly when a company needed an amendment. This was in contrast to the more widely held high yield bond market, where incurrence covenants have always been the norm. In addition, at the turn of the century, companies did more of their financing in the term loan A market, a structure that banks prefer because they find the greater amortization attractive (Figure 8).

FIGURE 6

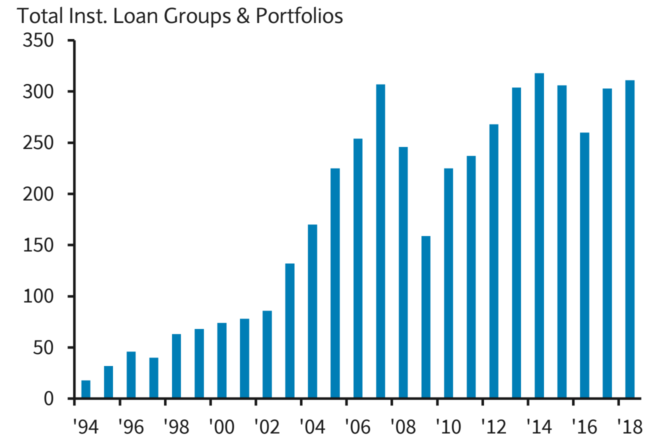
**Institutional Investors Now Make up 90% of the New Issue Loan Buyer Base**




Source: S&P LCD

FIGURE 7

**The Number of Institutional Loan Groups Has Grown Significantly over the Past 20 Years**



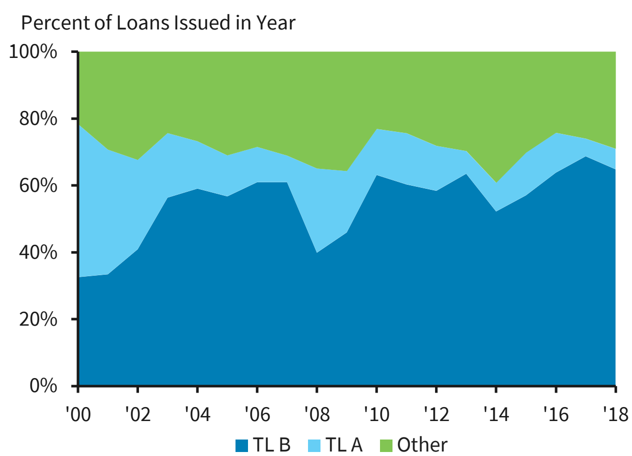

Note; Institutional loan groups defined as groups that either participated in three or more loans or made $10mn of commitments. Source: S&P LCD

## Demand Allowed Issues to Dial Back on Covenants

But the demand changes are more than just operational – they have been excessive relative to the supply of loans, driven by both CLOs and retail investors. CLOs now own 60% of the loan market. That percentage has been growing in recent years as CLO creation has outstripped even the strong growth of the loan market. In addition, retail loan funds have grown from $60bn to $125bn from the end of 2011 to now. As a result of this loan dedicated demand, investors needed the market to grow, and issuers were able to threaten to take their business to the always "cov-lite" bond market instead if they were forced to face more stringent terms in the loan market. Demand was not comparable in the bond market, but since that market has been shrinking modestly since 2015, investors likely would have been happy to look at new issue. Investors were therefore faced with few alternatives, and the answer was a wholesale shift to cov-lite.

FIGURE 8

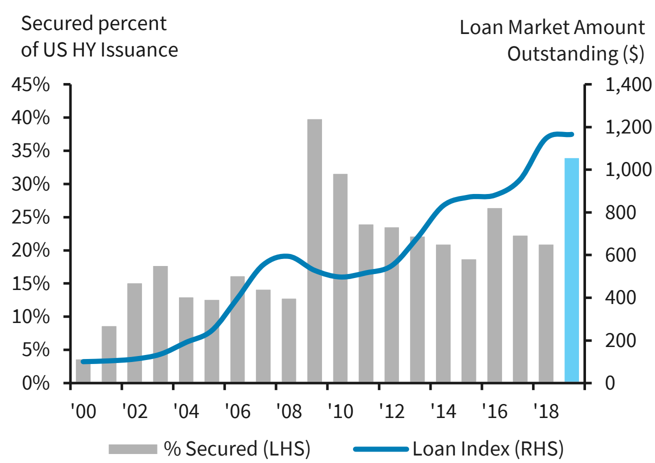
**Term Loan A Issuance Rate Has Decreased since the Recession**




