

# INTRODUCTION TO LEVERAGED LOANS

A primer for understanding the risks  
of a complex and evolving market

By Mark Carey, Co-President, GARP Risk Institute



The leveraged loan market is intricate, and so are the associated risks. To grasp the risks borne by investors, the financial system and the economy, one must first comprehend the instruments, the investors, the market and its history.

The term “junk bond” first appeared in the 1980s. It described the new, sizable original-issue market for bonds rated below investment grade (riskier than BBB-/Baa3) that was pioneered by Drexel Burnham Lambert.

In the late 1980s, the syndicated loan market grew rapidly and served many below-investment-grade borrowers. However, loans were not rated for many years and market participants needed a term to indicate riskier loans that were the equivalent of below investment grade. They chose “leveraged loans.”

Despite the name, the determinative feature of a leveraged loan was not the indebtedness of the borrower, but the interest rate spread on the loan. Though the cutoff varied somewhat with market conditions, a spread of 125 to 150 basis points over LIBOR was often close to the line. Today, many loans are rated, and a loan’s rating plays a role in determining whether it is a leveraged loan.

A leveraged loan is usually a package of loan instruments, including a line of credit and one or more term loans - i.e., loans funded at origination

with a fixed term to maturity. Where multiple term loans are included in a package, they are often designed to appeal to different investor types by, for example, varying in their term to maturity. The typical package is governed by a single loan agreement.

Leveraged loans are usually floating-rate instruments, with LIBOR as the base rate and an interest rate spread over LIBOR that varies with the credit risk that loans pose. Because it is floating-rate, a leveraged loan contract usually allows prepayment at any time with minimal penalties. Refinancings are common, so compensation received by investors for risk in their leveraged loan portfolio falls as the credit cycle progresses and spreads fall.

Frequent refinancing explains another feature of the loan market: Annual issuance is large relative to outstandings until the credit cycle turns down. At that time, issuance collapses because firms with outstanding loans already have spreads far lower than they would pay in the now-riskier market.

The chart (below) displays an estimate of the annual amount of leveraged loans issued in the U.S. market. Thomson Reuters’ Loan Pricing Corporation (LPC) estimates that refinancings accounted for two-thirds of issuance in 2017. High rates of refinancing imply that the usual life of a leveraged loan is much shorter than typical contractual term to maturity (3 to 5 years for lines of credit, and 5 to 7 years for term loans).

## LEVERAGED LOAN ISSUANCE IN THE U.S. MARKET, 2004-18



Source: Fitch Lev. Loan Chart Book and LPC Lev. Loan Monthly

## RECOVERY RATES, COVENANTS AND INVESTORS

Leveraged loans are usually secured and all tranches of a package usually share the same collateral. Being secured does not offer lenders much protection against default, but, in most cases, secured status places them nearer the head of the line in bankruptcy for recovery of what they are owed; consequently, recovery rates are better than for (usually unsecured) bonds.

In the past, average recovery rates on loans were far higher than recovery rates on unsecured credit. Shared collateral also motivates loan investors to act collectively whenever their incentives are similar.

Leveraged loans have traditionally had many covenants. The two most relevant kinds are maintenance and protection covenants.

Maintenance covenants typically feature allowable ranges for financial ratios or other risk measures; if measures move outside the ranges, the borrower must negotiate with the lender to change the covenant, often paying a fee. If such negotiations fail, the lender can demand immediate repayment of the loan (“acceleration of maturity”), which often forces the borrower into bankruptcy.

Protection covenants typically limit the borrower’s ability to take actions that would substantially increase risk borne by the lenders; for example, by selling assets and not using the proceeds to pay down debt.

However, revisions in both maintenance and protection covenants have changed the risks of leveraged loans. The risks posed by leveraged loans to the financial system depend not only on the risk characteristics of individual loans, but also on the vulnerability of different investors.

Even in the early years of the leveraged loan market, investors included nonbanks, such as finance companies and insurance companies. Today, the majority of leveraged loans, particularly term loans,

are bought by collateralized loan obligations. Retail mutual funds specializing in loans also are important investors, while banks continue to be the primary investors in lines of credit.

