

A Barometer to Gauge Credit Market Valuations

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U.S. corporate spreads narrowed to exceptionally tight levels in 2024. The mean reverting nature of credit risk premia might lead to the conclusion that imminent decompression will likely result in negative excess returns over the foreseeable future. However, a careful study of credit cycles suggests that the tendency of regressing to the mean is asymmetric – i.e., levels above the average often prove ephemeral while mid-cycle periods of spread compression typically last longer.¹ This behavior is related to the nature of economic cycles. Risky securities depreciate in price during recessions, which tend to be short-lived. Valuations for most securities then bounce back quickly once the economic contraction ends and remain buoyant during the expansionary phases, which tend to last much longer than recessions.

Economic cycles are just one driver of spread levels. Other variables, such as corporate fundamentals and technical factors, are also critical to arriving at a valuation judgement. By creating simple market barometers comparing credit spreads with a variety of macro, corporate fundamental, and technical drivers, we can better understand whether the credit market is currently over, under, or fairly valued.² To be sure, this is a measure of credit market drivers based on the current/static snapshot of these indicators and provides a starting point for our more [comprehensive macro scenario](#) analysis.

Barometer Construction Process

As an example of how we construct our market barometers, we'll use U.S. ISM services - a widely followed purchasing managers' diffusion index. Figure 1 shows the z-scores of ISM plotted against U.S. IG corporate spreads (inverted on the right axis). U.S. IG spreads usually move in tandem with the ISM measure which, in turn, tracks U.S. economic activity. Yet, there are periods when these two series deviate from each other.

FIGURE 1: ISM Services (z-score) vs. U.S. IG Corporate Spread (z-score)

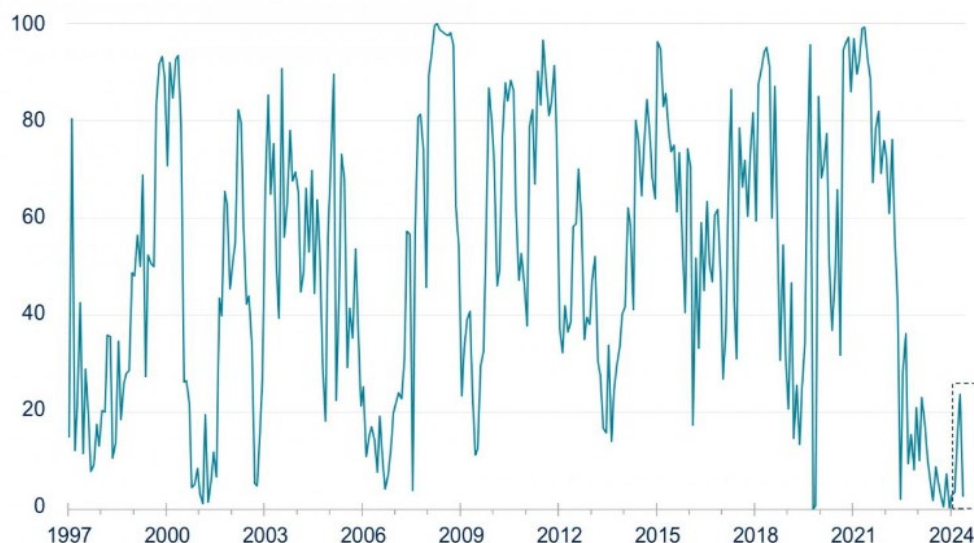


Source: Bloomberg and PGIM Fixed Income as of November 2024.

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To compare the relative deviation of U.S. IG corporate spreads versus this particular macro driver, we take the sum of the z-scores of spreads and the ISM services and calculate the percentile relative to history. Figure 2 shows the historical percentile of the relative z-scores. The current configuration leaves us at the low end of the historical distribution because the sum of z-scores results in a deeply negative number. This signifies a market that is rich relative to the soft economic backdrop implied by the level of ISM.

