

Regarding Bank Loan Fund Investing, Keep an Eye on Interest Rates and an Even Closer Eye on Credit Spreads

Introduction

The general level of interest rates has been low for quite some time and this has clearly worked against both savers and those on a fixed income investing in bonds and CDs, who rely on interest income to meet future savings goals and cover current living expenses, respectively. As a result there has been much discussion by market prognosticators and personal finance & investing gurus about what investors might do to combat the low interest income of bank savings accounts, certificates of deposits (CDs), and government debt such as Treasury bills, notes and bonds. Additionally, there seems to be a general consensus that rates are more likely to go higher in the future given the very low levels at which they are now coupled with potential inflationary pressures building in the system. With low current interest rates and the perceived likelihood of higher rates in the future, how might one invest to maximize future expected interest income? Enter Bank Loan funds (BLFs).

BLFs hold a portfolio of leveraged loans issued by low-rated firms typically rated either side of single-B, whose interest rate is tied to a floating interest rate such as 3-month LIBOR. Given the low ratings of these firms they need pay a significant spread over the floating interest rate, usually at least 200 basis points and typically much more. The loans are called "bank loans" because they have been usually arranged by large well-known commercial banks, although the funding and risk sharing is often spread across other non-commercial banking entities such as private equity funds and institutional investors such as asset managers and mutual funds. Bank loans are typically at the top of the capital structure, surpassing senior secured bonds in terms of payment priority.

Analysis

A primary benefit of owning a security like a bank loan, which has its rate periodically reset to the prevailing short-term market rate such as LIBOR, is that if short-term rates rise (such as when the Fed starts a tightening cycle) then the loan, and by proxy the BLF, will tend to rise in value. This is rather intuitive because, all things equal, interest income increases as the floating rate increases. This relationship works both ways, meaning that if short-term interest rates decline then the bank loan and by proxy the BLF, will decline in value. Therefore, if one believes that short-term interest rates are heading higher in the future, then an investment in a BLF seems to make perfect sense. But how strong is the relationship between prices of BLFs and short-term interest rates? Is the relationship very strong or only moderately strong? Furthermore, what about BLFs exposure to high yield credit spreads? After all, borrowers who take out leveraged loans are usually rated in the neighborhood of single-B.

In order to analyze the relationship between BLFs, short-term interest rates, and high yield credit spreads, I first graphically compared the price, rate, and spread times series from April 1st 2007 to April 1st 2011 (4 years) to see how well they tracked one another. Secondly, I calculated the correlation between BLFs and interest rates, and BLFs and high yield credit spreads. The data used were as per Table 1 below.

Table 1. Data used for the analysis. The two BLFs, FFRHX and EVBLX, were chosen based on Morningstar’s list of Analyst Picks for the Bank Loan funds category for which there were two; 3-month LIBOR is the most common rate index for floating rate loans; 5-year single-B credit spreads track both average rating and maturity quite well for most BLF portfolios.

Time Period:	April 2, 2007 – March 31, 2011
BLFs:	Fidelity Floating Rate High Income Fund (FFRHX) Eaton Vance Floating Rate A (EVBLX)
Interest Rate:	3-month LIBOR
Credit Spread:	DJ CDX.NA.HY B On-the-run 5Yr Spread

Let’s first observe how well the two BLFs tracked 3-month LIBOR in the following two figures.



Figure 1. Despite periods where FFRHX and 3M LIBOR tracked each other well, there was at least one significantly long period when they didn’t.

