

Monica Erickson, DoubleLine Portfolio Manager | October 31, 2021

As the Federal Reserve winds down its Secondary Market Corporate Credit Facility (SMCCF), let's take a long-term look at the investment grade corporate bond market. The purpose of this exercise is to compare the past to the present and see what this might tell us about the future. Last year, the Fed engineered an unprecedented intervention in the asset class. Today, investors in high grade corporate bonds face historically low yields, tight spreads and a high degree of interest rate sensitivity. However, as the global economy continues to reopen, and corporate profitability and earnings growth remain strong, the spread should remain range-bound. In my view, the main risk to investment grade bonds remains in the sector's elevated sensitivity to higher interest rates.

A Brief Summary of the Past

Companies have issued debt to fund their operations and expand their business for centuries. While the first record of a corporate bond dates to 1622 by the Dutch East India Company, the modern-day investment grade corporate bond market really began to come into its own in the 1970s. This decade marked the advent of key parts of the regulatory framework bringing together important sources of institutional investment capital, including pension plans, and issuers of corporate debt. These key parts include congressional passage of the Employee Retirement Income Security Act of 1974, which set standards for pension plans in the private sector, and, starting in 1975, the approval by the U.S. Securities and Exchange Commission of credit rating agencies as nationally recognized statistical rating organizations, deemed issuers "of credible and reliable ratings by the predominant users of securities ratings."

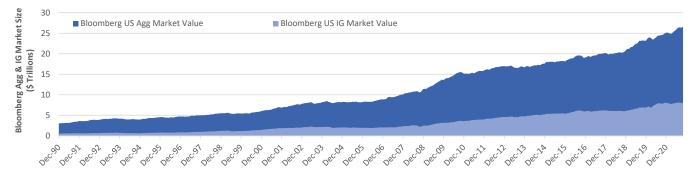


First bond issued by

Dutch East India Company in 1622

U.S. corporations had issued about \$7 trillion of debt outstanding rated investment grade as of October 29, 2021. (Figure 1)

Bloomberg US Aggregate Bond Index Market Value with Corporate Investment Grade Breakout (December 1990 - October 2021)



Corporate Investment Grade Percentage of Bloomberg US Aggregate Bond Index (December 1990 - October 2021)

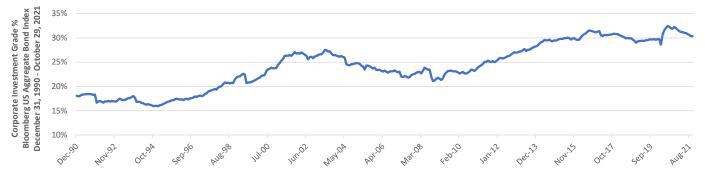


Figure 1
Source: Bloomberg, DoubleLine



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Evolution in Yields, Duration and Spreads

The composition of the market has evolved over time. As U.S. Treasury yields have declined over the past 50 years, so have the yields offered to investors in the corporate market. In fact, from the 1970s and through the early 1990s, companies had to pay an average 10% coupon to issue debt. Since the 1990s, the average coupon declined to just over 5% and is currently 2% for new issues. The yield to worst from the 1970s to present has averaged 7.2% but today stands at 2%, offering investors very little compensation for the risks to their investment. Low rates are a global issue, however. With yields at extremely low levels worldwide, the U.S. investment grade market offers a comparatively attractive yield. This relative attractiveness has fueled demand for the asset class, and I expect this demand to continue.

The duration, or risk to changing interest rates, of the asset class has also changed over time. Historically, companies issued shorter-maturity bonds, which meant that investors had less interest-rate risk. As the market has evolved, issuers steadily increased their maturity profiles. Calculated over the timeframe from 1989 to present, the average duration of the market was 4.4 years. Today, the market's duration stands at 8.8 years. As yields have decreased and companies have issued longer-dated bonds, investors have become more exposed to interest rate volatility than ever before.