Source: S&P LCD

FIGURE 9

**Secured Bond Issuance Rates Increased Post-Crisis When the Loan Market Shrunk**




Source: Bloomberg Barclays Indices, S&P LCD

For evidence of this behavior, we look at the rate of secured bonds issuance in a given year, the purest form of substitution for secured loans, relative to all bond issuance in that year. This rate increased significantly after the financial crisis, when the loan market was mostly closed (Figure 9). In fact, the loan market shrank during that period, suggesting that issuers turned from the loan market to the bond market. Since then, tough, the secured bond issuance rate has declined while the loan market has nearly doubled in size (note that so far this year, the rate of secured bonds has climbed, as large issuers such as Commscope (COMM) and Dun & Bradstreet (DNB) have flexed issuance to the secured bond market from the leveraged loan market).

Retail loan funds often consider secured bonds and have an allocation in their portfolios to these securities based on their value relative to the leveraged loan market. However, CLOs are prohibited from buying any bonds by the Volcker rule if they wish to sell their liabilities to US banks. We believe this exacerbated the decline in covenants in general and the shift to covenant-lite as well. While too big a bond bucket would be problematic for CLOs in terms of potential interest rate mismatches and potentially lower recoveries, the ability of a CLO manager to at least threaten to shift some allocation to bonds would help push back on the most aggressive loan structures. Last fall, there was a comment period outstanding on this topic, which is still under review, and we believe that allowing a small bond bucket (5-10%) that is required to at least in part be secured would be healthy for the market.

## Systemic Implications of These Changes Are Limited

The systemic implications of declining covenant protection are limited by two factors: the shift from bonds to loans and the changes in ownership that have driven the changes in covenants. We believe that the bond-to-loan shift should mitigate risk, as loans, even cov-lite loans, have investor protections that are at worst in line with bond covenants. Second, the demand technicals that have caused the shift in the loan market mean that the buyer base is broad, institutional, and limited in regard to contagion risk.

### Bond-to-Loan Issuance and the Growth of Loan-Only Capital Structures

As a result of the excess demand for loans, much of the increase in loan issuance has come in place of issuance that would have come in the bond market. In 2006, loans composed about 30% of the leveraged finance market, virtually all of which was cov-heavy. Today, loans are nearly 50% of the leveraged finance market, but cov-heavy is only 20% of the loan market, equating to 10% of the leveraged finance market. This puts a different perspective on how much aggregate covenant protection has really declined. Although loans have gone from 100% cov-heavy to 20%, the overall market has gone from 30% to 10% – a dramatically smaller shift. In other words, cov-lite loans that would, in other environments, have been issued in bond form, do not represent an actual loss of protection. In fact, they may represent an increase in protection, since they likely come with as many or more covenants than bonds, as well as increased security.

This change is further evidenced by the growth of loan-only issuers and decline of dual bond and loan issuers – with loan-only issuers now representing roughly 60% of the loan market (Figure 10). First, the decline of covenant protection and growth of "bond-like" loan issuance has caused companies to access the loan market when many previously preferred the limited restrictions of the bond market. Part of this preference for the loan market is that it generally has a more issuer-friendly call structure. The non-call period is much shorter for loans, and they have lower call prices (at par) relative to bonds (above par).

The stronger demand for loans put loan issuers in the driver's seat in recent years, while the high yield bond market faced weakening demand over the same period as retail investors (mutual fund and ETFs) pulled assets from high yield funds. This was a trend over several years until record outflows from loan mutual funds led the high yield bond market to regain some share of issuance in January 2019. At the same time, the December loan outflows highlighted that retail can add volatility to the loan market, but the bounce-back in January despite continued outflows showed that retail is more likely to affect short-term than long-term volatility in the loan market.

### A Broad Institutional Buyer Base Should Limit Contagion Risk

As discussed above, the changes in the loan market can be attributed to the supportive demand technical from a broad buyer base with committed capital, namely CLOs. The members of the current investor base hold committed capital and are less likely to be forced sellers in times of market pressure.

Banks, which previously made up the majority of loan market demand, used greater balance sheet leverage than today's CLOs do. In addition, the interconnectivity of banks could cause a snowball effect if loan prices were to decline and defaults pick up. This is generally not the case now, as the web of connections between loan investors has been detangled.

In addition, CLOs are non-mark-to-market vehicles that have incentive to hold assets over the long term, rather than be forced to sell at the lows. As recently detailed in *CLO Mythbusters: Fact-Checking the Headlines*, CLO structures do not require CLOs to be forced sellers if loans falls in price, are downgraded to CCC, or even default.

