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BANK LOANS: STRATEGIC ALLOCATION

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May 2019



ABSTRACT

Investable bank loans are floating-rate loans made to speculative-grade issuers that theoretically constitute a safer alternative to high yield bonds. Because bank loans pay a floating interest rate, they provide a hedge against rising short-term interest rates. In addition to potentially hedging these risks, bank loans offer broader portfolio diversification benefits. We believe that most institutional investors would benefit by investing in bank loans, which, when combined with an allocation to traditional high yield bonds and other lower quality debt issues, would constitute a fraction of perhaps a 5% to 15% allocation to credit generally.

BANK LOANS

Bank loans, also generally known as syndicated loans, are senior floating-rate corporate loans that businesses use to fund everything from working capital needs to acquisitions. Bank loans emerged in their relatively modern syndicated form in the 1980s, but it was not until 1995 that the industry established a trade association — the Loan Syndications and Trading Association (LSTA) — to develop and govern market standards.¹ This organization and its standardization work increased the credibility of the asset class (Taylor, 2007). As investors became more comfortable with bank loans, the secondary market flourished, and the par amount of representative issuance rose from \$200 billion in 1990 to over \$1 trillion as of the mid-2000s (Vaky, 2007) and now over \$2.8 trillion as of December 2017. Many buyout investors took advantage of the burgeoning bank loan market during this period by shifting to bank loans (as opposed to high yield bonds) as their preferred source for debt financing. For example, in mid-2018, bank loans constituted over 72% of debt financing for buyouts.²

There are three subsectors to the bank loan market: investment grade, middle market, and leveraged loans. Approximately a quarter of the bank loan market is composed of investment grade loans, which are usually — but not always — used to backstop an investment grade firm's commercial paper issuance. Another quarter of bank loans are middle market loans, which are small amounts (less than \$150 million) extended to small companies.³ Finally, about half of the bank loan market — and almost 100% of the investable market — are leveraged loans, which are loans made to speculative-grade (e.g., highly leveraged) firms. (Hereafter, we use the terms leveraged loans and bank loans interchangeably.) These firms often find the leveraged loan market their best option for financing, as issuance in the corporate bond markets would be significantly more expensive than the terms attached to most leveraged loans. It is the leveraged loan subsector, with about \$1.4 trillion in loans outstanding at the end of 2017,³ that is particularly attractive to institutional investors as higher yielding, floating rate instruments.

¹ However, bank loans are *not* securities — they are not traded on a regulated market. The LSTA issues guidelines and recommendations only.

² Thomson Reuters Global Syndicated Loans Review, June 2018.

³ Thomson Reuters Leveraged Loan Monthly: Year-end 2017.

BANK LOANS VS. HIGH YIELD BONDS

Although both bank loans and high yield bonds represent debt issued by speculative-grade companies, investors should consider some important general differences (see Table 1).

Table 1. General characteristics of speculative-grade debt⁴

	Bank Loans	High Yield Bonds
Coupon	Floating Rate	Fixed Rate
Ranking	Senior	Senior Subordinated
Credit Security	Secured	Unsecured
Covenants	Maintenance and Incurrence ⁵	Incurrence
Callability	Callable	Not Always Callable
Historical Spread	2.5% over LIBOR	5-10% over Treasuries ⁶

Since bank loans usually (a) are secured by company assets, (b) possess additional maintenance covenants, and (c) have a more senior position, they are theoretically considered less risky than high yield bonds. Indeed, this appears to have been the case historically: in default, bank loans on average recovered about 70 cents on the dollar, while high yield bonds recovered about 40 cents between 1990 and 2017.⁷ On the other hand, since bank loans are callable, investors bear some call risk, that is, the chance that issuers will prepay their debt in times of narrowing credit spreads, and investors wishing to reinvest would have to do so at a lower interest rate. As the market climate shifts, so does the relative importance of seniority versus callability: in boom times, when there are few defaults and spreads are narrowing, callability weighs heavily while seniority is discounted. However, in bust times, when defaults increase and spreads widen, seniority handily beats callability. Therefore, an investor should expect that — relative to high yield bonds — bank loans would underperform in boom times and outperform in bust times.

