🗲 Credit Benchmark

VIX, Credit Spreads and Consensus Credit Risk

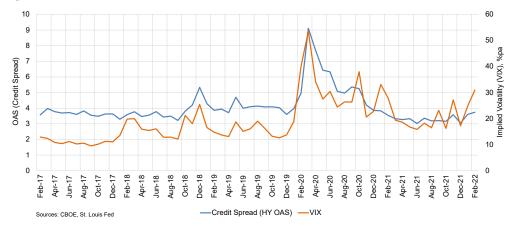
February 2022

With East-West tensions running high and interest rates at an inflection point, market risk indicators are increasingly important. Equity markets focus on the VIX volatility index, bond markets on credit spreads. These measures are linked: equity market volatility is a classic model input for credit risk estimates. Rising share price volatility implies higher default risk in the Merton framework, so it should not be surprising if credit spreads show positive correlation with the VIX.

Option-based equity volatility is, however, only a proxy for company asset volatility; credit spreads may spike because of an increase in the credit risk premium, rather than an increase in the real-world probability of default. And despite some very synchronized spikes during the early phases of the Covid pandemic, these risk metrics still show plenty of scope for short-term divergences. But whether the market measures are correlated or divergent, Credit Benchmark's consensus credit data¹ provides a third datapoint, and a direct read on the real-world probability of default, independent of short-term noise in the equity and bond markets.

Figure 1 plots monthly time series for the VIX index ("VIX") and the High Yield option-adjusted credit spread ("HY spreads") since 2017; Figure 2 shows credit consensus metrics for the same period. The bars in Figure 2 plot changes in median default risk (from a universe of 800+ industry/sector aggregates), and the line shows interquartile range ("IQR"). The latter measures sector risk divergence using the 25th and 75th percentiles of credit risk changes across the aggregate universe.

Figure 1: VIX and Credit Spreads



Both metrics show small spikes in Q4 2018, and again in Q2 2019.

The Covid outbreak pushed both indicators to near-record highs and both have more than halved since then.

The VIX entered a rather erratic uptrend from mid-2021 onwards, and HY spreads have also recently been climbing.

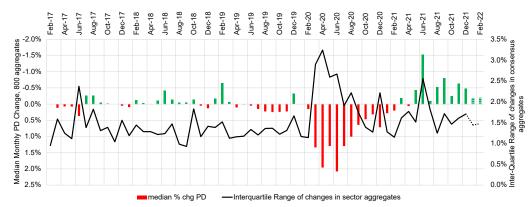


Figure 2: Consensus credit risk estimates, across 800+ sector aggregates.

The IQR often spikes at the same time as the VIX and the HY spread, and the early 2020 Covid spike led to months of rising median default risk.

But the early 2021 risk recovery saw another IQR peak in June. In recent months, like the VIX and the High Yield spread, the range is trending slightly higher.

NB: The last two plotted points are provisional based on contributor flash updates. The interquartile range is one of a family of indicators that may anticipate shifts in real world credit risk estimates. Crucially, it can spike when either positive or negative changes in default risk are on the horizon. When assessed against the VIX and credit spreads, it can confirm or deny the current market view, or alert investors to credit portfolio and default risk changes – positive and negative – that may not yet be picked up by the usual market metrics.

At a time when the global economy is grappling with supply chain problems, Fed tapering and international tension, current data show all three measures heading higher. The market price of risk may be rising, but it looks like major financial institutions see current problems translating directly into higher default rates.

Volatility is usually measured by the standard deviation family of metrics, mainly because of their tractability for option calculations and parametric VAR estimates. However, percentile-based metrics have the advantage that they are non-parametric and naturally include any asymmetry (ie skewness); They can also be used to compare different points on the distribution of credit risk changes (such as comparing the 95th percentile with the 50th).

As long as robust aggregates are available, any volatility or range based metric can be applied to specific regions or countries, or in global subsets of the aggregate universe that focus on one industry, sector, or credit portfolio. The data reviewed here suggest that it can also anticipate credit risk changes in loans and assets where VIX or spread metrics are unavailable.

