York Capital Management

State of the Loan Market

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JULY 3, 2019

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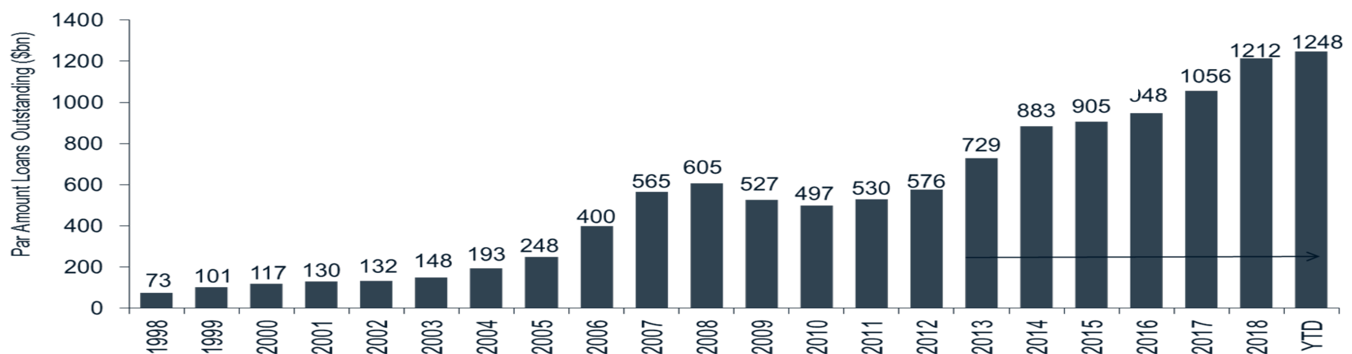
LOAN MARKET GROWTH

The loan market has experienced tremendous growth in recent years, doubling in size since 2012. By many estimates it is now similar in size to the US HY bond market. Much of this growth has come in the last few years when the Fed was hiking interest rates. This rate environment generated increased investor demand for floating rate products. Financial sponsors were happy to meet that demand as certain attributes of loans are preferable to HY bonds, including the ability to prepay with no penalty and less stringent reporting requirements.

Par Amount Loans Outstanding



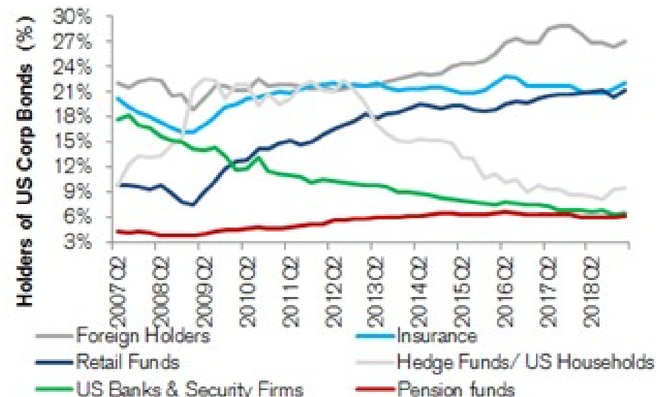
Source: JPMorgan

The growth in US credit markets has been supported by investors' "hunt for yield" as central banks across the world introduced unprecedented easing of monetary policy in the wake of the 2008 financial crisis.

25% Of all Bonds in the World Trade at Negative Interest Rates

Source: Bloomberg Finance LP, DB Global Research

Foreigners Still Largest Investor Base for US Corporates



Source: Credit Suisse, Fed Z1

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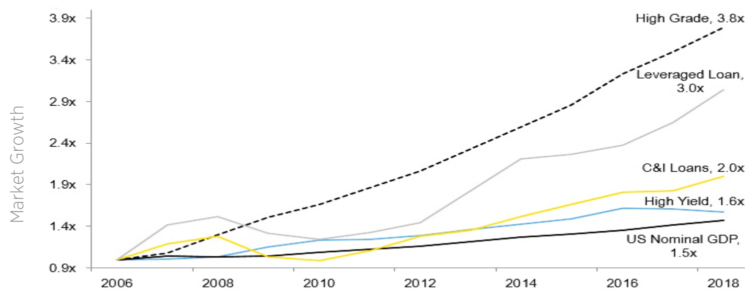
US Credit Market Growth