FIGURE 2: ISM Services vs. US IG Corporate Spread: Percentile of the Relative Z-score



Source: Bloomberg and PGIM Fixed Income as of November 2024.

In the rest of the post, we outline the chosen macro, corporate fundamental, and technical drivers of corporate spreads, highlight the nature/strength of the relationship, and summarize the current framework score on a scale between 0 (worst) and 10 (best). See Footnote 2 for greater detail into how we construct the composite valuation metrics.

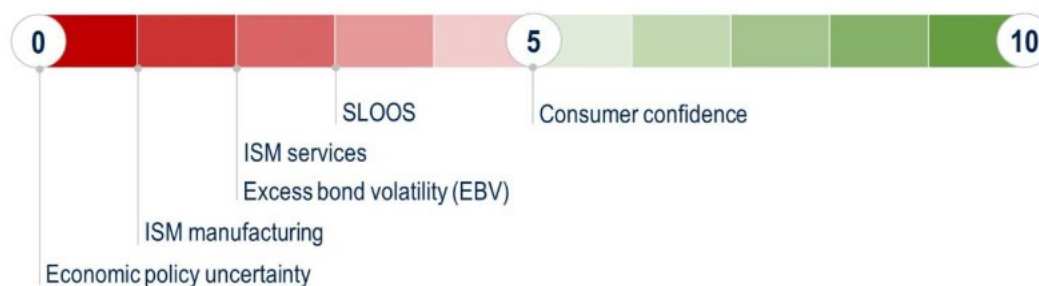
Macro Drivers

- **ISM manufacturing/services:** These are timely forward-looking indicators of the business cycle. ISM has a negative relationship with spreads. When the ISM moves down/up, spreads tend to widen/compress anticipating a weaker/stronger economy. The correlation of spreads with both services and manufacturing ISM is highly negative. Relatively tight spreads currently stand in contrast with weak ISMs. (Manufacturing Correlation: -0.35; Services Correlation: -0.59; Current Combined Score: 1-2)
- **Senior Loan Officer Opinion Survey (SLOOS):** The net percent of senior loan officers tightening credit standards for large companies is a forward-looking indicator of ratings migration in the IG corporate space. Loan officers likely base their credit extension decision on their outlook based on an inside look into the evolving finances of several companies. Tightening/loosening of credit standards precedes negative/positive ratings migration. The correlation of spreads with loan standards is strongly positive. While credit conditions are not tightening anymore, spreads screen rich based on this driver because the current level of spreads were historically associated with aggressive easing by loan officers. (Correlation: 0.57; Current Score: 3)
- **Excess bond volatility (EBV):** It is a gauge of bond volatility relative to that of equities. The idea is to capture the impact of Fed policy on asset prices. The Fed's unconventional policies (e.g. QE) compress bond volatility and encourage yield-seeking behaviour, thus supporting risky asset valuations. Spreads appear tight on this metric as

extreme uncertainty around inflation/employment and the Fed's potential response is keeping rates variability elevated. (Correlation: 0.17; Current Score: 2)

- **Economic policy uncertainty (EPU):** It is a gauge of uncertainty about public policy. A wider array of possible outcomes hurts credit markets because spreads don't tighten materially due to positive developments but widen significantly in negative scenarios, particularly now when spreads are below their median/mean. For instance, should a meaningful trade war materialize, significant damage for credit valuations cannot be ruled out. Right now, spreads appear rich based on this variable because EPU has jumped sharply given uncertainty related to the policies of the incoming administration. (Correlation 0.28; Current Score: 0)
- **Consumer confidence:** It is a gauge of consumer wellbeing and potential spending. Higher/lower consumer sentiment is generally associated with tighter/wider spreads. The correlation of spreads with consumer confidence is negative. Based on the latest data, spreads appear neutral based on this parameter because consumers are likely benefitting from the wealth-effect of high stock and home prices. (Correlation: --0.35; Current Score: 5)

