

# AxessPoint

## 2021 Collection



In 2021, we witnessed the reversal of the market convulsions experienced during the 2020 crisis. Declining volatility and narrowing bid/ask spreads were consistent themes throughout the year, with market conditions returning to pre-crisis levels. The shift to more normalized market conditions in 2021 allowed traders to grow their focus on trading automation for both cost and time savings opportunities, as well as increased trading in the newly issued market. Across the year, the MarketAxess Research team captured these trends and shared their unique insights within the AxessPoint series.

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# Intraday bid/ask spreads in global corporate bond markets

## HIGHLIGHTS

- Bid/ask spreads are wider in the morning and narrower throughout the day as trading information increases.
- The delta between opening and closing spreads was greater during the crisis, in line with wider bid/ask spreads and more volatile pricing. Additionally, spreads re-widened intraday with greater frequency.
- USHG, when compared to ASIA USD and EURO EUR, showed the most spread tightening intraday.

## WIDER BID/ASK SPREADS IN THE MORNING

When measuring the median Composite+ bid/ask spread by hour of the day across global corporate bond markets, we observe that Composite+ bid/ask spreads begin the day wider and tighten throughout the day. As more market data becomes available throughout the day, bond pricing moves towards a consensus, leading to less uncertainty and tighter bid/ask spreads. For example, USHG in January 2020, median 8am – 4pm (NY Time) bid/ask spread tightened by \$0.077, or 26% of the opening bid/ask spread. We observed the same phenomena in other regions as well; with ASIA USD spreads being \$0.0252 (11.7%) and EURO EUR at €0.0162 (11.2%) for the same period leveraging Singapore time for ASIA bonds and London Time for EURO.

Figure 1. Regional median intraday bid/ask spreads in price. Bonds quoted on price basis.

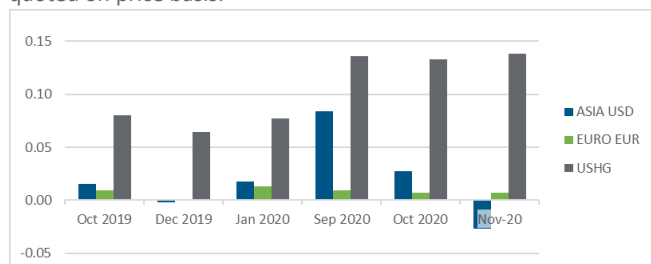
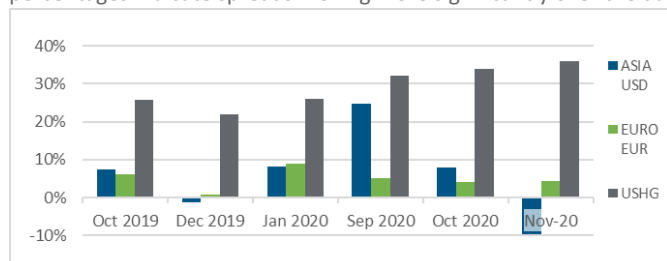


Figure 2. Percentage Tightening of Intraday Spreads, Higher percentages indicate spreads moving more significantly over the day.



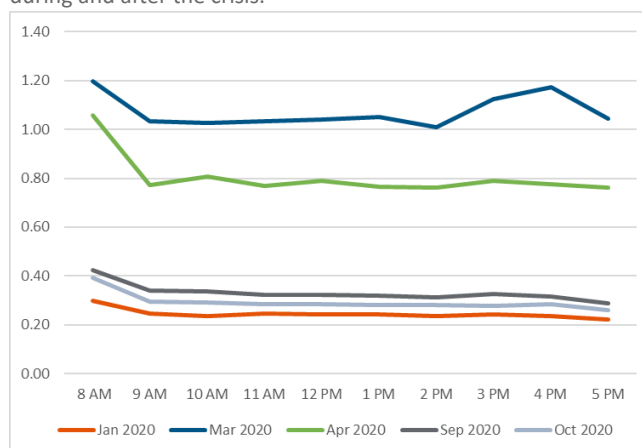
## Redefining real-time bond pricing

Composite+™ is MarketAxess' proprietary AI powered pricing engine for corporate bonds. It produces an unbiased, two-sided market for more than 29,000 instruments globally. Updated every 15 to 60 seconds, the engine generates nearly 30 million levels per day covering 90-95% of trading activity in its markets.