Source: JPMorgan

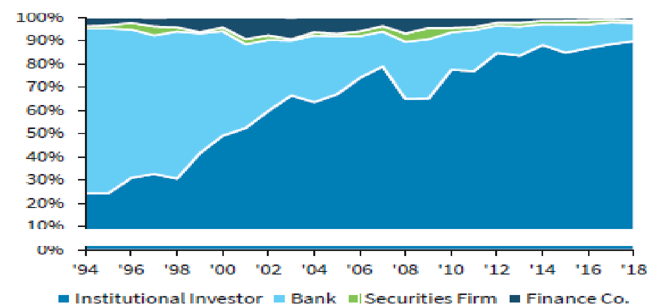
The increase in the loan market's size has received significant attention from the media and regulatory agencies. However, scaling it by GDP and comparing the growth to other credit products shows that IG credit has seen the most growth since the financial crisis.

THE LOAN MARKETS EVOLUTION

Historically, loans were issued and held by bank syndicates. A traditional loan deal would include a Revolving Credit Facility (RCF), a Term Loan A (TLA), and a Term Loan B (TLB). TLAs and RCFs were generally held by the banks, while the TLBs were sold to institutional investors.

Over time, regulatory changes have made it increasingly punitive for banks to hold riskier debt on their balance sheets. While regulatory trends can vary depending on the political landscape; generally, the trend has been towards stricter regulation of banks after the savings and loan crisis in the early 1990s. In the wake of the 2008 financial crisis, Risk Weighted Asset calculations were introduced which required banks to consider the riskiness of the assets they own when calculating their capital ratios. Today, banks are generally not buyers of single-B rated credits because of these changes. As banks cut back their lending to the riskiest borrowers, the void was filled by institutional investors.

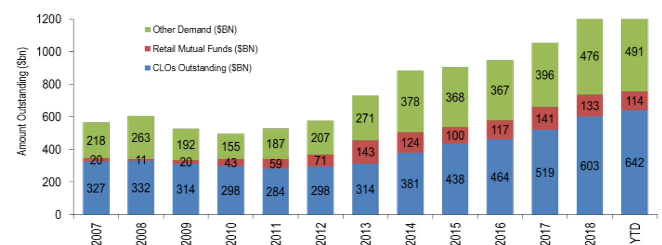
Institutional Investors Now Make up 90% of the New Issue Loan Buyer Base



Source: S&P LCD

Recently, the growth of leveraged loans and the commensurate deterioration in lender protections in loan documents have been frequent topics of conversation in the media. CLOs and retail funds have been scrutinized for their roles as buyers of these loans. We'll dive into each of these topical themes.

Growth in Leveraged Loans



Source: JPMorgan

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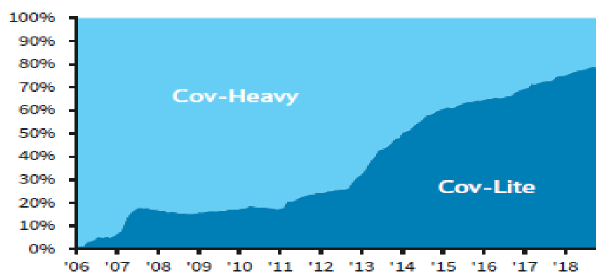
COVENANTS

Approximately 80% of the loan market is covenant lite today, a fact that receives a lot of attention from investors, regulators, and the media. Covenant lite loans are now so prevalent that, while not always the case, a deal with covenants typically means that it is a riskier credit that struggled during syndication!

While this development is certainly a negative for investors, we think it is important to appropriately frame the risk. This change is not entirely attributable to investors recklessly structuring deals and mispricing risk. Rather, it is at least partially attributable to the changes in the investor base.

As discussed previously, the loan buyer base has transitioned from banks to institutional investors. This resulted in a larger number of lenders buying each loan. While having more buyers improved the liquidity of the asset class, it made it harder to coordinate and push back on terms during syndication. It is much easier for a handful of banks to agree to terms than it is to coordinate amongst hundreds of institutions.