The yield spread of investment grade corporate bonds over Treasuries has fluctuated with economic activity and significant events over the years. Spreads have averaged about 142 basis points (bps) over Treasuries over the past 20 years, but, of course, an average is simply a mathematical summary that does not capture the extremes of real-world experience. For example, in the early 2000s during the dot-com bust and the defaults of WorldCom and Enron, spreads blew out to 240 bps over Treasuries. During the Global Financial Crisis in 2008-2009, the sector exhibited its most extreme widening, with spreads peaking at 545 bps. During March 2020, spreads reached 341 bps, arguably much lower than what would have been without the direct intervention of the Fed. As of October 22, 2021, the sector's spread at 80 bps, near historic tights, offers very little opportunity for further tightening. (Figure 2)



The scale of the vertical (Y) axis for the upper left chart (Bloomberg US Credit Market Value) is logarithmic. The vertical scales of the other three charts are arithmetic. Source: Bloomberg, DoubleLine



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Corporate Fundamentals and Behavior

Yields, duration and spread are important, but they are not everything. It is also important to understand the fundamental health of companies issuing bonds and the underlying demand for those bonds. How much leverage are companies carrying? How much cash flow do they have to service their debt? How much demand is there for the asset class? Who is buying the bonds?

Issuer fundamentals are strong and have been improving since the steep drop in earnings last year. (*Figure 3*) Debt/EBITDA sat at 4.2x as of the second quarter of 2021 and had ranged from a high of 4.4x to a low of 2.0x. Interest coverage has increased steadily since the late 1980s from the 5x range to a current 11.8x. This is logical, as rates have decreased, companies have been willing to take on more debt, but their overall cost of financing the debt has decreased. This has led to companies' willingness to drift lower down the rating scale, and now more than 50% of the market is rated BBB.

Credit Market Fundamentals

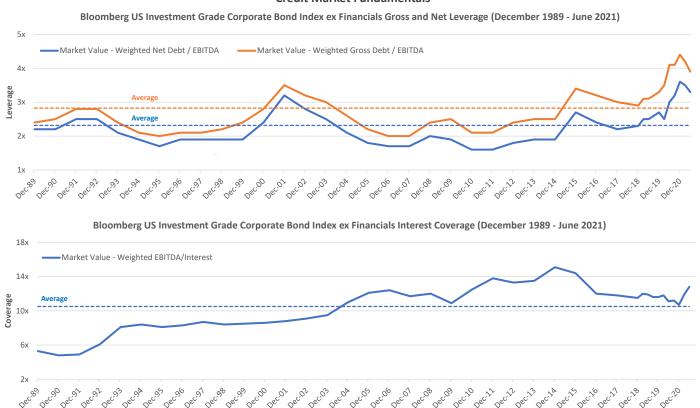


Figure 3
Source: Barclays, DoubleLine



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Demand for the asset class remains robust, as seen by year-to-date inflows as of Oct. 14. (Figure 4) Foreign investors pick up yield, on a hedged basis, by buying U.S. investment grade corporate bonds. (Figure 5)

Mutual Fund and Exchange-Traded Fund Flows for the Week Ended Oct. 14, 2021

Fund Flows	Weekly-	Weekly-	Weekly-	Weekly-	4-wk Sum-	YTD (incl.	YTD-
(\$mm)	All Funds	% AUM	Non-ETF	ETF Only	All Funds	monthly)	% AUM
U.S. Investment Grade Credit	\$1,177	0.05%	\$1,031	\$147	\$5,191	\$313,733	8.34%

Figure 4
Source: Wells Fargo Securities, EPFR/Business. Taxable bond funds only.

Corporate Investment Grade Yields for European and Japanese Investors





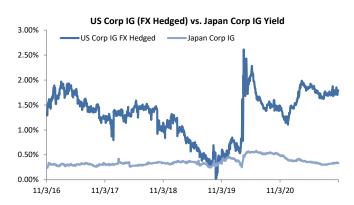




Figure 5
Source: Bloomberg, DoubleLine



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Fed Ex Machina

March 23, 2020, is a date that deserves its own chapter in the history books of America's central bank. Several weeks prior, the market experienced its fastest dislocation, with spreads blowing out by over 200 bps in two weeks as fears of the COVID-19 virus spread through the markets. The speed of the spread movement was unprecedented. So, on March 23, the Fed intervened directly in the corporate credit markets. Specifically, the central bank established the SMCCF to support the credit market by providing liquidity through direct purchases (through special purpose vehicles) of outstanding bonds and exchange-traded funds (ETFs). In addition, the Fed established the Primary Market Corporate Credit Facility (PMCCF), which provided direct lending to investment grade companies. Companies never tapped the PMCCF because the market for new issuance reopened on the Fed's announcement. The Fed did make purchase of outstanding bonds and ETFs through the SMCCF, although it has been winding down its holdings and recently sold out of the last of its positions. (Figure 6)