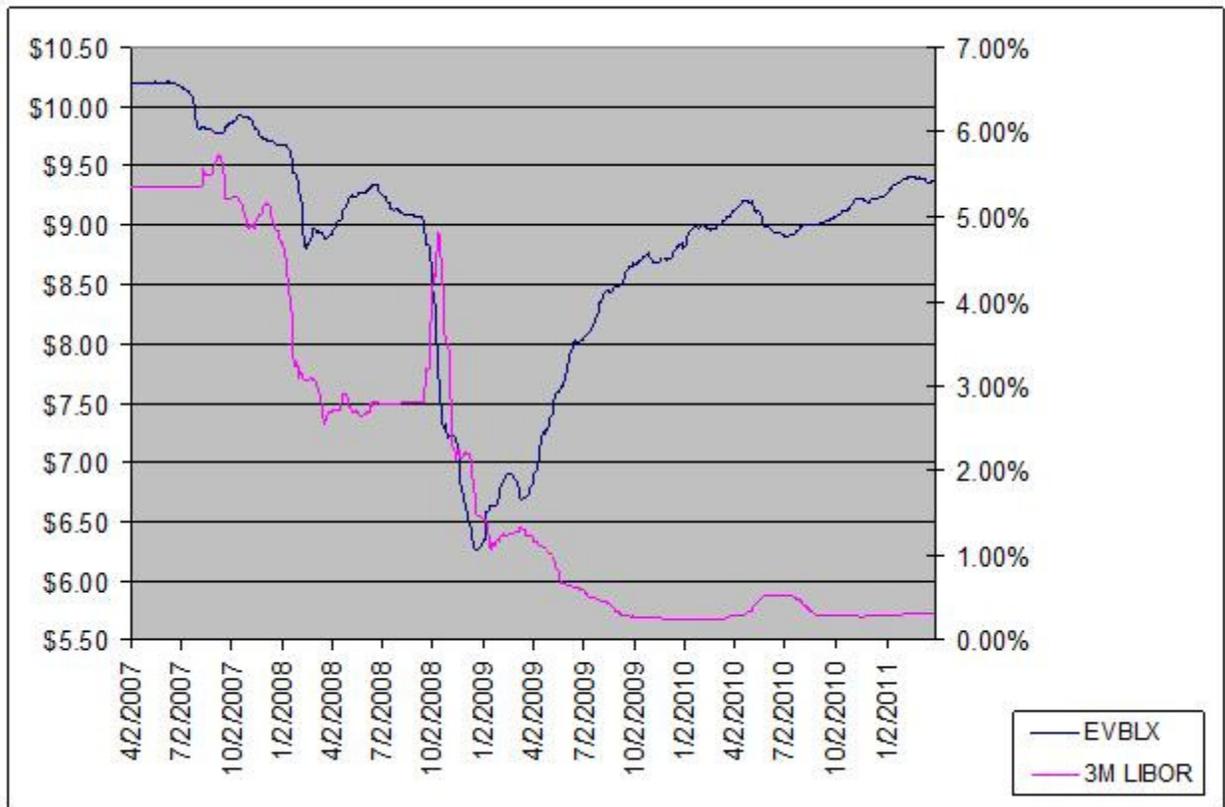


Figure 2. Despite periods where EVBLX and 3M LIBOR tracked each other well, there was at least one significantly long period when they didn't.

Notice that while there were periods when the BLFs tracked very well with 3-month LIBOR, there were also times when they diverged such as the period after December 17, 2008. It appears that some force other than interest rates may have been driving BLF price movements.

Going a step further, the correlations for the entire time period for FFRHX/3-month LIBOR and EVBLX/3-month LIBOR were 0.12 and 0.43, respectively. The fact that they are both positive makes sense because as mentioned earlier, as 3-month LIBOR goes up so does the interest income generated by the loan portfolios underlying the BLFs. In other words, the price of the BLFs and 3-month LIBOR are positively correlated. However, given that floating rate loans, and by proxy BLFs, generate more interest income as the 3-month LIBOR rate rises, the relationship is not quite as strong as one might hope for. Now let's repeat the same exercise for credit spreads.

Let's first observe how well the BLFs and DJ CDX.NA.HY B On-the-run 5Yr Spreads tracked each other in the following two figures.