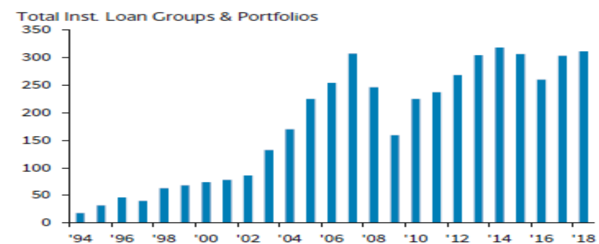
Cov-Lite Loans Now Represent Roughly 80% Loan Market



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

Source: Bloomberg Barclays Indices, S&P LCD

The Number of Institutional Loan Groups Has Grown Significantly over the Part 20 Year

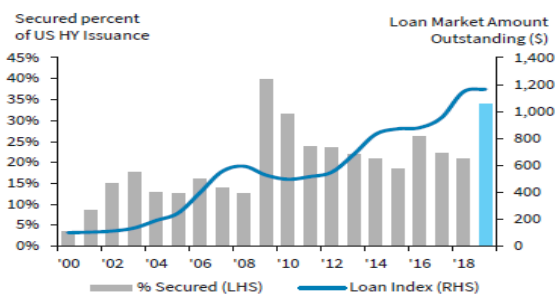


Note: Institutional loan groups defined as groups that either participated in three or more loans or made $10mn of commitments.

Source: S&P LCD

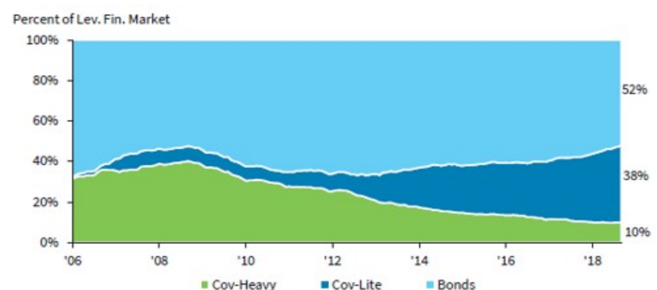
As mentioned previously, some of the growth in loan issuance was a function of credit investors' preference for floating rate instruments in a rising rate environment. As CLO issuance increased and dedicated loan retail funds grew, those investors needed loan issuance to grow. PE sponsors used this demand to their advantage and started to issue loans that more closely resembled the weaker covenant packages more typically seen in HY bonds.

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



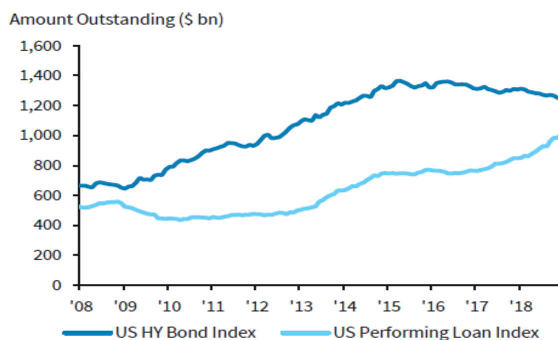
Source: Bloomberg Barclays Indices, S&P LCD

Lev. Fin. Market Composition



Source: Bloomberg Barclays Indices, S&P LCD

HY Issuance



Source: Bloomberg Barclays Indices, S&P LCD

When looking at loans in a vacuum, the covenant degradation over time seems glaring. However, if you take a broader view and look at the leveraged finance markets holistically then the convergence of documents in the HY and loan markets is not entirely surprising, as they are alternate sources of financing for borrowers. However, this change does have important implications for investors. These weaker covenant packages will likely result in lower recoveries than what loans have realized historically. Additionally, it opens the door for more aggressive actions by financial sponsors. Loan investors need to be aware of these changes as it requires more active management of portfolios.

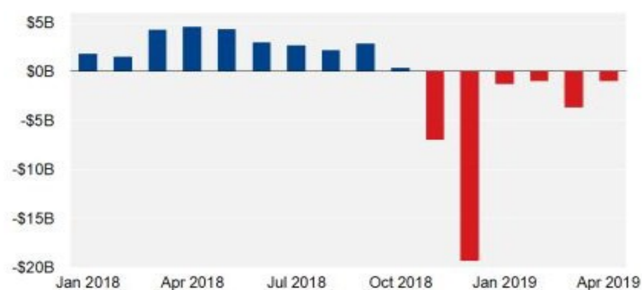
RETAIL FUNDS

There have also been questions about the suitability of leveraged loans for retail products like ETFs and Mutual Funds that provide investors with daily liquidity. The concern was that if a large amount of retail investors started selling their ETF shares, fund managers might not be able to sell the underlying loans as easily. This could force them to sell loans at "fire sale" prices, or even worse – they may not be able to sell them at all!

While we can't rule out such a scenario in the future, retail funds went through a decent stress test in December 2018 when they saw a monthly outflow of almost $20bn, representing over 10% of their total AUM.