Up until 2008, this had been the case. During the credit downturn of 2000 through 2002, bank loans outperformed high yield by 4.5% per annum on average. In contrast, during the boom years of 1997 to 1999 and 2003 to 2007, bank loans underperformed high yield bonds by 3.6% per annum on average.⁸ However, in 2008 — during the Global Financial Crisis (GFC) — bank loans underperformed high yield bonds by 2.7%. Also, in December 2017, despite being a relative bull market, due to rising interest rates leveraged loans outperformed high yield bonds by about 80 basis points.

⁴ Note that the reported spreads are typical and not reflective of extreme market conditions.

⁵ Maintenance covenants require that the issuer maintain financial metrics (such as total debt to EBITDA) on a periodic basis. Incurrence covenants require that the issuer meet certain financial ratio tests along with making timely debt and principal payments. Not all bank loans have covenants. Covenant-lite loans, or loans without maintenance covenants, currently comprise about 80% of the loans in the bank loan market.

⁶ Treasuries used to calculate spread are based on comparable maturity of specific bond.

⁷ Note that recovery rates could be much lower during extreme credit cycles. See “Recovery Rates Sink for Loans Tied to Defaults,” <http://online.wsj.com/article/SB123561585107778441.html>.

⁸ S&P/LSTA Leveraged Loan Index, December 2008 Review.

It is also worth considering that, unlike high yield bonds, bank loans are floating rate instruments. The rate is usually quoted as a spread over 3- or 6-month LIBOR,⁹ and has historically been approximately 2.5% over LIBOR.¹⁰ Therefore, bank loans are not directly exposed to interest rate risk, unlike high yield bonds. This floating rate structure provides protection against rising interest rates. Indeed, bank loans should benefit from rising short-term interest rates. Moreover, as increasing interest rates often correlate with inflation, bank loans may offer investors a partial hedge against certain types of inflationary environments.

BANK LOANS PERFORMANCE

The history of bank loans is relatively short and serves as a lesson in the perils of extrapolating a short-term data series to predict future return behavior (see Figure 1 below). After having performed well throughout the 1990s and most of the 2000s, the broad bank loan market suffered a significant decline in 2008 and then a massive surge in 2009 before returning to more historic levels. Over the whole 1992 to September 2018 period, the annualized return to bank loans was 5.7%, accompanied by a 4.9% annualized standard deviation. This has resulted in a Sharpe ratio of 0.7. However, the returns are anything but normally distributed. Thanks to a disastrous 2008 and fantastic 2009, the skewness is -2.9 and kurtosis is 32, indicating a narrowly-peaked distribution with a “fat,” long, and negative tail.¹¹

Figure 1. 12-month lagging total returns to bank loans, 1992-2018¹²



⁹ LIBOR is the London Inter-Bank Offer Rate. It is the rate that banks charge each other to lend money over short time periods.

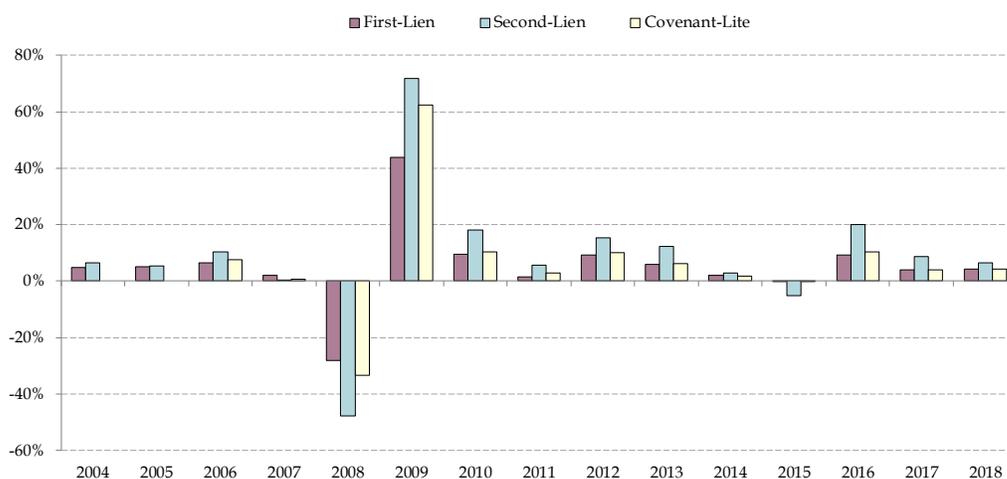
¹⁰ Historically about half of bank loans have had floors below which the coupon yield could not fall; when LIBOR was near zero during and after the Great Financial Crisis the effect was that, when LIBOR started going up, coupons did not keep pace, until they hit the floor. However, LIBOR has been comfortably above the typical 1% floor of late, so they are lessening in importance. In 2018 just 29% of new issuance had floors.