## VOLATILITY DROVE BID/ASK SPREADS HIGHER

Pre-crisis intraday bid/ask spread differentials were comparatively lower than during the height of the crisis. As we noted in a previous [AxessPoint](#), bid/ask spreads increased over the crisis and have slowly tightened since. Intraday bid/ask spreads also experienced a dislocation due to the volatility, where markets tightened over the day, but appeared to widen into the close, potentially due to news that introduced fresh uncertainty.

Figure 3. USHG intraday Composite+ bid/ask spread behavior before, during and after the crisis.



Globally, higher volatility drove bid/ask spreads wider over the day, and increased costs into the day's close. In March 2020 specifically, frequent global news headlines around the pandemic resulted in multiple intraday widenings as participants tried to digest market impact in real time. In April, bid/ask spreads opened even wider at the start of the day, but with fewer spikes as the world settled into the new normal. April opening bid/ask vs. normal times was also multiples higher in all regions.

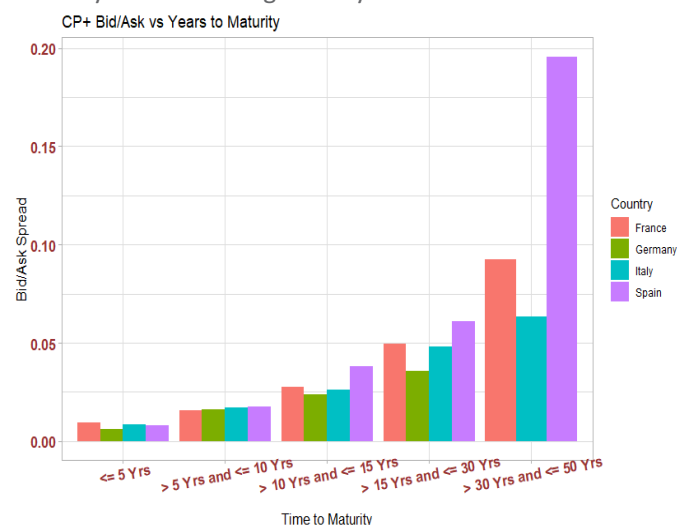
# European Government Bonds Bid/Ask Spread

## HIGHLIGHTS

- The bid/ask spread increases with maturity across all issuing countries. The average bid/ask spread is less than 0.01€ for short bonds but more than 0.05€ for long bonds.
- Actively traded bonds typically have a tighter bid/ask spread. The average bid/ask spread is 0.012€ for bonds with more than 80MM€ in average daily trading volume on TRAX; 0.02€ for the rest.

## BID/ASK SPREAD BY COUNTRY AND MATURITY

We calculate the bid/ask spread as the average of all bond-day Composite+ bid/ask spreads as of 4pm London in December 2020 and January 2021. Bid/ask spreads are a good measure of trading costs and in the case of European Government bonds, they are strongly correlated with time to maturity and the issuing country.