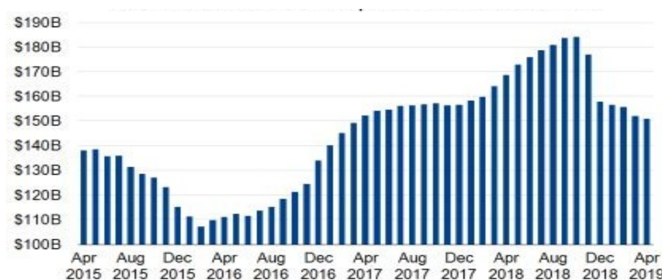
Managers of retail funds tend to invest in the largest loan tranches which have better liquidity. They also have a small portion of their portfolios invested in liquid HY tranches. These more liquid holdings are supplemented with cash and revolving credit facilities that allow them to redeem shares as they sell the underlying loans in periods of volatility. While a worse sell off may occur in the future, we believe the performance of these funds in December should give market participants some comfort.

US Loan Fund AUM Growth



Source: LCD, an offering of S&P Global Market Intelligence; Lipper FMI

Total Net Asset Value of US Prime Funds at Month-end



Source: LCD, an offering of S&P Global Market Intelligence; Lipper FMI

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CLOS

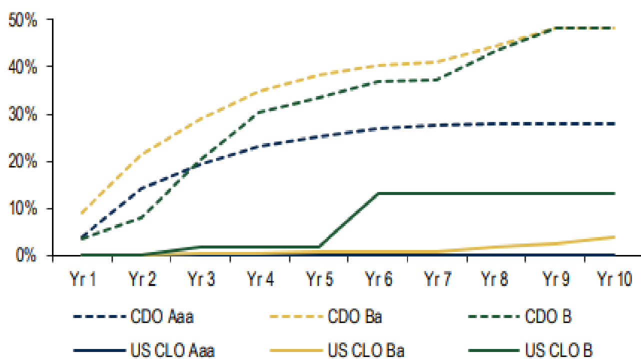
Numerous regulatory agencies have commented on the growth of the CLO market, the weaker covenants in leveraged loans, and questioned whether this represents a systemic risk to the financial system. CLOs sometimes get compared to the pre-crisis CDOs that helped fuel growth in low quality mortgages. However, there are important differences between CLOs and these other collateralized products.

First, it's important to frame the size of the CLO market. According to Federal Reserve data, there is currently $14.7 trillion of non-financial corporate debt in the US. There are $650 billion of USD CLOs outstanding, which means this product is less than 5% of the US non-financial corporate debt.

Contrast that with household credit in the US of $15.3 trillion (over 23x the size of the current CLO market), of which mortgages represent $10.2 trillion and student loans represent $1.5 trillion. At its peak, SIFMA data shows the non-agency RMBS market at over $2.7 trillion outstanding (over 4x the size of the current CLO market). Notably, the default rate on subprime RMBS reached 25% during the financial crisis, versus an 11% default rate on the S&P leveraged loan index. As these numbers show, the CLO market is a significantly smaller component of the US economy than the RMBS market was at its peak.

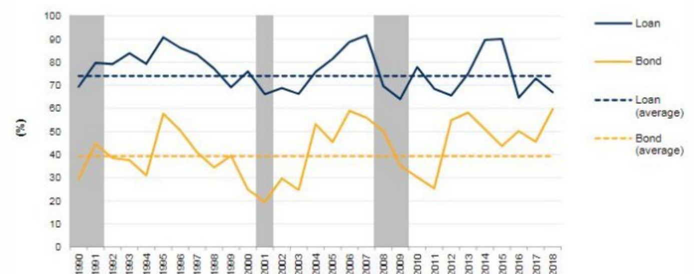
There are also stark contrasts in the performance of the two asset classes. The performance of pre- crisis CLOs (referred to as CLO 1.0s) and CDOs is shown on the right. Moody's data shows that US CLO tranches rated Ba had a 10Y cumulative loss rate of 3.9% versus 48.3% for CDOs (excluding CLOs). Notably, CLO AAAs have a cumulative 10Y loss of 0%.

