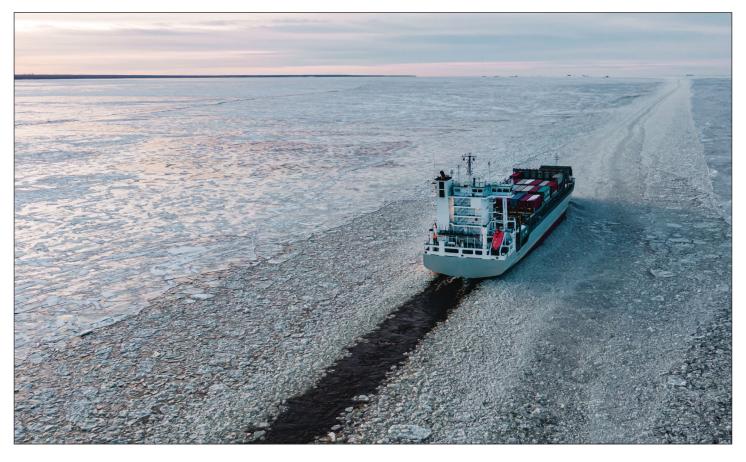


Smarter data Steering a course in volatile markets

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White paper



Fixed income markets are entering a new era of turbulence. This paper outlines the challenges facing asset managers in this macro environment and how to overcome them through high-quality data and cutting-edge analytical tools that uncover alpha and hedge risk intelligently



S&P Global Market Intelligence

Contents

2 Introduction

2 Navigating a challenging credit cycle

Asset managers have their work cut out

3 Charting a course

Superior data for a new era of volatility

5 Full steam ahead

Pricing tools and products embolden asset managers

6 Research Signals Good data gives the edge

7 Steering through choppy waters Grey clouds on the bond horizon

About S&P Global/IHS Markit

S&P Global joined forces with IHS Markit in a \$140 billion merger in 2022. Combined, their Market Intelligence vertical is the foremost provider of financial information services and solutions.

When markets are unpredictable, data-driven insights are critical to making better-informed investment decisions. Market Intelligence's new ecosystem of differentiated data, workflow solutions and seamless delivery channels delivers unrivalled insights. They provide detailed information on companies, industries and markets to help their customers make better-informed decisions when it comes to enhancing alpha, reducing risk and improving operational efficiency.

You can explore their datasets using S&P Marketplace, which serves as the firm's discovery tool to understand more about the plethora of datasets on offer.

www.spglobal.com/marketintelligence

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Introduction

Volatility, in all its forms, is here to stay. Our post-Covid-19 pandemic world is spinning towards a global recession, triggered by soaring inflation on everything from food to fuel, rising interest rates, countries on the brink of economic collapse and conflict on European soil. None of these issues are likely to be resolved soon. Asset managers therefore have their work cut out navigating hurdles such as asset valuation and managing risk more intelligently to avoid getting burned and to find profit-boosting opportunities. Today, risk managers are seeking out more granular, transparent data on bonds and bond sector curves as a proxy to compute historic value-at-risk calculations on asset holdings. Sophisticated tools used to hedge tail risk and manage risk optimally – such as credit index options, Research Signals and volatility products – are in growing demand. It pays to have data that delivers supplemented by the best analytical tools in town.

Navigating a challenging credit cycle Asset managers have their work cut out

After years of smooth sailing in an ocean of easy, cheap financing, the global economy is weathering a painful U-turn. Central banks worldwide are aggressively tightening monetary policy to combat sky-high inflation, signalling the end of an era of loose monetary conditions and challenging credit markets. Borrowers face operational and structural pressure, with credit now more costly and harder to access. Investment-grade yields are at their highest in a decade.

S&P Global Ratings' global and regional credit cycle indicators (CCI) have been falling steadily since peaking in early 2021, while credit spreads are widening – a credit correction is afoot. Typically, CCI peaks precede a negative credit outlook by six to 10 quarters, suggesting a period of higher credit stress in 2023 and beyond.

Waves of volatility are crashing into bond markets. The VIX volatility index, otherwise known as the 'fear index', has breached the crucial 30-point level – indicating large volatility from increased uncertainty, risk and investors' fear – multiple times since the onset of the pandemic, and especially in 2022. "Intraday volatility creates challenges, in particular for asset managers, in terms of valuation of assets and managing risk"

Gavan Nolan, S&P Global Market Intelligence

Large intraday swings on fixed income assets are proving a headache for buy-side managers more accustomed to years of relatively benign credit markets. Gavan Nolan, executive director, business development and research, fixed income pricing at S&P Global Market Intelligence, explains: "Intraday volatility creates challenges, in particular for asset managers, in terms of valuation of assets and managing risk."