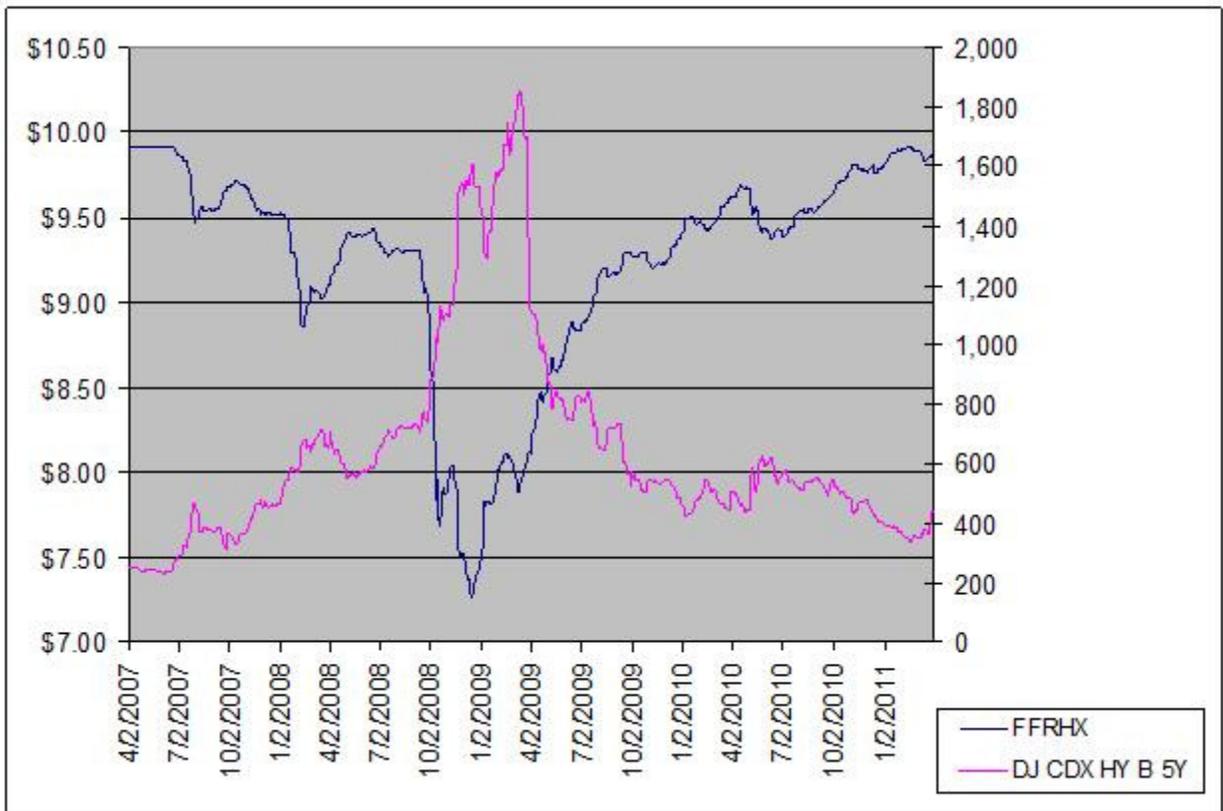


Figure 3. Visually speaking, FFRHX and DJ CDX HY B 5Y negatively tracked each other very well over the entire period.