## Measuring the Value of Covenants through Bond and Loan Comparisons

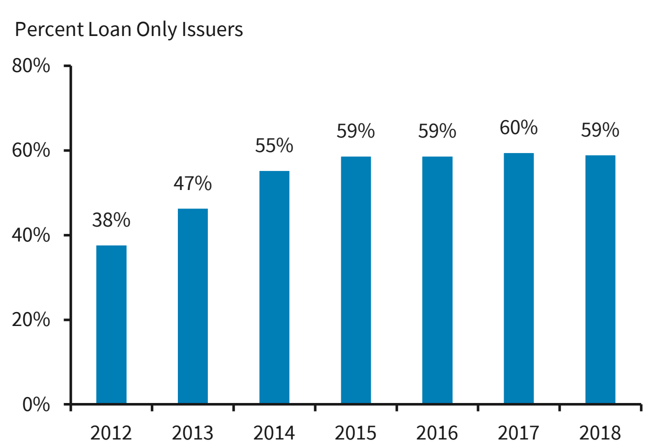
### The Relationship between Bond and Loan Returns

The shift of the loan market to be more structurally similar to the bond market through weaker covenants and a more institutional, broad investor base implies that there should be a convergence between returns and valuations for the two. In theory, there should be a price associated with shifting from maintenance covenants to incurrence covenants, with investors receiving less compensation to take on less risk.

Adjusting for volatility of returns, loans have generated better risk-adjusted returns than bonds in recent years (Figure 11). Theoretically, the gap between the two markets should have compressed as covenants in the loan market became more "bond-like." In practical terms, though, the gap between the two markets beginning in 2016 can likely be attributed

FIGURE 10

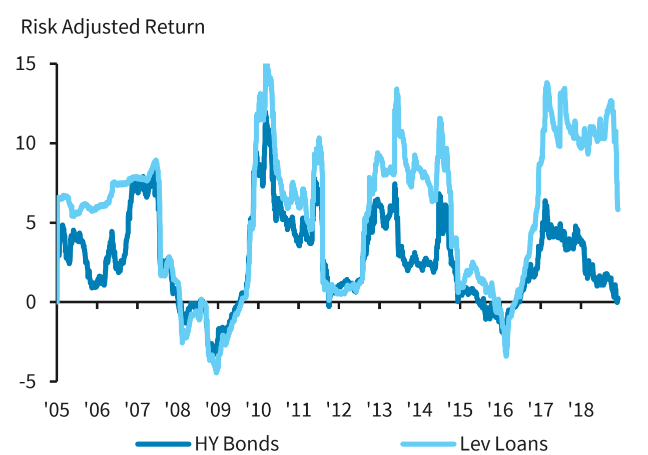
**The Percent of Loan-Only Issuers Has Increased since 2012**




Source: S&P LCD, Bloomberg Barclays Research

FIGURE 11

**Loans Have Had Greater Risk-Adjusted Returns Than Bonds in Recent Years**




Source: Bloomberg Barclays Indices, S&P LCD

to rate forecasts, as expected hiking made floating-rate loans more desirable. In late 2018, it began to compress again as the outlook on rates increases moderated and loan mutual fund flows turned negative. As a result, we expect risk-adjusted returns between the two asset classes to be more comparable over the medium term.

### Cov-Lite versus Cov-Heavy Trading Levels

If there is truly a price associated with shifting from maintenance to incurrence covenants, this would allow investors to choose between additional spread and better covenants. Unfortunately, few issues have both cov-lite and fully covenanted loans, thus limiting the opportunity to do like-for-like comparisons between the two structures. Regardless, if an issuer had both type of loans, the cov-lite lenders could, to some degree, free ride off the cov-heavy terms, obscuring the true value of covenants. Therefore, we are left with market data across issuers.

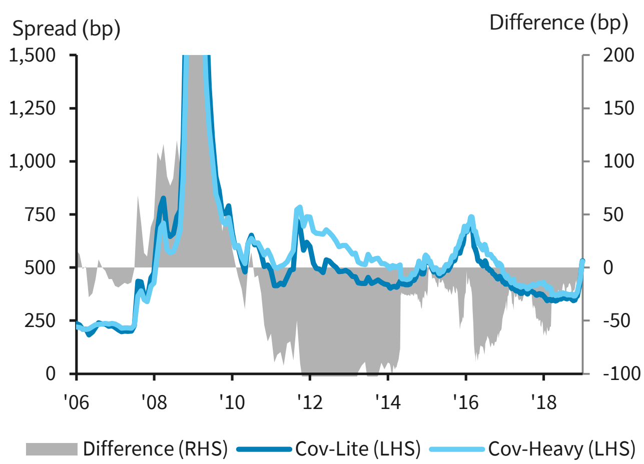
Covenant-lite loans reached a significant portion of the market in mid-2007 and subsequently traded wide to the cov-heavy portion, implying that investors were charging additional spread for companies funding with more issuer-friendly covenant packages. This premium remained fairly modest for the next year and averaged 20bp before spiking at the onset of the financial crisis (Figure 12). However, by mid-2009, the added spread evaporated, and since then, cov-lite loans have consistently traded tight to covenant-heavy loans; they are 16bp rich currently.