The data used in these calculations can also be used to assess the cross-sectional correlation between credit risk changes from one time period to another. For example, if the monthly cross section correlation has been high and positive for several months, and then turns negative, it indicates that the pattern of credit risk is changing – with risk dropping after a spike in some sectors, and vice-versa in others. In effect it signals the end of a period of one-way trending in sector credit risk estimates.

About Credit Benchmark

Credit Benchmark brings together internal credit risk views from 40+ of the world's leading financial institutions. The contributions are anonymized, aggregated, and published in the form of entity-level Credit Consensus Ratings (CCRs) and aggregate analytics to provide an independent, real-world perspective of risk. CCRs are available for 60,000 financials, corporate, funds, and sovereign entities globally across emerging and developed markets, and 90% of the entities covered are otherwise unrated.

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Credit Benchmark

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Credit Benchmark provides Credit Consensus Ratings and Analytics based on contributed risk views from 40+ of the world's leading financial institutions, including 15 GSIBs, domiciled in the US, Continental Europe, Switzerland, UK, Japan, Canada, Australia and South Africa.

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- **Credit Risk Management** >
- Systematic Credit Trading >
- **Securities Finance** 5
- **Supply Chain Risk** >
- **Trade Credit Insurance**

- > **Fund Management**
- **Regulation, RWA & Capital** >
- **Onboarding, KYC & Relationship** > Management
- Point-in-Time (PIT) Impairments
- **Accounts Payable & Receivable**



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🛎 10 Million

Contributed Credit Risk Estimates Per Year 40 Million+ Estimates Collected Since Launch



60,000+

Entities Covered

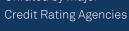


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1,100+ Aggregates







75+ Months of Data



50 +Data Metrics



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Credit Benchmark

Consensus Analytics:

Insights into the depth, dispersion, movement, and directionality of the Credit Consensus Rating's underlying views

Opinion Indicator: Month over month observation-level net downgrades or upgrades

Credit Benchmark Web App: Entity-Level Data Sample

E Home Aggregates Single Name Lookup ↓ Rep My Portfolios **CB** Screeners View All Build screener with criteria below Screener name: Untitled Credit Strength Dampens Wildfire Risl Focus on Australia Credit Benchmark Coverage v. Agencies S&P Rating is Unrated 🕴 × Global Credit Recovery Shifting Recreational Trends Combine qualitative and quantitative fields to screen for entities that meet your Credit Benchmark Dislocations v. Agencies Unrated 🖸 Fitch Rating is × Trade Credit Risk and Supply Chains criteria Credit Recovers as Lumber Prices Skyrocket 5G and Satellite Internet Airlines Pulling Out of Credit Risk Tailspin aa 🞗 aa- 🎗 a+ 🎗 a 🎗 a- 🎗 CCR is aaa 3 aa+ 3 bbb+ 🕴 bbb 🕴 bbb- 🖸 × Quickly filter the database of Screen for public and non-+ Add Criteria (3/15) 60,000+ legal entities publicly rated entities within specific geographies, industries, sectors and within your defined 44,628 Entities found My Screeners rating thresholds Untitled 🗹 Result Count 44628 Modify Colum . CBID Entity Nam S&P Rating Credit Cons Fitch Rating sus Rating CB000000009 IHS GLOBAL CANADA LTD Start creating your first screener CB000000025 GYP HOLDINGS III CORF hh Unrated Unrated CB000000080 GESTIELLE CEDOLA DUAL BRAND Unrated Unrated CB000000087 TRANE TECHNOLOGIES LUXEMBOURG FINANCE SA bbb+ Unrated Unrated TECK HIGHLAND VALLEY COPPER PARTNERSHIP CB000000088 bbb Unrated Unrated

Credit Benchmark Web App: Data Screen Sample

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Credit Benchmark data is available via our Web App, Excel add-in, API, flat-file download, and third-party channels including Bloomberg.

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