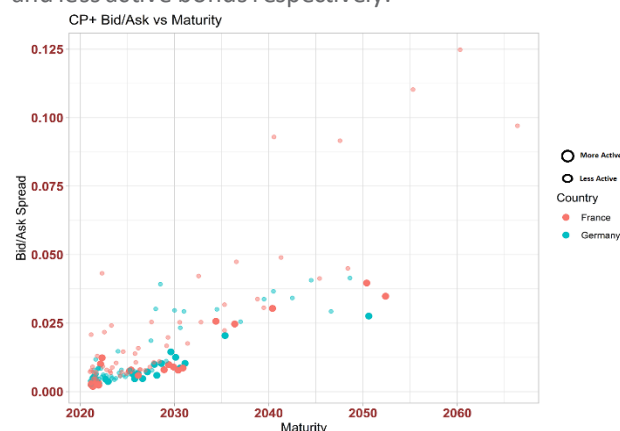
Bonds with less than 5 years to maturity have bid/ask spreads tightly grouped around 0.008€ across countries. With a AAA rating, Germany is seen as the safest issuer of EGB. It has the tightest average bid/ask spread after controlling for maturity.

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## BID/ASK SPREAD BY BOND LIQUIDITY

Generally, more liquid bonds observe a tighter bid/ask spread. We use a measure of activity as a proxy for liquidity, where "More Active" bonds are defined as bonds with more than 80MM€ in average daily trading volume on TRAX. Bonds' activity level is positively related to their issuance date and negatively related to their price; average time since issuance is 2 years for more active bonds and 7 years for less active bonds, while average price is 106€ and 118€ for more and less active bonds respectively.



Bonds with the same maturity and issuer may have a significantly different bid/ask spread. For example, the newly issued (January 2021) German bill (BUBILL 0.000 12/15/21) has a 0.003€ bid/ask spread, while a less active counterpart (BUBILL 0.000 11/21) issued in December 2020 hovers around 0.008€. Their bid/ask spreads are 0.005€ different, even though they are both German money market securities and trade around 100€.



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# Block trading activity in US credit during the 2020 crisis

## HIGHLIGHTS

- Both US High Grade and US High Yield capped trade activity saw significant growth in the first half of 2020.
- The largest trade sizes were an area of opportunity for buyers, as buys outperformed sells of similar size by as much as 17 cents.

## CAPPED TRADE ACTIVITY DURING MARKET TURMOIL

Our previous AxessPoint described FINRA's timeline for disclosing uncapped trade quantities [here](#). Now that the complete data for the first half of 2020 is available, we can look carefully at March-June 2020, the most volatile period since the 2008 financial crisis. Trade counts and volumes rose sharply as investors rushed to update their strategies in the quickly shifting market. This was even more true in High Yield names, as concerns around downgrades and fallen angels led to forced sales for some and opportunities for others.

High Grade block trades saw increased activity overall in the first half of 2020, in line with count and volume growth market wide. March, April, May, and June had the four largest HG block trade counts on record, with April's total of over 23,000 the highest among them. Further, there were more than 10,000 HG block trades of 20MM or more over the same period, a record as well. The C2D buy/sell ratio in this segment peaked in March at a rate of 1.2 Buys/Sell.

High Yield block volumes rose by 29.8% overall, outpacing volume growth as a whole. HY block volumes over 10MM exploded, growing by 50% YoY. There were more HY block

## Uncapped TRACE from MarketAxess

Using an intelligent mapping engine, the uncapped TRACE report has been linked to the original trade records as an add-on to the standard Corporates and 144a feed. This provides accurate trade-level information for transactions that were previously capped, going all the way back to the inception of the feed in July of 2002.

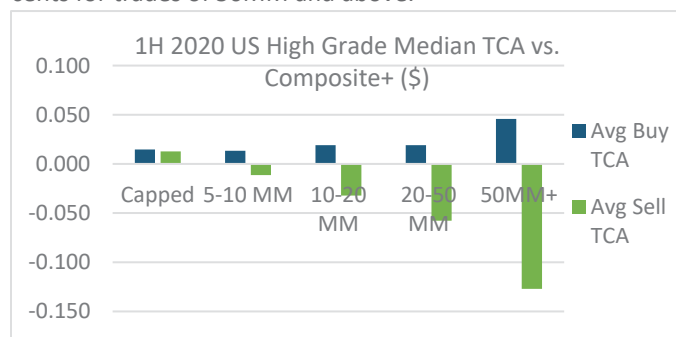
trades of 50MM and above in 1H 2020 than in all of 2019. The HY market remained very well-balanced, at 1.08 Buys/Sell.