Though leveraged loans are not securities and are not registered with the SEC, secondary market trading of an investor’s portion of a loan has always been possible, if the investor can find a buyer. (Often, the buyer is another member of the syndicate.)

Organized broker-dealer trading of loans did not begin in earnest until the early 2000s. Today, many investors depend on secondary market liquidity to support management of their portfolios. However, liquidity typically dries up during credit downturns (with prices falling below fundamental values), so investors sometimes find it difficult and costly to sell loans.

This overview has focused on features of the leveraged loan market that are particularly relevant for risk. To learn more about these features, please read our leveraged loan companion articles on maintenance covenants, protection covenants and CLOs.

## ABOUT THE AUTHOR



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Prior to joining GARP, he was associate director in the Division of International Finance at the Federal Reserve Board in Washington, D.C., leading some of the Fed’s work on issues related to the financial services industry, systemic risk and the financial crisis. He has written many technical papers on credit risk and corporate finance.

# PROTECTION LITE AND INVESTOR RISK IN LEVERAGED LOANS

Limited loss experience for protection-lite loans makes them difficult to analyze, but risks are higher for investors.

By Mark Carey, Co-President, GARP Risk Institute



For decades, lender protections in loan contracts were strong and stable. In the last few years, however, protections have weakened.

Loans with weakened protective covenants are referred to as “protection-lite” in this article. These loans are riskier for investors because default and, particularly, recovery rates may be worse than historical norms, as borrowers may take advantage of a protection-lite-enabled ability to move firm value out of lenders’ reach.

Understanding the role of incurrence covenants in loan contracts is important for comprehending the risks of leveraged loans. Traditionally, loan contracts have contained text that limits the borrower’s ability to do many things that would increase the risk borne by lenders. Examples include transferring or selling collateral, so that lenders are no longer senior to other claimants in bankruptcy; paying large dividends, which lessens firm value remaining to repay lenders; and issuing new debt that is equal or superior to loans in bankruptcy priority.

Protection-lite loans differ from covenant-lite loans, which have received much attention in recent years. Covenant-lite loans are those that lack the maintenance covenants that give power to lenders when measures of borrower risk, such as financial ratios, fall outside specified ranges.

To be in technical default on maintenance covenants, borrowers do not need take any action. In contrast, a violation of most incurrence covenants occurs only if the borrower takes a forbidden action.

While protection-lite loans have received less attention, they may be associated with materially increased risk borne by lenders. For instance, if a borrower’s actions under protection-lite loans are followed by bankruptcy, the recovery received by lenders may be far less than historical norms. A recent example is instructive.

In June 2018, PetSmart Inc. transferred 36.5% of its equity interest in Chewy Inc., a key subsidiary, to a consortium of investors led by BC Partners (20%)

and to an unrestricted subsidiary (16.5%). Standard and Poor’s (S&P) subsequently analyzed this transaction in a report.



WHILE PROTECTION-LITE LOANS HAVE RECEIVED LESS ATTENTION, THEY MAY BE ASSOCIATED WITH **MATERIALLY INCREASED RISK** BORNE BY LENDERS. FOR INSTANCE, IF A BORROWER’S ACTIONS UNDER PROTECTION-LITE LOANS ARE INSTEAD FOLLOWED BY BANKRUPTCY, THE RECOVERY RECEIVED BY LENDERS MAY BE FAR LESS THAN HISTORICAL NORMS.

“According to PetSmart, the Chewy share transfers were permitted under its loan agreement and bond indentures, and resulted in the termination of Chewy Inc.’s guarantees and the removal of Chewy’s assets from the collateral package for PetSmart’s first-lien term loan and secured notes -effectively reducing the lenders’ security interest in Chewy to a pledge of 63.5% of Chewy’s stock,” S&P wrote in its analysis.

Ultimately, the unrestricted subsidiary engaged in an IPO and, as part of settlement of lawsuits brought by the lenders, the loans were paid off. But if the remainder of PetSmart had entered bankruptcy,

its lenders' priority in bankruptcy would have been protected by less collateral and their recovery would have been smaller.