¹¹ A Shapiro-Wilk *W* test indicates that we may safely reject ($p < 0.0001$) the hypothesis that the monthly returns to bank loans are normally distributed.

¹² Source: CSFB Leveraged Loan Index; S&P/LSTA Leveraged Loan Index. Note the similarity between the two indices' return series.

There has been some performance dispersion within the bank loan universe. Second-lien bank loans, which are junior to first-lien loans and represent just 5% of loans outstanding, have outperformed first-liens on an annualized basis by 180 basis points since 2004, before which second-liens were essentially non-existent. This is skewed due to the large outperformance of 2,790 basis points by second-lien loans in 2009. Additionally, covenant-lite loans,¹³ which represent an average of 15% of loans outstanding, have outperformed all first-lien loans on an annualized basis by 41 basis points since 2006, before which covenant-lite loans were essentially non-existent (see Figure 2).

Figure 2. Monthly returns to first-lien, second-lien, and covenant-lite bank loans, 2004-2018¹⁴



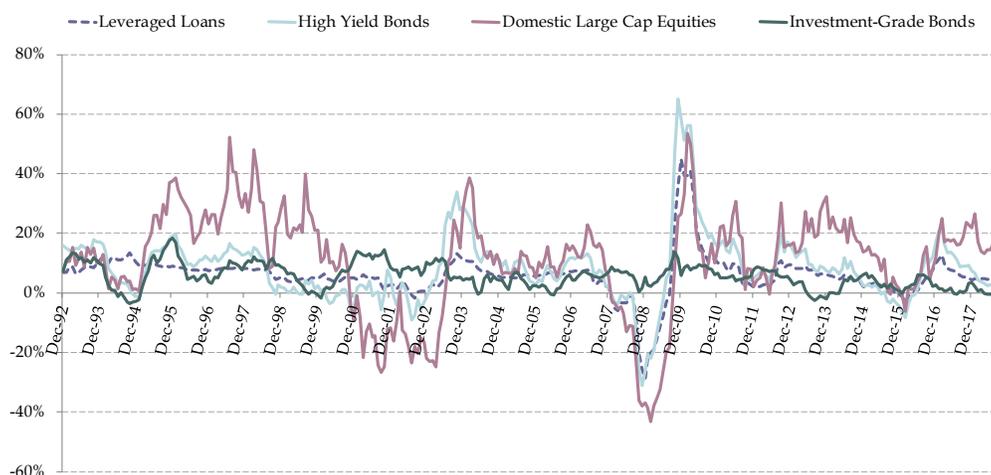
The relative performance of bank loans is revealing (see Figure 3). Up until 2008, bank loans' annualized returns were essentially the same as investment grade bonds, but with considerably less volatility.¹⁵ Clearly, this changed in 2008: bank loans' revealed themselves to be much riskier than investment grade bonds, with losses closer to those of assets such as high yield bonds and equities. From January 1992 through September 2018, bank loans outperformed investment grade bonds with a 5.7% return compared to 5.3%. However, this came with higher volatility, with bank loans' annualized standard deviation of 4.9% compared to investment grade bonds' 3.5%.

¹³ Covenant-lite loans are first-lien loans without a maintenance covenant. They also became a feature of the last credit cycle, with their increased issuance coinciding with narrower spreads and greater loan issuance for leveraged buyouts.

¹⁴ Source: Credit Suisse Leveraged Loan Index.