## MEASURING PERFORMANCE OF BLOCK TRADES

The uncapped data allows us to measure trade performance for specific size buckets that are normally masked. Looking at the universe of HG C2D buys and sells for the first half of 2020, the original capped data set shows that client buys outperformed the Composite+™ offer price at the time of execution by 2.9 cents, and client sells underperformed the Composite+ bid by 1.3 cents on a median basis. Median market-wide C2D TCA vs. CP+ ranged from -1.3 cents in January to -7.8 cents in March.

Using the uncapped data, we can provide a more granular breakdown that shows this performance gap between buys and sells grows sharply for larger block sizes. For trades from 5-10MM and 10-20MM, the premium remained close to the overall value, at 2.5 and 5.1 cents, respectively. For blocks between 20 and 50MM, the premium rose to 7.7 cents. For trades over 50MM, the number was a sizable 17.3 cents. High yield numbers showed a similar trend, with the premium stretching from 4.8 cents for trades from 1-5MM to 17.4 cents for trades of 50MM and above.

| HG          |                |                |            |
|-------------|----------------|----------------|------------|
| Size Bucket | 1H 2019 Volume | 1H 2020 Volume | YOY Change |
| 1-5MM       | -              | -              | -          |
| 5-10MM      | 571,437.7      | 703,437.5      | 23.1%      |
| 10-20MM     | 397,661.2      | 462,418.0      | 16.3%      |
| 20-50MM     | 237,868.3      | 270,618.7      | 13.8%      |
| >=50MM      | 52,050.4       | 62,386.3       | 19.9%      |
| HY          |                |                |            |
| Size Bucket | 1H 2019 Volume | 1H 2020 Volume | YOY Change |
| 1-5MM       | 533,718.4      | 664,305.1      | 24.5%      |
| 5-10MM      | 178,599.8      | 233,494.1      | 30.7%      |
| 10-20MM     | 82,651.3       | 121,019.2      | 46.4%      |
| 20-50MM     | 39,347.9       | 58,312.1       | 48.2%      |
| >=50MM      | 9,524.7        | 17,701.9       | 85.9%      |



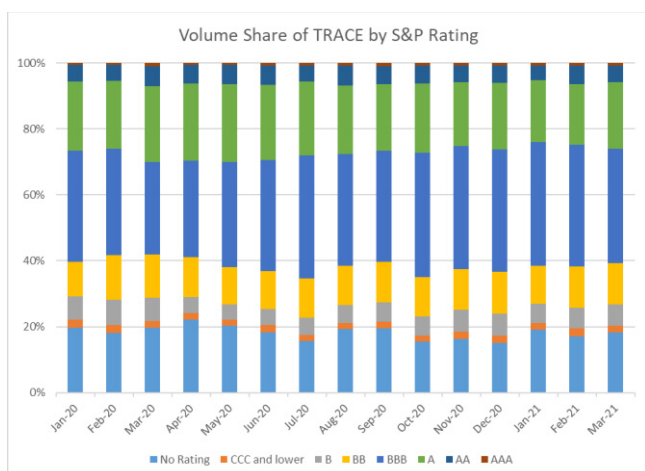
# BBB-Rated Corporate Bond Activity Through The Crisis

## HIGHLIGHTS

- BBB-rated activity has grown substantially through 2020, rising from 32% to 37% of TRACE as of February 2021.
- During the crisis period, BBB bid-ask spreads rose more and remained elevated longer than other Investment Grade ratings.

## OVERALL GROWTH IN TRACE-REPORTED ACTIVITY

This universe of bonds with S&P ratings of BBB+, BBB, or BBB- appearing on TRACE in 2020 grew 6.5% vs 2019, to a new high of 11,353 unique CUSIPs. The total amount of outstanding debt on these bonds grew from \$3.7T to \$4.9T with the largest new issues coming from Pemex, AT&T, T-Mobile and AbbVie.