Estimated 10Y cumulative loss rates by original tranche ratings for global CDOs & US CLOs



Source: Moody's BofA Merrill Lynch Global Research

Loan Versus Bond Recoveries (by Emergency Year)



Note: Calculated for the year of emergence. Loans include term loans and revolving credit facilities; bonds include bonds and notes. Only includes instruments that emerged following default. Sources: S&P Global Market Intelligence's CreditPro® and S&P Global Fixed Income Research.
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Source: J.P. Morgan

Post-crisis CLOs (referred to as CLO 2.0s) benefit from even tighter structures than their predecessors. Per BAML data, the average credit enhancement for AAA tranches has increased from 28% to approximately 38%. The increase in credit enhancement has admittedly been less significant down the capital structure, with only a 3% increase for BBB tranches. However, documentation has been tightened to eliminate portfolio investments in synthetic credit and bonds, among other beneficial changes. Despite the often-cited deterioration of loan documentation, these structural enhancements should help CLOs withstand increased defaults, particularly at the IG tranches.

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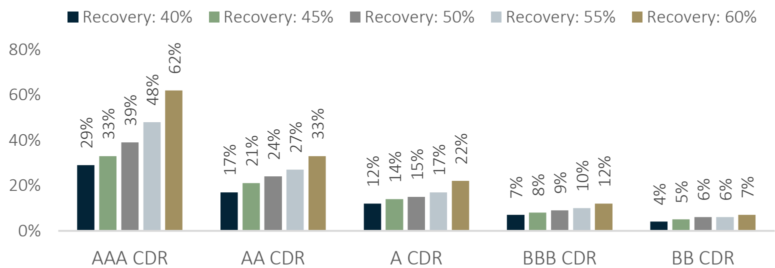
The graphic to the right shows JPM's estimates of the default rates that would be required to cause impairment of a CLO tranche, given certain recovery assumptions. For context, the peak default rate on the S&P loan index was approximately 11% during the financial crisis but has subsequently been closer to 2%. Historical recoveries on leveraged loans are over 70%, although that's expected to decrease in light of the deterioration of creditor protections in loan documents.

Constant Default Rate (CDR) to cause Principal Loss at various recovery rates



Source: J.P. Morgan

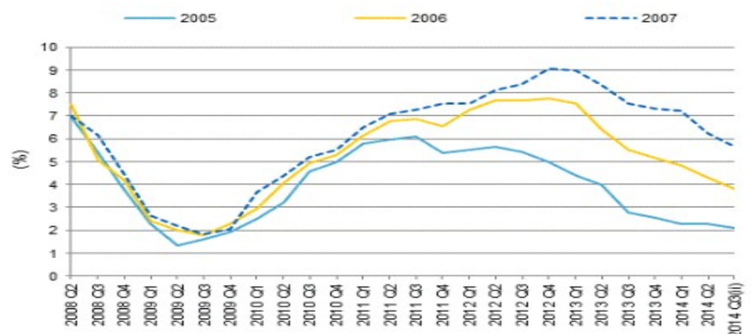
Looking at the equity IRRs on deals from the 2005 – 2008 vintages further shows the resiliency of CLOs when managed correctly. The median IRR on these vehicles was 15% and despite going through one of the worst recessions in history only 8% of the equity tranches had negative IRRs!

Perhaps the most important differentiator of all between a CLO and a CDO, is the CLO manager's alignment of interest with their investors. CLO managers generate revenue from two sources: a management fee and an incentive fee. The incentive fee is only paid if the investor hits an IRR hurdle, and typically comes at the end of a deal's life. The management fee is split into two components, a senior-fee and a sub-fee. While it can vary, the split between these two components is typically 50/50. The senior-fee is at the top of the waterfall and gets paid regardless of performance. However, if the vehicle fails tests and can't make distributions to the equity investors, the sub-fee is shut off. With the bulk of the manager's economics contingent on performance (which altogether ignores the importance of a manager's performance for future fundraising!), there is a natural alignment of the equity investor's and manager's interests. This is in stark contrast to CDOs which were often static vehicles where structurers had no incentive to manage the quality of the underlying collateral.

CLO 1.0 IRR Distributions

Source: BAML and Intex

Average Quarterly Return of Outstanding CLO 1.0 Equity



(i)Pre-2005, 2008, and 2010 vintage CLOs together account for less than 2.5% of the outstanding deals and were excluded from the vintage averages reported in this update.
(ii)Included third-quarter 2014 data points as rough estimate.
© Standard & Poor's 2014.