¹⁵ From 1992-2007, bank loans' annualized standard deviation was 2.3% versus 3.7% for investment grade bonds.

Figure 3. 12-month lagging total returns to leveraged loans, high yield bonds, domestic large cap equities, and investment grade bonds, 1992-2018¹⁶



In Table 2 we show the correlation of monthly returns between bank loans and other major asset classes prior to and including 2008. Note that although bank loans' performance in 2008 and afterward did not fundamentally alter their relationship with investment grade bonds, it did notably alter their historical relationship with high yield bonds and domestic large-cap equities. What was once an asset class that appeared to be a great diversifier is now — with the benefit of hindsight — decidedly less so. That said, bank loans still appear to offer diversification benefits relative to other fixed income securities.

Table 2. Correlation of monthly returns; bank loans, high yield bonds, domestic large cap equities, and investment grade bonds, 1992-2018¹⁷

Correlation Since 1992	Investment Grade Bonds	High Yield Bonds	Domestic Large Cap Equities
Bank Loans (<i>prior to 2008</i>)	-0.07	0.52	0.18
Bank Loans (<i>through Sep 2018</i>)	-0.02	0.74	0.42

Several explanations have been offered to explain bank loans' difficult 2008. First, 60% of institutional loan purchases between 2002 and 2007 were in the form of CLOs.¹⁸ Since CLOs are highly leveraged investment vehicles, the broad deleveraging of the global financial system forced these CLOs to sell their loans at extreme discounts. This explanation naturally suggests that the loans themselves were worth substantially more than they were trading for in late 2008. Another explanation contends that bank loans had become increasingly risky due to (a) relaxed covenants and issuer standards, (b) less subordinated debt,¹⁹ and (c) a generally deteriorating economic environment. This explanation suggests that bank loans were worth more or less what their market value at year-end implied.

¹⁶ Sources: CSFB Leveraged Loan Index; Barclays High yield Index; Barclays Aggregate Index; and S&P 500 index.

¹⁷ Sources: CSFB Leveraged Loan Index; Barclays High Yield Index; Barclays Aggregate Index, and S&P 500 Index.

¹⁸ S&P/LSTA Leveraged Loan Index, December 2008 Review.

¹⁹ That is, there was little-to-no junior debt in the capital structure as well as less equity to absorb any losses.

STRATEGIC ALLOCATION

Bank loans belong in an investor's credit allocation, where they may offer benefits over standard high yield bonds because they are senior, secured, and carry a floating rate, although they are callable. Nevertheless, 2008 made abundantly clear that bank loans are risky – and that this risk had probably been underpriced historically.

As the bank loan asset class has evolved, it has become heterogeneous with regard to credit quality: the asset class is currently composed of first- and second-lien loans, non- and covenant-lite loans, and from a variety of issuers across various industries and including both private equity-owned firms and publicly traded companies. The composition and credit quality of the bank loan universe tends to change as the availability of credit in the market changes. For example, immediately after the Global Financial Crisis two-thirds of the bank loan market was rated BB or above while under 15% was covenant-lite. At the end of 2018, after a prolonged period of credit availability, slightly under 40% of the market was rated BB or above and nearly 80% was covenant-lite. Also, there are certain industries that have historically been large issuers of both high yield and bank loans such as media and health care. Both asset classes have their own unique industry exposures as well such as energy in the high yield market and technology and services in bank loans. Thus, an investor must consider how an investment in bank loans fits within their credit portfolio. For example, an investor who currently maintains an allocation to high yield bonds and who wants to diversify his credit exposure should arguably seek investments in first-lien loans since second lien debt may perform similarly to high yield bonds (as both are subordinated in a capital structure and tend to have lower recoveries in the event of a default).

Depending on the investor, Meketa Investment Group would recommend allocating as much as 15% of their portfolio to credit, with no more than half coming from bank loans.²⁰ Table 3 shows the expected impact of adding bank loans to a relatively simple portfolio. Without a prior allocation to lower quality credit, increasing a bank loan allocation from 0% to 15% modestly increases the Sharpe Ratio from 0.31 to 0.32.