For example, when the then UK chancellor Kwasi Kwarteng announced his disastrous minibudget in September 2022, it not only triggered intraday volatility in gilts and sterling swaps, it exposed pension fund managers with holdings in risky liability-driven investments (LDI) and threatened a nationwide pension fund meltdown. The proposed huge government borrowing triggered massive cash calls, leaving asset managers scrambling to find hundreds of millions of pounds of extra collateral within days.

Charting a course Superior data for a new era of volatility

These kinds of black-swan-like blips are on the rise as we move deeper into quantitative tightening, which exposes weak spots in the financial system. In the same way active management is currently more pertinent than passive investing, asset managers require targeted tools to ride out the coming years of volatility.

Nolan says: "We are entering a different era. That creates requirements for risk managers, in particular, within asset management firms to source more data to make calculations. That could be on a very granular level, whether it's across individual bonds – but also more on a proxy-type basis with bond sector curves needed for more illiquid assets."

Asset managers need established intraday data at their fingertips, historical information stretching back 20 years and cutting-edge credit default swap (CDS) figures on thousands of observed and evaluated names to track credits on a specific rather than a broad basis, plus illiquid names. This information typically comes either directly from a data provider such as S&P or through any number of third-party platforms.

Karthick Chandrasekaran is responsible for business development for the fixed income pricing and reference data business at S&P Global Market Intelligence. He says: "There is a change in approach for risk practitioners. They typically look at end-of-day data but, as times change, they may need intraday datasets. Intraday risk monitoring can offer valuable insights during volatile markets. Risk practitioners benefit from shorter feedback on the value of holdings."

"There is a change in approach for risk practitioners ... Intraday risk monitoring can offer valuable insights during volatile markets"

Karthick Chandrasekaran, S&P Global Market Intelligence

When asset managers were grappling with the LDI crisis, S&P's largest pension fund customers benefited from granular, intraday data obtained through S&P's Liquidity Navigator – a set of tools that helps users make more informed price-making decisions. They gained insight on liquidity scores for the secondary market in gilts, including metrics such as the number of quotes disseminated and volumes traded for fixed income securities. Liquidity Navigator offers a bird's-eye view of available inventory and loan volumes in securities lending markets.

Paul Wilson, managing director in securities finance at S&P Global Market Intelligence, says: "We provided our clients with data across a number of UK gilt securities that helped them better understand liquidity during the LDI debacle. The information was taken from a combination of our Liquidity Navigator, repo and securities finance datasets. This daily data provided a market snapshot and facilitated monitoring as market conditions changed." Demand from asset managers is also growing for credit index options and volatility products, such as CDS options that reference credit indexes. S&P offers independent pricing and liquidity metrics on CDS single names, indexes, options, tranches and sector curves.

Pricing illiquid credits is proving particularly tricky for asset managers. In the second half of 2022, the traded volume of illiquid fixed income instruments decreased while yields spiked and credit spreads widened, caused by central bank action and other geopolitical factors. However, a steady stream of good quality data can help asset managers pull together information quickly for clients.

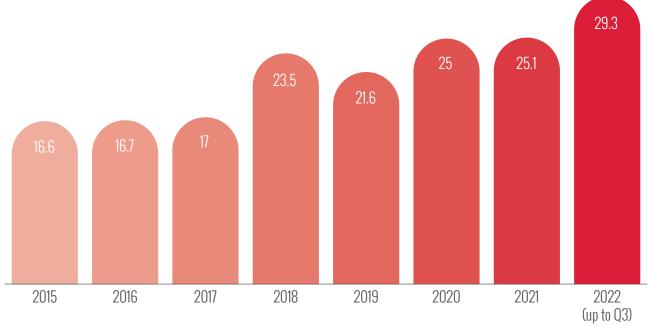
Oleg Kulkov, head of global model valuation, at Allianz Global Investors, is responsible for the valuation of illiquid fixed income instruments at the global investment manager, which manages around €500 billion in assets. Kulkov says: "It's really a challenge because you have to explain to every single investor what is causing this huge decrease in [investments'] prices.

"We use S&P's data package for pricing of derivative and non-derivative financial instruments to help us run models. The data looks stable, it follows the market and we are pretty happy with it."

S&P publishes three million daily quotes covering over 10,000 CDS curves and independent pricing, transparency and liquidity data for more than 2.3 million bonds. Chandrasekaran says: "Data is processed using rigorous automated cleaning tests to publish only the highest quality [information] on 3,800 CDS entities and all major credit indexes. 2022 was a record year for S&P's CDS indexes offering."

iTraxx/CDX notional traded volumes hit close to \$30 trillion last year – up from \$25 trillion a year earlier – reflecting growing appetite from the likes of asset managers to include trading tools such as CDSs in their arsenal.