Tighter spreads for cov-lite would theoretically imply a "free lunch" for companies that could fund with more issuer-friendly loans at lower costs. That said, this is only the case if factors, specifically quality, are the same across the cov-lite and cov-heavy markets.

In mid-2007, the covenant-lite universe was much weaker rated than the covenant-heavy universe. Today, the ratings distribution is closer, but the covenant-lite universe is still lower quality, with roughly 70% of the amount outstanding of cov-lite loans rated B+ or below, while just 60% of cov-heavy loans meets that qualification (Figure 13). We believe that investors, especially those in CLOs that are overweight B-rated loans, which are overwhelmingly covenant-lite (*A Look at the Future of CCC Buckets in CLOs*), valued access to product and putting capital to work over covenants as their assets under management grew rapidly.

FIGURE 12

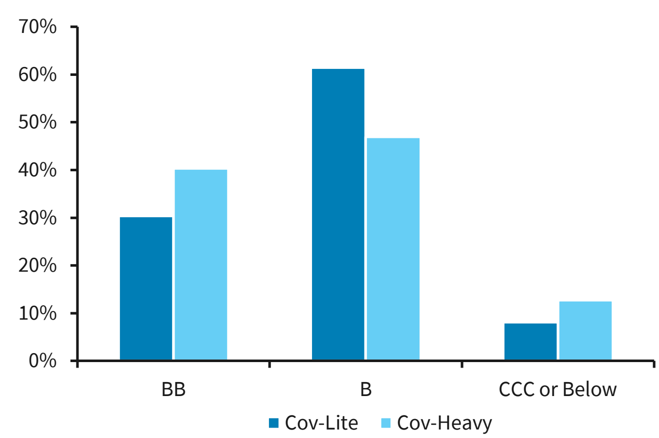
**Cov-Lite Has Traded at a Premium to Cov-Heavy since the Crisis**




Source: S&P LCD, Bloomberg Barclays Research

FIGURE 13

**Cov-Lite Loans Are More Likely to Be Lower Rated than Cov-Heavy Loans**




Source: S&P LCD, Bloomberg Barclays Research

The barbelled nature of Figure 13 implies that issuers with cov-heavy structures are not just those that might not be allowed to issue cov-lite loans because they need more monitoring. This may be part of the reason that a greater portion of CCCs have covenants, but cov-heavy loans are overweight BBs as well. It appears that with some CCCs, the market has tried to be self-regulating, but there are also corporate issuers at the higher-quality end of the spectrum that feel they do not need to ask for cov-lite loans.

We believe the overweighting of B-rated loans in the covenant-lite bucket highlights how fluid the loan and bond markets have become. This is the bucket where sponsor-driven deals are most prominent, and private equity is particularly keen on flexible structures. As the CLO market grew significantly in the middle of this decade, the demand for loans skyrocketed. As mentioned above, this is the part of the market where it is often efficient within the structure for CLOs to be overweight, and the need to stay invested meant that investors have pushed issuers more on areas that would help them satisfy the most important tests within the structure rather than on covenant specifics.

## Covenant-Lite Investors Lose Access to Amendment Fees

If market pricing is not able to provide much information on the value of covenants, another way to assess value is through additional returns that investors of cov-heavy loans might expect to receive that are not available to investors that purchase cov-lite loans. When a company with maintenance covenants violates or comes close to breaching its covenants, it typically asks its lender group for an increase in headroom. Very rarely would a lender group cause a large corporate to file for bankruptcy as a result of this type of covenant violation. Instead, it extracts premiums and keeps the company on a short leash. In exchange for amending the covenant, issuers pay lenders an amendment fee and often increase the running spread of the loan. These are components of returns that are typically not available to covenant-lite lenders.