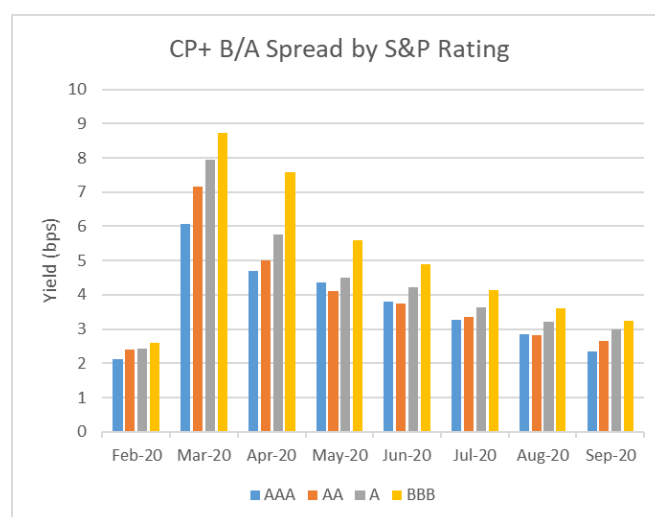
BBB volume grew from \$244.6B in February 2020 to \$308.4B in February 2021 – a 26% increase YoY. This pushed its TRACE volume share by rating from 32.2% in February 2020 to 37.0% in February 2021, hitting a high of 37.9% in October 2020. Trade count grew by 14% from 494,327 to 564,381 and average trade size increased by 10% to \$546k.

## Uncapped TRACE from MarketAxess

Using an intelligent mapping engine, the uncapped TRACE report has been linked to the original trade records as an add-on to the standard Corporates and 144a feed. This provides accurate trade-level information for transactions that were previously capped, going all the way back to the inception of the feed in July 2002.

## COMPOSITE+ BID/ASK SPREAD BY S&P RATING

Bid/Ask spreads widened considerably across all ratings in March 2020, with BBB bonds hitting 8.73bps – higher than any other rating bucket. Although BBB bonds spiked higher than their counterparts, they recovered much more quickly than high yield bonds and dropped back down to pre-crisis levels within a year.



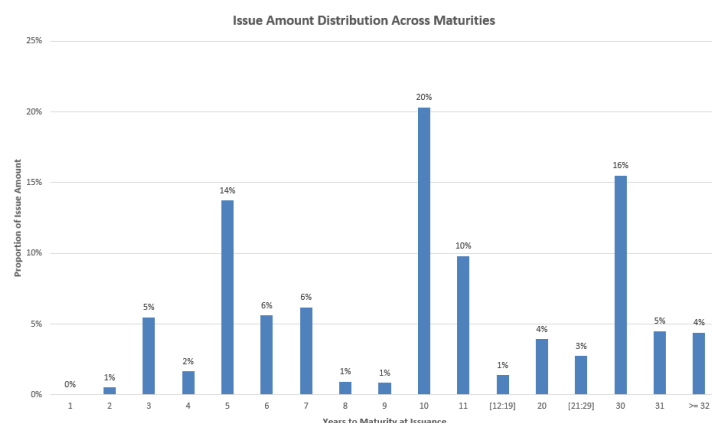
# Stylized Facts About New Issues in the US IG Market

## HIGHLIGHTS

- Most US Investment Grade bonds are issued to only 3 times to maturity: 5, 10 and 30 years. 20%, 16% and 14% of the total amount issued have a time to maturity of 10, 30 and 5 years respectively.
- On average, the daily traded volume of a bond decreases significantly after it is first traded. 20 days after it first hits TRACE, the daily volume traded drops to 30% of that on the first trade day.

