Volume 5

Marketplace Insights.

Marketplace Lending in a Rising Rate Environment

December 2018

LendingClub

Overview

The Marketplace Insights series is designed to share periodic insights about how LendingClub's marketplace works and performs.

In this issue, we focus on potential impacts to marketplace loans in a rising interest rate environment.

Highlights

- As interest rates march steadily higher, investors are asking how marketplace loans might perform in a different rate environment. Because marketplace loans' risk and return dynamics are different from those of more traditional fixed income assets, they can offer investors benefits in various environments. This is due to three primary factors:

- **Duration.** Marketplace loans offer shorter duration versus certain other types of fixed income assets, making them less sensitive to changes in interest rates.

- **Differentiation.** Marketplace loans have different return drivers than many other fixed income assets do. Their returns tend to be more affected by credit-specific factors and broader trends in consumer credit health, specifically, unemployment rates and recessions, than by prevailing interest rates.

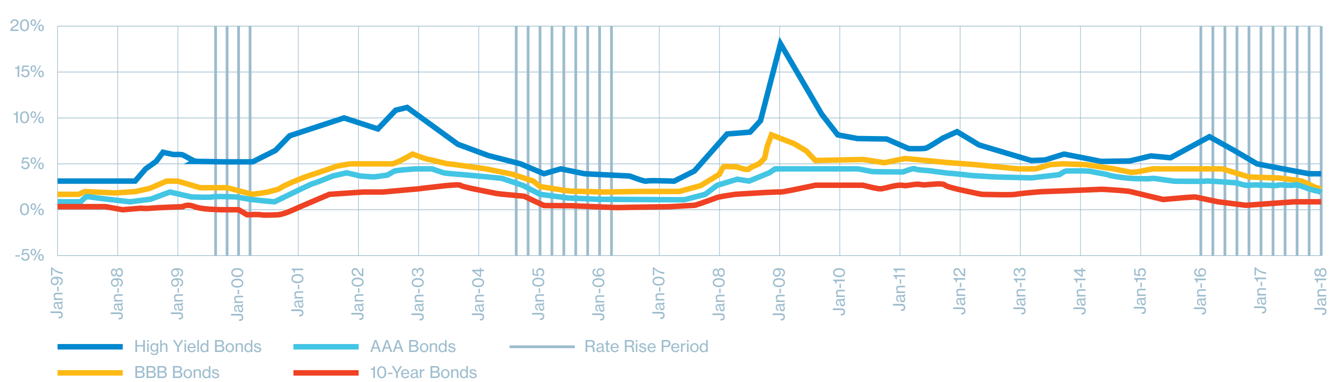
- **Demand.** Marketplace loans are an attractive alternative for borrowers in a variety of rate environments, given the generally higher rates on other consumer credit products.

The Impact of Rising Rates

With the U.S. Federal Reserve focused on raising rates, investors, particularly those in fixed income, have turned their attention to the potential impact on spreads. Though sustained interest rate rises usually reflect healthy economic fundamentals, they can have a negative impact on spreads. While marketplace loans are a relatively new asset class, looking at how other fixed income assets have weathered prior rate-hike cycles can be helpful in anticipating how marketplace loans might perform.

What Happens When Rates Rise?

Figure 1: Spreads vs. 2-Year Treasurys[1]



Among those most affected by rising rates are long-duration bonds such as 30-Year Treasurys, given their greater sensitivity to interest rate changes. As shown in Figure 1, following periods when the Fed raised rates in 1999-2000, and from 2004-2006, spreads versus 2-Year Treasurys widened for both high yield and investment grade corporate bonds (though high yield saw the most pronounced spread-widening).