Source: Standard & Poor's 2014

While the news coverage of CLOs seems to create an air of mystique around the product, conceptually they're not very different from a traditional bank. From a balance sheet perspective, the equity tranche of a traditional CLO is approximately 10% of the capital stack, almost identical to a bank's balance sheet. As shown in the simple Bloomberg comp table on the right, most banks have a Tier 1. Equity Ratio (equity as a percent of Risk Weighted Assets) of 10%. Their common equity to total assets is also in the 10% area. Unlike banks however, CLO managers report their entire portfolio's loan holdings to their investors in a monthly trustee report. As regulations prevented banks from lending to lower rated borrowers, CLOs stepped in and filled this financing gap.

Tier 1 Common Equity Ratios and Common Equity to Total Asset Ratios for Select Regional Banks

Name (BI Peers)	Ticker	Tier 1 Cmn Ratio LF	CE to Tot Ast LF
Average		10.50%	10.91%
00) M & T BANK CORP	MTB US	10.05%	11.96%
01) FIFTH THIRD BANCORP	FITB US	9.60%	10.90%
02) BB&T CORP	BBT US	10.30%	12.16%
03) WELLS FARGO & CO	WFC US	11.92%	9.25%
04) PNC FINANCIAL SERVIC…	PNC US	9.80%	11.34%
05) US BANCORP	USB US	9.30%	9.64%
06) HUNTINGTON BANCSHA…	HBAN US	9.84%	9.45%
07) REGIONS FINANCIAL CO…	RF US	9.81%	11.27%
08) FIRST HORIZON NATIO…	FHN US	9.62%	10.83%

(Accounting Adjustments: Adjusted for Abnormal Items When Applicable)

Source: Bloomberg

NEW DEVELOPMENTS IN THE CLO MARKET

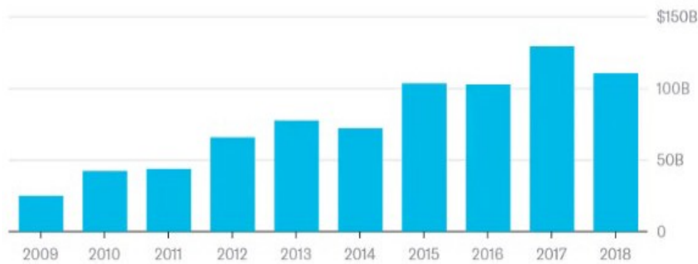
A few managers have recently started to issue CLOs that were not "plain vanilla". Most interesting is the recent emergence of the "CCC CLO" which are also being referred to as "Enhanced CLOs". These resemble CBOs in that the leverage is only 5x versus 10x in a traditional CLO. In exchange for the reduced leverage, the manager gets more flexibility on the terms governing their collateral. More specifically, they can invest up to 40% of their collateral in CCC-rated assets, versus the typical 7.5% restriction in a traditional CLO.

OTHER LOAN MARKET DEVELOPMENTS – DIRECT LENDING

There continues to be an abundance of direct lending money in the credit markets. Historically, these funds financed middle market transactions that were too small to be placed in the broadly syndicated loan (BSL) market, or riskier financings that took more diligence to get comfortable with. Typically, there is only a handful of lenders in the syndicate, so the asset managers went through a very diligent underwriting process since there would be no liquidity in the loan. The due diligence process was similar to that of a private equity sponsor, with access to management and documents that a lender in the BSL market would not typically have access to.

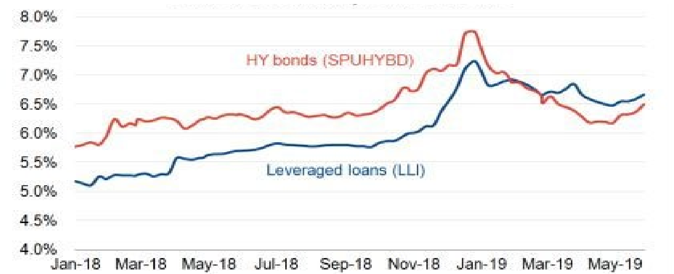
Preqin estimates that the direct lending industry now has almost $770bn in AUM as of June 2019, versus $275bn in 2009. We have seen these direct lenders come into the broadly syndicated loan market more and more frequently as the managers look to deploy this influx of capital. Now, it's very often that a financing comes to the market where the 2nd lien has already been privately placed with a direct lending syndicate.