## DATA AND COMPLEXITY CHALLENGES

Little historical experience is available as a basis for estimating the effect of protection-lite status on risk. Historically, even bonds contained many protection covenants, so there is a lack of historical bankruptcies with protection-lite debt structures.

Moreover, protection-lite contracts are complex. For example, the borrower's ability to take forbidden actions is often conditional on financial ratios being within specified ranges; the borrower may adjust the definition of the ratios, so historical ratios calculated according GAAP are not indicative; and different clauses in the contract are written to be interdependent.

Consequently, unlike covenant-lite loans - which are similar in their omission of maintenance covenants - the details of loss of protection for each protection-lite loan may differ.

Protection-lite first appeared in loans to firms with private equity sponsors. One can imagine the motivations of the sponsor: They may see a variety of strategic alternatives for a firm and want the ability to implement their choices rapidly and without renegotiation with lenders, potentially reducing the probability of default. Alternatively, sponsors may want the ability to maximize the value they can extract from a troubled firm before it goes bankrupt, which very likely would substantially worsen the loss suffered by loan investors in the event of bankruptcy.

LITTLE HISTORICAL EXPERIENCE IS AVAILABLE AS A BASIS FOR ESTIMATING THE EFFECT OF PROTECTION-LITE STATUS ON RISK. HISTORICALLY, EVEN BONDS CONTAINED MANY PROTECTION COVENANTS, SO THERE IS

# A LACK OF HISTORICAL BANKRUPTCIES

WITH PROTECTION-LITE DEBT STRUCTURES.

Although rating agencies analyze loan contracts and have called attention to protection-lite developments, they do not currently reflect differences in protection-lite status in either their default or their recovery ratings, perhaps because of the lack of historical experience.

However, in an economic downturn, which is when many defaults occur, it seems likely that recovery rates on protection-lite loans will be far worse than historical averages. Investors would be wise to plan for that and to price loans only after taking into account their protection-lite features.



# COVENANT LITE AND INVESTOR RISK IN LEVERAGED LOANS

What challenges do loans without financial ratio covenants present to borrowers and lenders? How do they measure up against more traditional loans, and are they really riskier?

By Mark Carey, Co-President, GARP Risk Institute

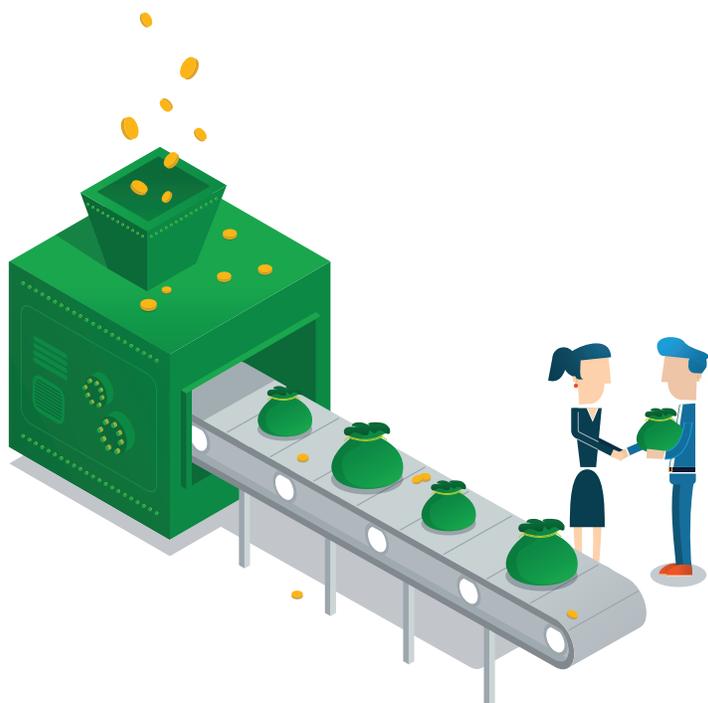


In the past, loan contracts contained covenants that gave power to lenders when borrowers showed evidence of distress. Today, leveraged term loans without such financial ratio covenants – also known as “covenant-lite” loans – are prevalent.