FIGURE 3: Macro Driver Barometers

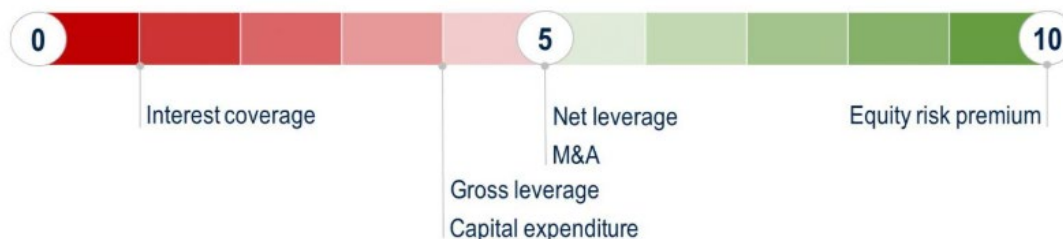


Source: Bloomberg and PGIM Fixed Income as of November 2024.

Corporate Fundamental Drivers

- **Leverage in cyclical sectors:** Higher/lower leverage is associated with wider/tighter spreads. Leverage in cyclical sectors, such as chemicals and capital goods, tends to have a higher correlation with spread directionality. Spreads are positively correlated with leverage and get a score of 4-5 because while overall leverage is high, cyclical sectors appear better placed compared to the past on this metric. (Correlation: 0.13; Current Score: 4-5)
- **Interest coverage in cyclical sectors:** High/low interest coverage should be good/bad for credit spreads. While the correlation with this metric is not meaningful, spreads screen rich as coverage for the IG corporate universe looks low from a historical perspective. (Correlation: N/A; Current Score: 1)
- **M&A activity:** Increasing M&A activity poses a risk to credit markets due to the nature of financing and business risks related to subsequent integration challenges. Spreads screen neutral as M&A activity, while rebounding, still appears low in a historical context. (Correlation: 0.16; Current Score: 5)
- **Capital expenditure:** Higher capital expenditure tends to be a negative for investors in corporate bonds as it reduces the cashflow available to pay back creditors and increases operating leverage. Spreads screen slightly rich as capital goods orders, while stabilizing, appear to be weak. (Correlation: 0.28; Current Score: 4)
- **Equity risk premium:** Equity risk premium quantifies the incentive companies face to lever up. When equities screen cheap to bonds, there is a higher likelihood of bondholder unfriendly activity such as dividends and buybacks. While the correlation with spreads is only slightly positive, historically rich equities imply that spreads screen cheap. (Correlation 0.11; Current Score: 10)

FIGURE 4: Corporate Fundamental Barometers

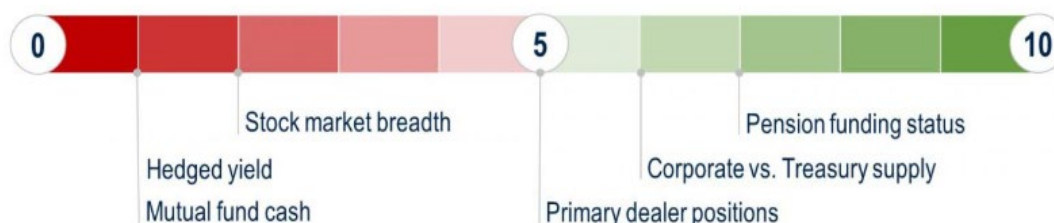


Source: Bloomberg, Leverage and Interest Coverage from JPM, PGIM Fixed Income as of Q2 2024.