## ISSUE SIZE DISTRIBUTION ACROSS MATURITIES

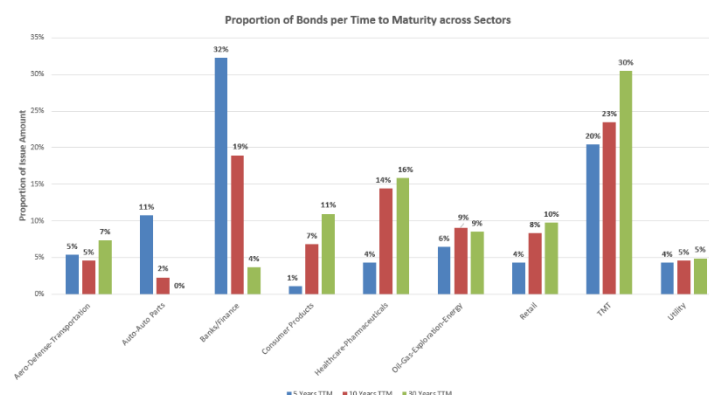
We define issue date as the first day the bond is traded. Using January 2020 to March 2021 data, we analyze the - distribution of issued amount across time to maturity at issuance. The distribution is clearly centered around 5, 10 and 30 years to maturity and one fifth of the issued amount is to 10 years to maturity.



Additionally, over 90% of the bonds with 6, 11 and 31 years to maturity at issuance are callable within their final year and therefore can be grouped with the bonds issued with 5, 10 and 30 years to maturity, bringing the percentage of bonds issued with these 3 maturities to 70%.

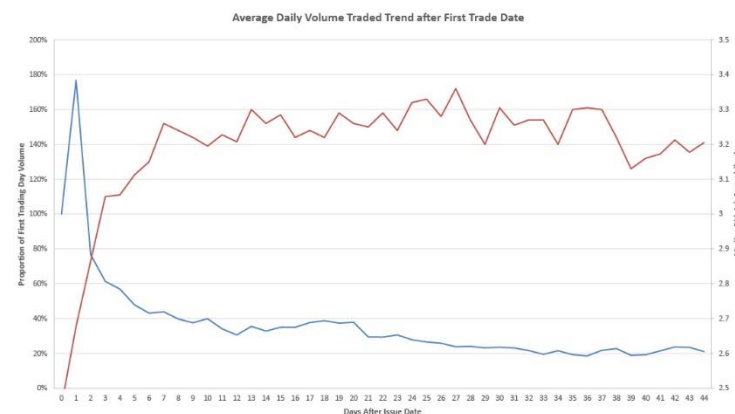
## TIME TO MATURITY AT ISSUANCE ACROSS SECTORS

Bonds in different maturity buckets at issuance are distributed differently across various sectors. The Financial and Auto sectors issue shorter bonds, while the TMT and Healthcare sectors issue longer bonds. The Financial sector is the largest issuer of bonds with maturities of 5 or 10 years, while the TMT sector is the largest issuer of 30-year bonds.



## TRADING VOLUMES DECREASE AFTER ISSUANCE

We study the volume of newly issued bonds as a function of the number of days since their issuance. The daily traded volume falls quickly and sharply after the first day of trading, reaching 20% of the volume traded on day 0 in as little as 45 days. Simultaneously, the Composite+ bid-ask spread increases with time. Both trends illustrate the evolution of liquidity after issuance.



# The Open Trading Inquiry Orderbook - An Untapped Source of Liquidity Insight

## HIGHLIGHTS

- Inquiries available for Open Trading® represent an average daily global volume of \$17.2bn in 14,000 bonds across 30 different markets in Feb 2021.
- These inquiries constitute an aggregated live order record that is available to any market participant.
- Inquiry volumes were driven higher during the crisis, allowing greater liquidity opportunities at a time when traditional sources were more precarious.