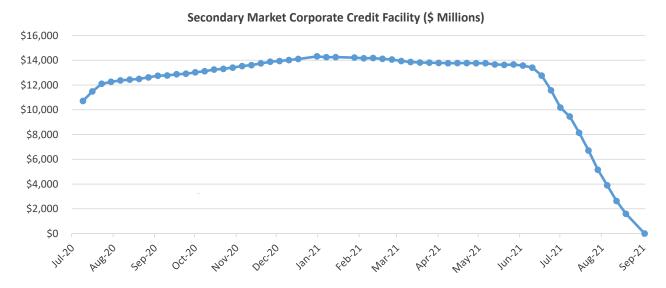


Figure 6
Source: DoubleLine, Federal Reserve

The investment grade market is a vital part of the financing of our economy, and access to it by corporations remains essential for our economic health. The Fed's involvement in the market last year underscored that importance. Will spread volatility be lessened because of the Fed's involvement? My guess is yes, to some degree. So far in 2021, we have seen a steady decline in spreads with very little spread volatility. One thing is certain, the asset class has more interest rate sensitivity than ever before and very little yield to help cushion a price move related to higher rates. To conclude, I expect spreads to remain range-bound, and the biggest driver of volatility to the asset class will be movements in interest rates.



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Monica Erickson, CFAPortfolio Manager

Ms. Erickson joined DoubleLine at its inception in 2009. She is Head of Investment Grade within The Global Developed Credit group and participates in DoubleLine's Fixed Income Asset Allocation

committee. Prior to DoubleLine, Ms. Erickson was a Vice President in the Corporate Bond group at TCW where she was involved in the management of the Firm's corporate credit fixed income and structured products. Previous to TCW, she was a Vice President at Froley, Revy Investment Company, active in managing several convertible strategies. Ms. Erickson holds a B.S. in Business, summa cum laude, from the University of Southern California. She is a CFA® charterholder, a past board member of CFA® Society of Los Angeles, and the current chair of the Charter Recognition committee for the CFA® Society of Los Angeles. Ms. Erickson is also on the Educational Committee of 100 Women in Finance.

Citations

1 Report on the Role and Function of Credit Rating Agencies in the Operations of the Securities Markets," U.S. Securities and Exchange Commission, January 2003. https://www.sec.gov/news/studies/credratingreport0103.pdf

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Definitions

Basis Points (BPS) – Basis points (or basis point (bp)) refer to a common unit of measure for interest rates and other percentages in finance. One basis point is equal to 1/100th of 1%, or 0.01% or 0.0001, and is used to denote the percentage change in a financial instrument. The relationship between percentage changes and basis points can be summarized as: 1% change = 100 basis points; 0.01% = 1 basis point.

Bloomberg US Aggregate Bond Index – This index represents securities that are SEC registered, taxable and dollar denominated. It covers the U.S. investment grade, fixed-rate bond market, with components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indexes that are calculated and reported on a regular basis.

Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) – Measure of a company's overall financial performance that is used as an alternative to net income in some circumstances.

Employee Retirement Income Security Act (ERISA) of 1974 – U.S. tax and labor law that establishes minimum standards for pension plans in private industry. It contains rules on the federal income tax effects of transactions associated with employee benefit plans.

Investment Grade (IG) – Rating that signifies a municipal or corporate bond presents a relatively low risk of default. Bonds below this designation are considered to have a high risk of default and are commonly referred to as high yield (HY) or "junk bonds." The higher the bond rating the more likely the bond will return 100 cents on the U.S. dollar.

Option-Adjusted Spread (OAS) – Measurement of the spread of a fixed-income security rate and the risk-free rate of return, which is then adjusted to take into account an embedded option. Typically, an analyst uses U.S. Treasury yields for the risk-free rate. The spread is added to the fixed-income security price to make the risk-free bond price the same as the bond.

Spread – Difference between yields on differing debt instruments, calculated by deducting the yield of one instrument from another. The higher the yield spread, the greater the difference between the yields offered by each instrument. The spread can be measured between debt instruments of differing maturities, credit ratings or risk.

Yield to Worst (YTW) – The lowest yield of a bond that can be received short of default

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