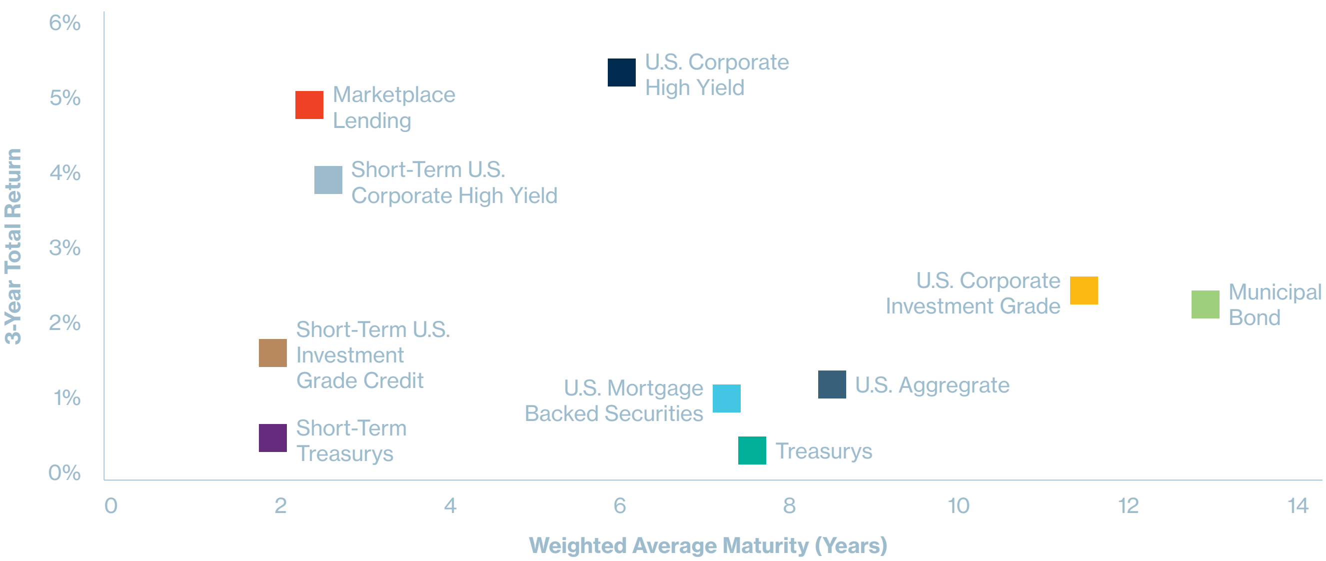
How This Rate Cycle Compares

Beginning in December 2015, the Fed has implemented seven quarter-point rate hikes. But compared to the last two periods of rising rates, spread-widening for fixed income assets has been more muted. Why might this be the case? Clearer communication from the Fed on its targets and rate-hike path, a moderate pace of increases (no 50 or 75 basis point hikes), and the fact that interest rates on 10-Year Treasurys have started off at a much lower overall level (2.4% in 2016 versus 4.7% in 1999 and approximately 5.6% in June 1999) than in prior periods may have all contributed to a cycle that looks different than previous ones.

How Have Marketplace Loans Performed?

As shown in Figure 2[2], three year returns (through March 31, 2018) compare favorably with those for U.S. investment grade and the U.S. Aggregate bond indexes. Additionally, despite nearly two years of steadily rising rates we continue to see healthy borrower demand for marketplace loans on our platform.

Figure 2: How Marketplace Lending Compares to Other Fixed Income Assets[2]



Consumer Credit Performance in Rising Rate Environments

Consumer credit behaves differently than many fixed income assets. And marketplace loans share more characteristics with other types of consumer credit products (i.e, a higher sensitivity to the unemployment rate), than they do with traditional fixed income assets.

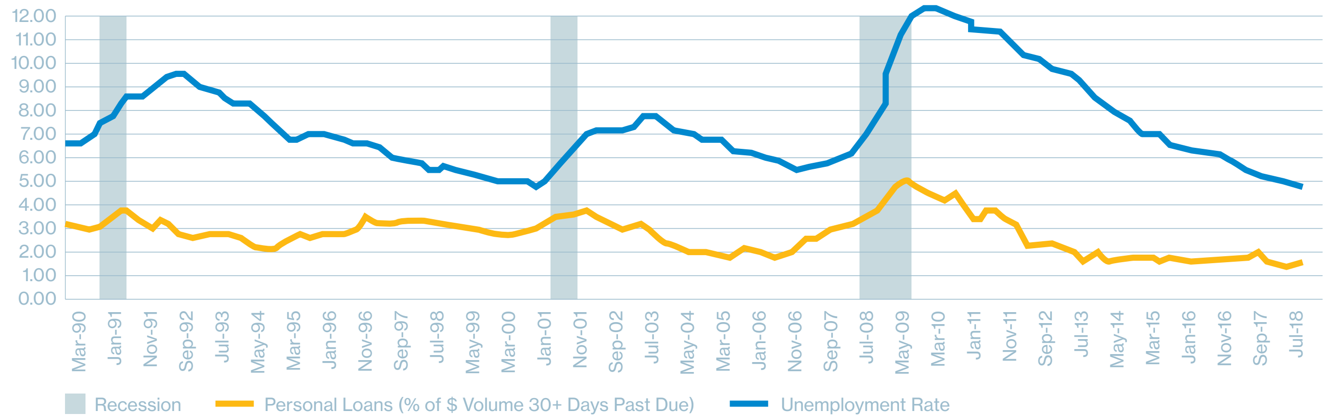
Marketplace loans also typically have lower duration than government and corporate bonds do. As an example, across our platform, average loan duration for Prime loans ranges from 1.1 to 1.9 years[3]. This means the product's performance may be less sensitive to interest rate changes.