Indeed, more than 80 percent of leveraged loans are now covenant lite. Risk-related changes in loan contracts (like covenant lite) raise the possibility that losses in the future will differ from losses on loans with financial ratio covenants.

Loans with “maintenance” covenants have text that requires the borrower to maintain specified financial ratios or other measures of risk within specified ranges. For example, the ratio of total debt to EBITDA might be required to be less than five.

If ratios go outside the specified ranges, implying increased risk for lenders, the borrower is in technical default and the lender may choose to accelerate maturity of the loan, meaning the borrower must immediately repay it in full. Usually, the borrower negotiates with lenders for changes in loan terms that remove the technical default. Such revisions often involve fees paid to lenders and changes in the loan interest rate.



# MORE THAN 80 PERCENT OF LEVERAGED LOANS ARE NOW COVENANT LITE.



However, lenders may also choose acceleration, which usually forces the borrower into bankruptcy. Lenders are more likely to do so when they believe further deterioration is likely to cause them to suffer a loss in bankruptcy.

If the loans are small relative to the firm’s total debt and well secured (i.e., first in priority in bankruptcy to be paid from available assets), lenders may permit the borrower to become deeply insolvent, because they will still achieve a full recovery of what they are owed. If loans are most of total debt or junior to most other debt, lenders may pull the plug around the point of insolvency to protect their recovery.

Bonds, especially publicly-issued bonds, rarely have maintenance covenants, because the owners of bonds are dispersed and inexperienced at renegotiating debt terms. Loans traditionally had covenants because the number of lenders was relatively small, and most were banks experienced at renegotiation. Bonds are rarely secured, whereas loans are usually secured.

Today's covenant-lite loans are similar to bonds in their lack of covenants. For firms that truly have no loans with maintenance covenants, the dynamics of distress are changed: Only the shareholders and/or management decide when bankruptcy is declared.

Shareholders rarely have an incentive to choose bankruptcy because, if the firm is insolvent, they are likely to receive nothing if they put it into bankruptcy. Instead, shareholders hope that the firm's condition will improve to a solvent state if it continues to operate.



## COVENANT LITE MAY HAVE LITTLE OR NO EFFECT ON THE RISK BORNE BY LENDERS.

If they end up in bankruptcy, firms that are bereft of loans with maintenance covenants are likely to have much less firm value remaining to distribute to lenders. So, even well-secured lenders are likely to suffer much larger losses than on loans with covenants, where they can force timely bankruptcy.

On the other hand, some firms that become deeply insolvent will go on to recover, so fewer will end up in bankruptcy. For covenant-lite loans, the net effect on loan losses is likely to depend on business conditions.

### TRUE RISK IMPACT

Despite all the press stories about covenant lite, few firms have debt structures that are completely covenant lite. Most borrowers have a loan package with a line of credit and one or more term loans. Though the term-loan tranches bought by institutional investors (such as CLOs and loan mutual funds) are likely to be covenant lite, the line of credit is usually provided by banks and will have one or more maintenance covenants.

If all tranches of the loan package share the same collateral, the bank will negotiate in a way that protects recovery in bankruptcy for all tranches, because all share the same recovery. Consequently, covenant lite may have little or no effect on the risk borne by lenders.

An exception is cases where the amount drawn on the line of credit is small. In the past, that was unusual, because distressed borrowers generally needed funds and drew on their lines. However, if the borrower has other sources of contingency funds, such as a private equity sponsor, the drawn amount may remain small.

Banks may then respond differently: With little loan principal to protect, they may focus on earnings from covenant waiver fees or other services they provide to the borrower, or place value on the relationship they have with a private equity sponsor (if one is present). In such cases, covenant lite may increase loss-given-default and reduce probability-of-default.

Overall, the effects of covenant-lite loan tranches on risk borne by lenders are likely to be smaller than many fear.

# CLO AND MUTUAL FUND INVESTOR RISK FROM LEVERAGED LOANS

How do collateralized loan obligations and loan mutual funds function, and what specific leveraged loan risks do they face?