Technical Drivers

- **Corporate bond vs. Treasury stock outstanding:** Relatively high budget deficits and a surfeit of government bond issuance helps to keep corporate spreads tight when measured versus Treasury yields. Currently, spreads screen slightly cheap as fiscal irresponsibility can be, counterintuitively, good for excess returns versus Treasuries. (Correlation: 0.40; Current Score: 6)
- **Euro and yen hedged corporate yield:** High hedged-yields tend to attract foreign demand to the U.S. corporate market, helping valuations. High front-end rates in the U.S. make hedged returns on U.S. fixed income appear weak. Consequently, IG corporates screen poorly, particularly for Japanese investors. While hedged yields are widely tracked, the correlation with spreads is spotty. (Correlation: N/A; Current Score: 1)
- **Primary dealer positions:** When primary dealers are light on inventory, they have greater ability to buy and support the market. This is a very short-term indicator with relatively little influence on medium-term price action. Spreads appear fair because primary dealers have destocked. (Correlation: NA; Current Score: 5)
- **Mutual fund cash:** A high level of mutual fund cash implies the presence of dry powder to buy after selloffs and is supportive for spreads. The correlation of cash in investor portfolios with spreads is negative and current low levels imply valuations are rich. (Correlation: -0.29; Current Score: 1)
- **Stock market breadth:** Poor stock market breadth is often related to weak earnings outside a few companies and is associated with wider spreads. The standardized covariance of spreads with breadth is highly negative, and while the stock market has broadened this year; spreads still appear rich. (Correlation: -0.44; Current Score: 2)
- **Pension funding status:** A solid pension funding status may encourage reallocation from equities to bonds, supporting spreads. While the high funding status suggests spreads are cheap, the correlation with spreads of this indicator is spotty. (Correlation: N/A; Current Score: 7)

FIGURE 5: Technical Variable Barometers



Source: Bloomberg, PGIM Fixed Income as of November 2024, except mutual fund cash which is as of October 2024.

U.S. IG Corporate Spread Barometer

Figure 6 shows our summary valuation judgment as of November 2024. Individual scores are combined, weighting them by the absolute value of the correlation of the explanatory variable with spreads. Consequently, short-term technical drivers such as primary dealer positions and hedged yields don't find their way into the composite because their correlation with spreads is unreliable. In summary, spreads appear to be tight relative to the fundamental and technical drivers we have chosen. Most of the richness is driven by macro indicators (Current Score: 2). This influence of economic data is offset by better corporate fundamentals (Current Score: 4) and technical drivers (Current Score: 3).

FIGURE 6: Composite Credit Barometer



Source: PGIM Fixed Income as of November 2024.

Conclusion

Currently the barometer suggests that spreads are tight versus the chosen macro, corporate fundamental, and technical drivers. These barometers provide a comprehensive, unbiased, and non-parametric assessment based on history and sets the stage for further inquiry and debate. For instance, spreads screen rich based on key macro drivers. The obvious question is why have spreads remained so tight and if they can continue to do so. This analysis provides potential answers.

One, corporate fundamentals appear to be faring much better in face of weak PMIs.

Two, heavy Treasury issuance relative to corporate paper supply may also be working to keep spreads tight.

Our list of explanatory variables is far from exhaustive, and the goal is to research and add more variables that help to predict spreads. In addition, individual scores have been combined by using the correlation with spreads as the weight. Other combinatorial schemes such as beta weighting could also be helpful.

Finally, this is a static analysis and provides a stepping-stone for our more comprehensive macro scenario analysis. The barometer provides a valuation judgment based on the latest available value of the chosen variables. We build on this first step by mapping the explanatory variables to different macro scenarios, both qualitatively and quantitatively, to arrive at a probabilistic assessment of the risk-reward in the credit market over the next 12-months.

1. As evidenced by the periods 1994-1997 and 2004-2007.

2. To construct the composite valuation metric, we take the z-score of credit spreads and add/subtract it to/from the z-score of the explanatory driver based on the direction of the correlation. Then we take a historical percentile of this series to arrive at a raw valuation score for spreads based on the selected variable. This exercise is conducted for each of the chosen explanatory parameter, and finally the individual scores are weighted by the strength of correlation with spreads to arrive at the overall composite valuation barometer, as well as those for macro, corporate fundamentals and technical drivers. Finally, the rounded percentile is the score for spreads based (10th percentile being a 1 and median a 5).

Source(s) of data (unless otherwise noted): PGIM Fixed Income, PGIM Fixed Income, as of November 22, 2024.

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