Significant amendment fees have become an increasingly rare phenomenon, though, in a cov-lite-dominated market. We examined data from a time (2009-12) when there were more maintenance covenants and found that the average amendment fee was 43bp and the average spread increase was 182bp. In the largest year of amendments, 2009, this affected more than 140 loans, or 15% of the cov-heavy market. Grossing this up based on the cov-lite/-heavy breakdown at that time, market-wide returns would have booked an extra 28bp in 2009 and over the longer period of 2009-12 received on average an extra 14bp. This places a greater value on covenants than secondary markets would suggest, but remains fairly modest.

As a final note, cov-lite issuers could be forced to come to lenders for an amendment if they want to incur more debt, but with large baskets for this carved out of most credit agreements already in the market, it is fairly rare. Instead, cov-lite lenders focus on most favored nation (MFN) clauses, hoping for a spread bump if the issuer does an incremental loan in a less favorable environment. This probably means that the true difference in value is a bit smaller than the calculations above indicate based on amendment fees for covenant-heavy issuers, but these instances are rare enough in the covenant-lite realm that excluding them should not affect our conclusions.

These nuances are affecting issuance as volatility has picked up in the loan market. For example, Transdigm's (TDG) recently issued only secured bonds, despite initial talks of financing through both the bond and loan markets. The deal, which is the largest secured bond in the high yield market (and third-largest bond overall), helped the company avoid the MFN clause in its loan that likely would have been triggered if it had tapped the loan market in substantial size. In addition, when the cycle turns, we expect distressed issuers to ask lenders for other forms of flexibility, such as the ability to share or move collateral, although this would be the same for covenant-lite and -heavy issuers, as it is not dependent on whether the issuer has maintenance or incurrence covenants.

## Loan Recoveries Will Be Lower

Loan market growth has been fuelled by non-bank investors, and that should give regulators and politicians solace with respect to some of the points they have raised about the macroprudential concerns stemming from the growth of leveraged loans and covenant-lite, specifically. However, as demand became overheated, the quality of issuers declined, and other protections apart from maintenance covenants have evaporated, which could cause modestly higher losses for institutional investors. Therefore, we believe the material risks to the loan market are a micro problem, and lower covenant protection should result in lower recoveries. As a result, valuations could be pressured in the medium term given our expectation of lower loan recoveries through the next cycle.

As detailed in *Downside to Recoveries after a Long Recovery*, we believe that recoveries for the loan market should be 5-10pts lower over the next cycle, as leverage has spiked overall, especially through the first-lien portion of capital structures. The lack of subordinated debt from the growth of loan-only issuers should contribute to this reduction in recoveries. While the loss of amendment fees and possible spread increases when companies get into trouble are less than ideal for investors, we think that a potential mispricing of losses for the new generation of loosely covenanted loans is a bigger issue.

One additional concern of investors – and those thinking about macroprudential influences on the loan market – is that without maintenance covenants, overleveraged companies that are not burning substantial cash and do not have upcoming maturities will take unnecessary risks in an attempt to turn around their fortunes. While this concern is valid and always the case for bond-only issuers, the shift toward the loan market within leveraged finance has made it understandable why loans have come into focus.

Although we feel comfortable in our assessment of lower recoveries, there is the possibility that the longer runway that covenant-lite provides could lead to lower default rates, nullifying the effect on future losses of the drop in recoveries. Moody's issued a report in June 2011, *Seeing Where it Hurts*, showing that covenant-lite issuers defaulted at a rate modestly below historical averages. However, three years later, when the agency issued a report entitled *Time is Catching Up with Covenant-Lite*, the data showed somewhat higher default rates for companies with cov-lite loans, although those of the actual loans were similar to the rest of the loan universe (likely because distressed bond exchanges by companies that had cov-lite loans inflated their company default rate). This calls into question the theory of lower overall default rates for covenant-lite, but based on a sample of 29 defaulted issuers, it is somewhat limited. The report concludes that, as expected, covenant-lite structures can defer default, as the 29 covenant-lite issuers had a time to default of 3.3 years from origination, compared with 2.1 years for the average loan.

Our conclusions are supported by historical data (that are once again limited by sample set sizes) from Fitch on recoveries in 2007-17, which begins when covenant-lite became a non-negligible portion of the market. Using $36bn of first-lien covenant-lite defaults and $106bn of non-covenant-lite broadly syndicated loan defaults (assuming that all cov-lite is broadly syndicated and not middle market), the difference in recovery is $53.8 versus $65.5 for 30-day post-default recoveries. Using Fitch's sample set of only $18bn of covenant-lite loans for which it has post-emergence prices, the gap is slightly closer, at just over $10, but the evidence remains skewed toward lower covenant-lite recoveries. Ultimately, if default rates are similar for loans regardless of the covenant package, then higher losses will come from lower recoveries, given the changes in the loan market.

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