By Mark Carey, Co-President, GARP Risk Institute



To understand the transmission of distress in the leveraged loan market to the capital markets, one must comprehend how collateralized loan obligations (CLOs) and loan mutual funds work. They are two of the largest types of investors in leveraged loans and are exposed to different kinds of risk.

A CLO is a limited-life securitization vehicle that holds a portfolio of leveraged loans, financing it by issuing several tranches of floating-rate debt securities, as well as an “equity” tranche that pays no stated interest rate but receives residual cash flows. The tranches absorb losses in order of priority, with the AAA-rated tranche least likely to experience losses of principal or interest, and the equity tranche most likely to do so.

Although the structure of CLO liabilities varies somewhat, a fairly typical case can be seen in the table below, which also depicts Moody’s long-run average, 5-year cumulative default rates on corporate bonds for each grade.

CLO loan portfolios are diversified across issuers and industries, and therefore are fairly

likely to experience the average default and recovery rate for all loans issued around the time of CLO creation. CLOs invest almost entirely in leveraged loans that are rated BB/Ba and riskier, with the majority of CLO investments rated in the single-B range at acquisition.

The five-year cumulative single-B default rate is 16.6 percent (about 3.3 percent a year), and the historical average recovery rate on defaulted loans is around 75 percent. With some BB- and high B-rated loans in portfolios, the standard CLO industry assumptions of a 2.5 percent annual average default rate and average annual loss rates of about 0.625 percent are consistent with available evidence.

Given an average spread on the loan portfolio higher than 300 basis points over LIBOR and a weighted-average spread on CLO tranches of less than 200 basis points, all investors in the average CLO in average times will receive all principal and interest; holders of the equity tranche will receive a reasonable annual average return, even after expenses of the CLO.

## CLO LIABILITIES: A TYPICAL EXAMPLE

RATING	PERCENT TOTAL	DEFAULT RATE 5 YEAR
AAA/Aaa	63	.07
AA/Aa	12	.26
A/A	6	.67
BBB/Baa	5	1.46
BB/Ba	4	6.80
Equity	10	na

## CYCLES, RECOVERY RATES AND MUTUAL FUNDS RISK

Credit conditions, of course, are not always average. Indeed, corporate credit losses are cyclical, with a substantial fraction having occurred during just three time periods: 1989-91, 1999-02, and 2008-10.

In the worst episodes, for a bond portfolio with a similar rating distribution to CLO portfolios, cumulative 5-year default rates were not far from 30 percent. With a recovery rate of 75 percent, 5-year cumulative losses would be about 7.5 percent.

CLO equity would lose money under such a scenario, but holders of other tranches would not. Investors in CLO tranches would be nervous and market prices of such tranches would drop below par for an extended period – but would eventually return to par.

OVERALL, THE  
**PRIMARY RISK**  
FOR CLO INVESTORS IS  
THAT FUTURE CREDIT  
LOSSES WILL DIFFER  
(I.E., HIGHER LOSSES ARE  
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THOSE IN THE PAST.

The recovery rate assumption is crucial: If recovery rates are far below historical averages for loans, then even holders of investment-grade tranches might suffer losses of principal and interest. For example, a recovery rate of 50 percent would imply cumulative losses of 15 percent, enough to wipe out all non-investment-grade tranches of the typical CLO shown in the table.

Overall, the primary risk for CLO investors is that future credit losses will differ (i.e., higher losses are very possible) from those in the past.

Investors in loan mutual funds face a different type of primary risk: run risk. Though large leveraged loans are traded in broker-dealer markets, liquidity has dried up during past periods of credit distress, leading to large discounts below par.

Loan mutual funds have a liquidity mismatch because they offer daily withdrawals backed by assets that might become illiquid. In an episode in 2018, for example, large withdrawals from loan mutual funds occurred when investors came to believe that interest rates would fall in the future, reducing the value of floating-rate loan funds as an interest rate hedge. But credit conditions were good and secondary markets remained liquid, so the transition was orderly.

In contrast, if outflows are due to concerns about future credit losses, withdrawals are likely to coincide with a loss of liquidity and a reduction in secondary market loan prices, creating conditions ripe for mass withdrawals and dysfunctional secondary markets.





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