Performance for consumer credit products such as auto loans, credit cards, home equity lines of credit, and personal loans is impacted by Fed interest rate changes. But prices are affected much more by idiosyncratic credit quality considerations than is true for government and investment grade bonds, which are heavily influenced by overall and asset class-specific supply and demand dynamics, including secondary market liquidity.

Indeed, as shown in Figure 3 on the next page, consumer credit delinquency rates and charge-offs do not move in line with rising interest rates but are on the whole related to broader developments that impact consumer health (in particular, recessions). Delinquencies were in line with historical averages during rate-hiking cycles in 1994-1995, 1999-2000, and from 2004-2006, but spiked during the 1991 and 2008 recessions[4]. The spike in 2008 was particularly pronounced because of the recession's severity. On the other hand, delinquencies did not spike during the much shallower 2000 recession, likely because that wasn't consumer-driven (but rather one driven by tech and the bursting of the dot com bubble).

1 Source: Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org.
2 Sources: Bloomberg and Orchard Platform, based on monthly total returns as of 3/31/2018. "Marketplace Lending" = Orchard Index, "Treasurys"= Bloomberg Barclays U.S. Treasury Index, "Short-Term Treasurys" = Bloomberg Barclays U.S. Treasury 1-3 Year Index, "U.S. Aggregate"= Bloomberg Barclays Aggregate Index, "U.S. Corporate Investment Grade"= Bloomberg Barclays Corporate Investment Grade Index, "Short-Term U.S. Investment Grade Credit" = Bloomberg Barclays 1-3 Year Credit Index, "U.S. Corporate High Yield"= Bloomberg Barclays U.S. Corporate High Yield Index, "Short-Term U.S. Corporate High Yield" = iShares 0-5 Year High Yield Corporate Bond ETF, "Municipal Bond"= Bloomberg Barclays Municipal Bond Index; "U.S. Mortgage Backed Securities"= Bloomberg Barclays U.S. Mortgage Backed Securities Index.
3 Based on forecasts for grade and maturity mix of loans issued as of Q2 2018.

Figure 3: Personal Loans 30+ Days Past Due Versus Unemployment Rate[4]