Piles Of Cash: Global Private Debt Fund Raising Has Skyrocketed In Resent Years



Source: Preqin

YTM On Outstanding Loans Vs. Bonds



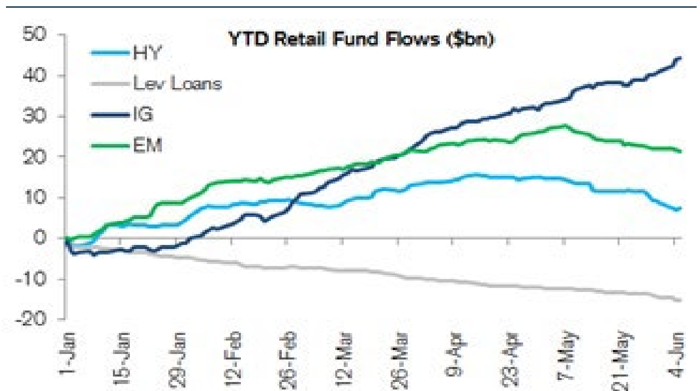
Source: LCD, an offering of S&P Global Market Intelligence: S&P U.S. High Yield Corporate Bond Index (SPUHYBD): S&P/LSTA Leverage Loan Index (LLI)

These 2nd liens still have higher spreads and less liquidity, traits of a typical direct lending investment. However, the other attributes that direct lenders previously benefitted from are no longer apparent. Traditionally, these smaller syndicate groups were able to negotiate tighter covenant packages. By investing in the 2nd lien of a BSL financing though, it means the documents are likely going to suffer from the same loss of covenant protection that is plaguing the BSL market! As more money flows into this illiquid asset class and new managers continue to enter the space, it's an area that's worth continuing to watch closely.

CREDIT MARKET OUTLOOK

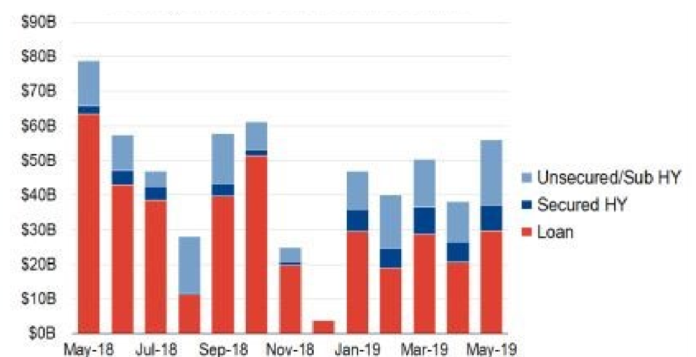
Credit markets have recovered most of their losses since the sell off at the end of 2018. However, we continue to see outflows from retail investors who view the asset class as less attractive with the Fed putting rate cuts back on the table. This has benefitted the HY asset class to the detriment of loans, as can be seen in retail flows and new issuance trends (issuers tend to go wherever there is demand).

YTD Retail Fund Flows ($bn)



Source: Credit Suisse, Fed Z1

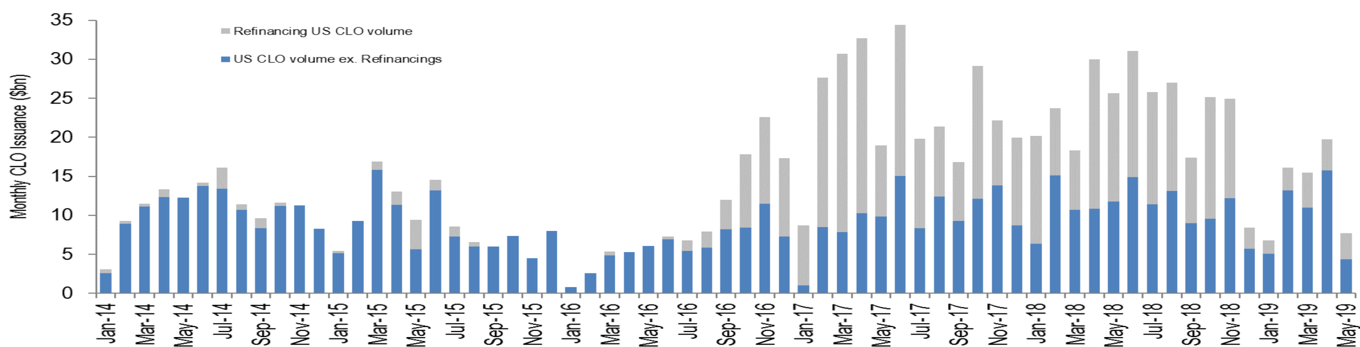
Leveraged Finance New-issue Volume



Source: LCD, an offering of S&P Global Market Intelligence

However, CLO issuance has more than offset the retail outflows in loans, providing technical support to the loan market. According to the JPM data shown below, YTD CLO issuance excluding refinancing transactions, totaled $49.3bn through May. This contrasts with YTD retail outflows of $16.5bn through June 12th, per S&P/LCD data.