Table 3. Standard portfolio parameters with an increasing bank loan allocation²¹

	Bank Loan Allocation		
	0%	7%	15%
Domestic Equities	60%	56%	51%
Inv. Grade Bonds	40%	37%	34%
Bank Loans	0%	7%	15%
Expected Return	6.29%	6.24%	6.16%
Expected Std. Dev.	11.0%	10.7%	10.3%
Sharpe Ratio	0.31	0.31	0.32

²⁰ A speculative-grade portfolio with a higher (lower) allocation to high yield would be expected to be more (less) risky in terms of credit and interest rate risk.

²¹ Results generated using MIG's 2018 Annual Asset Study parameters; assets taken from equities and bonds so as not to change the relative weightings of the two asset classes.

The diversification benefit stems primarily from bank loans' relatively low expected correlation with investment grade bonds (0.12) and moderate expected correlation with U.S. equities (0.64).²²

IMPLEMENTATION

If there is one thing investors learned in 2008, it was that the type of investment vehicles in an asset class could substantially alter the asset's riskiness. CLOs (and Collateralized Debt Obligations, or CDOs), which themselves are highly leveraged entities that invest in the bank loan market, are a case in point. These vehicles were a double-edged sword: while they expanded the opportunities for institutional investors to access the bank loan market and offered the opportunity for incremental return, they introduce increased risk to the entire asset class as they utilize significant leverage and, because of that leverage and the structure it brings, lack full investment flexibility during times of stress. It should be noted that, since the Global Financial Crisis, CLOs generally use less leverage and focus on longer-term (not short-term mark-to-market) financing, so it is theoretically less likely the asset class will experience similar technical forced selling. Still, we recommend that plan sponsors engage specialist loan managers who employ little to no leverage.

Regardless of which type of manager the investor selects, it is essential that the manager have additional resources to support the research and operational requirements of the asset class. The manager should have a legal staff with experience evaluating loan documentation and structuring, in addition to bank loan bankruptcy ("workout") proceedings. Secondly, they should have a deep, skilled operations group who can handle over-the-counter trading and unique settlement of bank loans, as trading is much more nuanced relative to securities such as bonds. The bank loan mutual fund universe has grown significantly during the past several years, however the daily liquidity requirements of those funds is misaligned with these multi-day bank loan settlement times. Many bank loan mutual funds keep higher cash positions and/or invest in more liquid non-loan assets such as high yield bonds to maintain some fund-level liquidity, though this will increase other risks to the fund such as tracking error risk and potentially credit and duration risk. It is for this reason that we recommend private commingled funds with monthly or quarterly liquidity for investors who are able to meet these funds' minimum investment thresholds. The largest investors should consider separately managed accounts if they are able to achieve appropriate diversification and they have access to the necessary operational resources.

The fees for most public manager strategies typically start at 35 basis points for the largest accounts, and are generally higher — and include a performance fee — for private managers. As of 2018, there are 113 public managers of bank loan strategies in the eVestment US Floating-Fate Bank Loan Universe. Finally, mutual funds and ETFs fees tend to be approximately 100 basis point management fee.

²² We feel that these — in addition to our estimate of bank loans' correlation with high yield bonds at 0.75 — are conservative estimates of correlation given the historical evidence.

SUMMARY AND RECOMMENDATION

Bank loans represent an alternative to high yield bonds, both from an investor's and an issuer's standpoint. The key difference between the two are that bank loans pay a floating interest rate and occupy a more senior position in the capital structure. Because bank loans pay a floating interest rate, they provide a hedge against rising short-term interest rates.

The secondary bank loan market has grown rapidly in the last decade, due primarily to the establishment of governance standards and their popularity as a source for financing mergers and acquisitions. Bank loans have had a volatile performance history, culminating in a sharp sell-off at the end of 2008, followed by massive gains in 2009. With such a short history, it is difficult to draw firm conclusions about performance going forward.

Nonetheless, we believe that bank loans represent an attractive area for diversification and to attain a reasonable risk-adjusted return. We believe that most institutional investors would benefit by investing between 2% and 7% of assets in bank loans, which, when combined with an allocation to traditional high yield bonds and other public or private credit strategies, would constitute a fraction of perhaps a 5% to 15% allocation to credit generally.

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