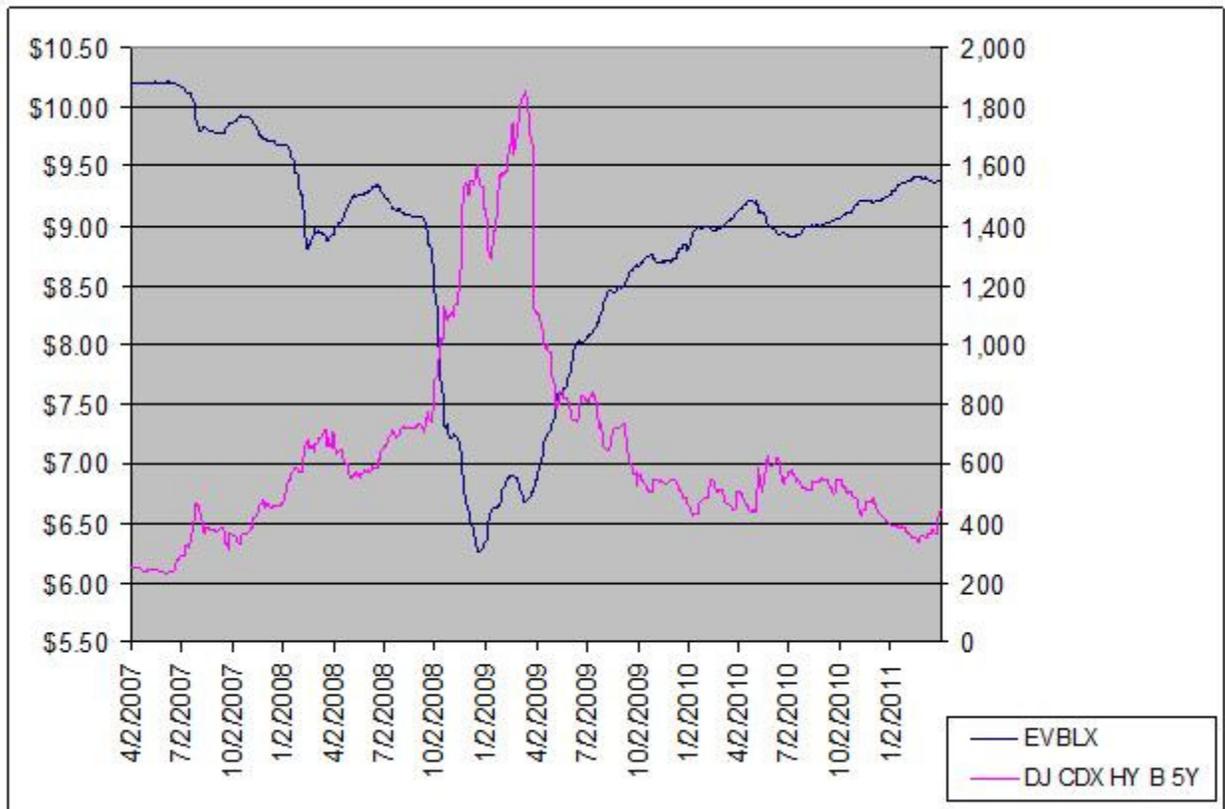


Figure 4. Visually speaking, EVBLX and DJ CDX HY B 5Y negatively tracked each other very well over the entire period.

The situation is a bit different for credit spreads. While we saw long periods of time when the BLFs did not track 3-month LIBOR so well, we don't see the same phenomena happening here for the DJ CDX.NA.HY B On-the-run 5Yr Spreads. In other words, as the DJ CDX.NA.HY B On-the-run 5Yr Spreads drop, the BLFs rose in price, and as the DJ CDX.NA.HY B On-the-run 5Yr Spreads rose, the BLFs fell in price. Recall that loan values move inversely with credit spreads, which means that they are negatively correlated.

Going a step further, the calculated correlations for the entire time period for FFRHX/ DJ CDX.NA.HY B On-the-run 5Yr Spread and EVBLX/ DJ CDX.NA.HY B On-the-run 5Yr Spread were -0.94 and -0.92, respectively. Clearly, there is a much stronger relationship between DJ CDX.NA.HY B On-the-run 5Yr Spreads and BLFs, and in this particular case one that approaches nearly perfect negative correlation (-1.00 is considered perfectly negative).

But hope springs eternal and I thought what if I focus on the "best" historical period for the four years of data for BLFs vs. 3-month LIBOR to see if the correlation improves. By "best" I mean that part of the time series where the highest correlation between the level of the BLFs and 3-month LIBOR was observed. This period happens to be prior to December 18, 2008. The recalculated correlations for the "best" period and for convenience, the original ones calculated over the entire period, can be found in Table 2 below.

Table 2. Original correlations (middle column) and recalculated correlations (last column). Note how much stronger the relationship is, in absolute terms, between the BLFs and the DJ CDX.NA.HY B On-the-run 5Yr Spreads.

Correlation	Complete Time Period	Time Period up to December 17, 2008, inclusive
FFRHX/3-month LIBOR	0.12	0.62
EVBLX/3-month LIBOR	0.43	0.70
FFRHX/DJ CDX.NA.HY B On-the-run 5Yr Spread	-0.94	-0.97
EVBLX/DJ CDX.NA.HY B On-the-run 5Yr Spread	-0.92	-0.98

What we can see from Table 2 is that the correlation was more strongly positive between the BLFs and 3-month LIBOR for the time period up to and including December 17, 2008, but still not as strong in absolute terms as the correlation between the BLFs and DJ CDX.NA.HY B On-the-run 5Yr Spreads over the same period. In fact, the correlation between the BLFs and DJ CDX.NA.HY B On-the-run 5Yr Spreads got even closer to being perfectly negatively correlated. Regarding the impact on BLF price changes over the “best” period and the entire period, clearly credit spreads seemed to matter more than interest rates.

Conclusion

What the forgoing analysis suggests is that when deciding to invest in bank loan funds, do keep an eye on the level of interest rates, but keep an even closer eye on the level of credit spreads for picking entry points. Basic time series analysis reveals that credit spreads influence bank loan fund prices even more than interest rates do.