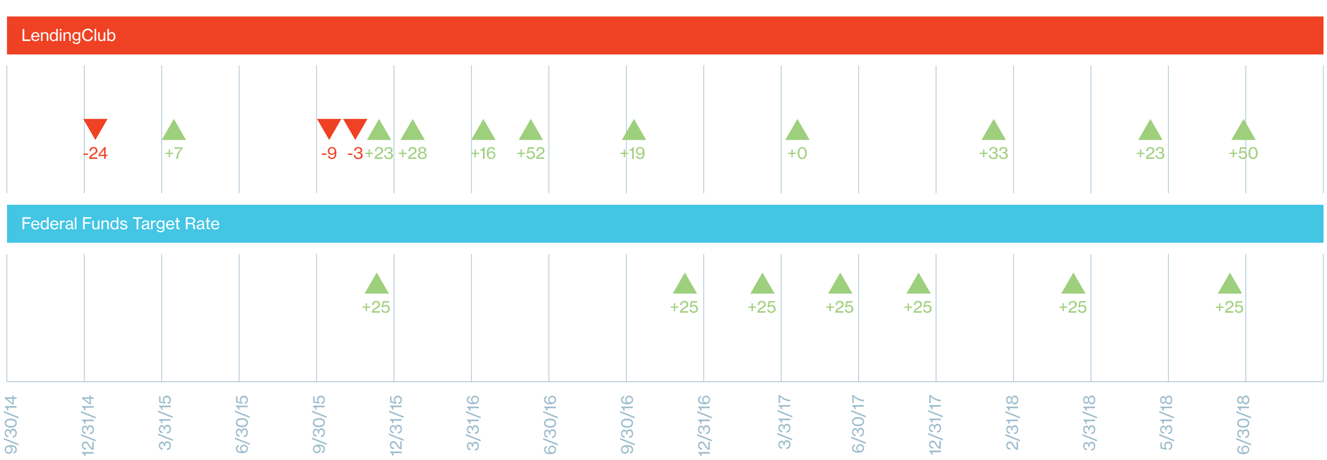
As a result of these differences, we anticipate in a rising rate environment marketplace loans would perform more in line with consumer credit overall than with long-dated bonds or other traditional fixed income assets. With consumers' alternatives generally comprising higher rate credit cards and other instruments linked to the prime interest rate, borrower demand for marketplace loans should remain robust throughout a rising rate cycle.

How Do We View Rising Rates?

LendingClub interest rates are influenced by the Fed's rate changes— but do not move in lockstep with them. For instance, while platform rates have risen four times year-to-date, generally shortly after Fed increases[5], past increases have also been independent of the Fed (See Figure 4 for rate changes over time). Among other variables that influence LendingClub platform rates are prevailing market interest rates overall, competitors' rates, and ongoing conversations with our investor base.

In a rising rate environment, one benefit of LendingClub's platform is the dynamic model, which means that rates can be quickly adjusted, whether due to broader economic or financial market conditions, competitive considerations, or in anticipation of changes in consumer risk profiles. This enables the platform to react quickly so that competitive rates may be offered to borrowers and investors have the opportunity to earn competitive returns.

Figure 4: Interest Rate Changes on the LendingClub Platform Over Time[5]



4Source: Moody's Analytics, (based on data for personal loans provided by the American Bankers Association).

5 Source: LendingClub, Federal Reserve Bank of New York. Interest rates on the LendingClub platform above are calculated as weighted averages. Weighted average is the average of sub-grade rates with weights based on sub-grade issuance in the month of price change. As an average of many loan interest rates, any interest rate in this chart does not represent the interest rate for any particular loan. Interest rates on the LendingClub platform are subject to change, and historical interest rates are not a guarantee of future interest rates.

Bottom Line

Because marketplace loans' risk and return dynamics vary from those of more traditional fixed income assets, they can contribute valuable diversification in a variety of environments. Lastly, they also allow investors to take a specific view on credit or interest rates by selecting for grade and term.

About LendingClub

LendingClub was founded to transform the banking system to make credit more affordable and investing more rewarding. Today, LendingClub's online credit marketplace connects borrowers and investors to deliver more efficient and affordable access to credit. Through its technology platform, LendingClub is able to create cost efficiencies and passes those savings onto borrowers in the form of lower rates and to investors in the form of solid returns. LendingClub is based in San Francisco, California.

For more information, please contact us at Investing@LendingClub.com or call us at 888.596.3159 (7 am-5 pm PT, Monday-Friday).

Institutional Investors can contact us at Institutions@LendingClub.com.

How Interest Rates Are Set

A comprehensive approach is taken to setting rates

- While the credit model leverages both machine learning and LendingClub's 10 years of data on borrower payment performance, at the individual borrower level, loans are assessed and priced based on the level of risk each individual presents.
- At the platform level, dozens of factors are considered including: the competitive landscape—rates available to borrowers at competing marketplace lending platforms, credit card issuers, or other relevant borrower products—the supply and demand for credit from investors (relative value expectations for risk-adjusted returns) and borrowers, and the macroeconomic environment.
- At the macroeconomic level, the platform monitors and considers the impact of a multitude of current indicators including the federal funds rate, prevailing spreads on other fixed income assets, household financial health indicators, and unemployment, among other factors.