1 Asset managers pile into tradeable CDS indexes: iTraxx/CDX notional traded (\$ trillions)



Source: S&P Global Market Intelligence

Full steam ahead Pricing tools and products embolden asset managers

Clean fixed income data is just the tip of the iceberg. In times of volatility, when markets are moving rapidly and unexpectedly, it pays to have granular data to hedge risk optimally.

In 2022, for example, the US dollar index, which measures the currency against a basket of six peers, hit a 20-year high. Since the beginning of the year, the dollar was up as much as 33% against the Japanese yen, 30% against the British pound, 20% against the euro and 12% against the Indian rupee.

Allianz receives bond yield curves from S&P in a variety of currencies, including softer currencies such as the Indian rupee and hard currencies such as the US dollar. "It helps us to estimate the value of assets which are not denominated in hard currencies," says Kulkov. "Otherwise we'd have to make these curves ourselves and I don't know that we have sufficient data to build this regression model. It helps that S&P collects this data from lots of bonds. It means we can focus on our daily business and think how we can combine all these curves."

S&P Global's bond sector curves service generates bond discount margin, yield, Z-spread and assetswap spread curves across all sectors or a single sector for specific countries in North America, Europe and the Asia-Pacific region (Apac). "The fixed income market is quite idiosyncratic, so you need very good data to proxy that risk historically ... That's where derived datasets such as CDS sector curves and bond sector curves come into play. Being as timely as possible is paramount, given that we're in this much more volatile period"

Gavan Nolan, S&P Global Market Intelligence

Chandrasekaran says: "We generate sector curve data across different granularities for fixed-rate and floating-rate-note bonds. The service uses a multivariate factor model and tension-spline curve fitting method to calculate sector curves across attributes such as credit rating, country of risk, currency, sector and seniority."

Bond data, including prices from S&P's Corporate and Sovereign Bond Pricing Data service, is used as an input to the multivariate factor model. The challenge for fixed income asset managers is sourcing the best data and cross-asset insights – and striking while the iron is hot.

Nolan explains: "The fixed income market is quite idiosyncratic, so you need very good data to proxy that risk historically – which is crucial when there's thin data on certain names. That's where derived datasets such as CDS sector curves and bond sector curves come into play. Being as timely as possible is paramount, given that we're in this much more volatile period."

Research Signals Good data gives the edge

With great volatility come great opportunities. Traditional 60/40 portfolios of equities and bonds suffered massive losses in 2022 because bond yields have surged while equities have gone into a bear market. As both bond and equity markets lurch like a ship navigating a storm, equity investors are hunting for signals from fixed income markets to find new trading ideas.

S&P Global not only provides underlying fixed income pricing data, but also helps equity investors find new alpha sources from this data. A team of quantitative analysts responsible for identifying new alpha signals recently introduced a set of bond-toequity factors, capturing measures of credit risk and changes in an issuer's yield curve. The dataset also provides signals that indicate when a company's bond price and equity price are diverging from their historical relationship. These factors are often used as inputs for quantitative and systematic trading strategies.

Chris Hammond, global head of the Research Signals product at S&P Global, says: "While our institutional clients are constantly searching for new signals, recently we have seen increased interest in connecting information across asset classes – no doubt driven by the economic environment.

"Our new bond-to-equity factors provide insights into the outlook of stock prices based on the activity in the bond market. Our research finds that the bond market can help indicate risks that other market participants have not yet priced in, and is another important factor for equity investors. It's an essential piece of the puzzle." "Recently we have seen increased interest in connecting information across asset classes ... The bond market can help indicate risks that other market participants have not yet priced in, and is another important factor for equity investors"

Chris Hammond, S&P Global Market Intelligence

Steering through choppy waters Grey clouds on the bond horizon

Bonds have had a disastrous year of performance, with 2023 set to get even uglier as recession sets in. Between global inflation, rising interest rates and the appreciating US dollar strangling emerging markets on their debt repayments, credit markets are predicted to get even more choppy. S&P predicts that up to a quarter (16–25%) of rated Apac entities could take a hit to their credit quality through 2023. After years of benign markets, asset managers must now navigate turbulent waters for the foreseeable distance.

Risk management practices and datasets tailored to normal market conditions are insufficient in a challenging credit cycle where default rates are predicted to rise and black swan events such as the UK's LDI-linked pension calamity are already happening. This calls for updated data, processes and systems.

Superior pricing tools and products such as S&P Global's Liquidity Navigator are paramount to managing risk to avoid being a casualty and emerge a winner, says Chandrasekaran: "S&P Global brings together the best expertise in equities and now fixed income – thanks to the merger with IHS Markit – to give asset managers the most cutting-edge tools across asset classes."

Learn more

Find out more about how S&P's data delivers

<u>S&P's Global Marketplace</u>: explore high-quality, unique datasets by category, industry, region, and more.



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