Monthly CLO Issuance



Source: JPMorgan

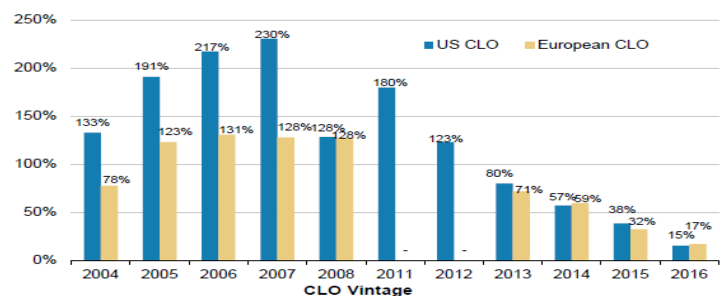
There was some market concern around the impact that new regulations from the Japanese Financial Services Authority (JFSA) would have on CLO issuance, as Japanese investors are meaningful buyers of CLO AAA tranches. However, domestic banks have resumed purchases of CLO tranches after sitting on the sidelines earlier this year. Since banks fund using LIBOR, they are more focused on spreads versus all-in yields and thus are less impacted by the prospect of lower rates. The return of the other AAA buyers should help to alleviate J-FSA concerns, as the market is continuing to function without the Japanese participants acting as anchor investors in deals.

While most forecasters had predicted higher interest rates at the beginning of the year, the ECB and the Fed look increasingly likely to cut rates which has helped to buoy most risk markets. However, it is notable that the current recovery is now the longest in US history.

THE CASE FOR CLO EQUITY

The following charts from Morgan Stanley show historical CLO performance by vintage. The best performing CLOs were those that closed in 2007. These deals benefitted from tight pricing on their liabilities, and from being able to reinvest in loans at much wider spreads after the financial crisis. Additionally, strong CLO managers are able to benefit from market volatility by actively trading their portfolios to build par.

Median Cumulative Equity Distributions from Deal Inception



Source: Morgan Stanley

We're currently in a market that is frequently referred to as being in "the later innings" of the cycle. At the same time, central banks look set to return to monetary easing which originally catalyzed investors' "hunt for yield". For those with a longer-term investment horizon, CLOs proved their resiliency in the last crisis. That being said, CLO manager selection will continue to be an important driver of investor's returns, especially as we get closer to a cycle and the loan market continues to evolve.

Median US CLO Equity Distributions by Vintage

	Payment Year												
Vintage	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
2004	-	14.9%	17.6%	19.6%	1.7%	12.1%	13.9%	7.0%	13.0%	-	-	-	-
2005	-	15.3%	20.4%	22.2%	4.9%	18.2%	26.6%	24.1%	16.5%	18.3%	-	-	-
2006	-	-	16.0%	23.7%	6.5%	19.2%	29.2%	31.9%	25.7%	17.4%	14.6%	2.9%	-
2007	-	-	-	22.1%	5.5%	20.4%	31.7%	35.2%	34.9%	24.5%	18.3%	14.0%	4.0%
2008	-	-	-	-	3.9%	8.0%	18.3%	17.3%	-	-	-	-	-
2010	-	-	-	-	-	-	1.9%	3.1%	2.4%	28.6%	7.3%	34.2%	-
2011	-	-	-	-	-	-	11.1%	26.2%	27.3%	21.3%	19.7%	61.7%	14.9%
2012	-	-	-	-	-	-	-	5.8%	21.0%	18.3%	17.7%	16.3%	30.2%
2013	-	-	-	-	-	-	-	-	9.2%	20.6%	21.8%	18.6%	13.3%
2014	-	-	-	-	-	-	-	-	-	9.3%	22.1%	18.1%	12.8%
2015	-	-	-	-	-	-	-	-	-	-	9.6%	20.0%	13.8%
2016	-	-	-	-	-	-	-	-	-	-	-	7.6%	12.8%
2017	-	-	-	-	-	-	-	-	-	-	-	-	6.2%

Source: Morgan Stanley

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