## OPEN TRADING INQUIRIES OFFER LIQUIDITY INSIGHT ACROSS VARIOUS MARKETS

Inquiries eligible for Open Trading averaged \$17.2bn daily in Feb 2021. In key markets, USHG saw \$7.2bn daily across 9k bonds; USHY had \$2.6bn across 3,500 bonds, USD EM saw \$2.6bn in 5,000 bonds and in EUR bonds, there was €799MM in 4,000 bonds daily. These daily levels are at a higher baseline than pre-crisis.

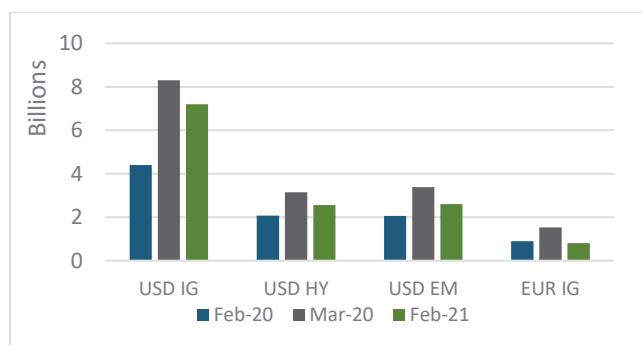


Figure 1: Daily Open Trading Inquiry Volume Represent Significant Inventory Every Quarter

## OPEN TRADING INQUIRIES SHOW FIRM ORDERS IN VARIOUS AREAS OF INTEREST OVER THE DAY

Inquiries submitted to Open Trading come from a variety of market participants, and span a wide range of inquiry sizes, liquidity profiles and market segments. USHG inquiries in lower liquidity (1-3) constituted 11.1% of total inquiries submitted.

## Open Trading Inquiry Orderbook

These are client and dealer RFQs submitted to the platform that are eligible for Open Trading. Being public RFQs, these orders are not mere indications, but are **live orders and immediately actionable**. Traders can search the order book or be alerted, and thus can opportunistically participate by providing liquidity when such 'natural matches' arise. In doing so, they simultaneously satisfy their own liquidity needs.

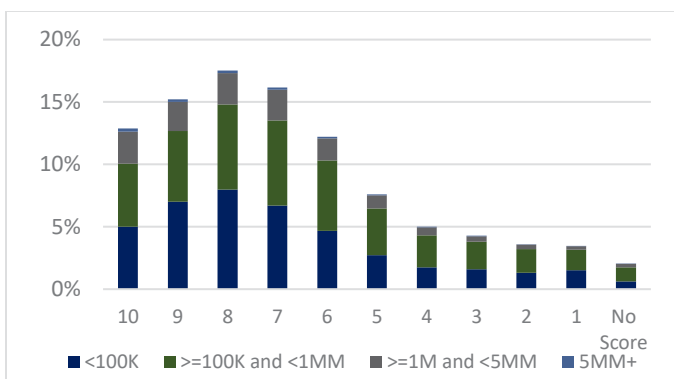


Figure 2: USHG Open Trading Inquiry Count by Liquidity Score and Inquiry Size

Within each liquidity bucket, we observe that the highest proportion of inquiry counts belongs to odd lot trades, between \$100K and \$1MM. However, we see a growing percentage of high-volume inquiries for mid to high liquidity bonds. Furthermore, Blocks (orders 1MM or higher) are represented in line with overall platform trends over the day as seen in the volume breakout by hour below.

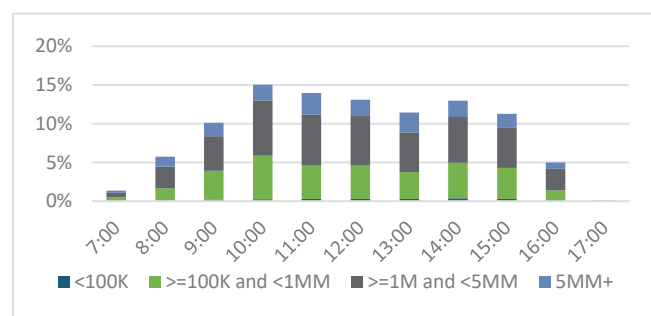


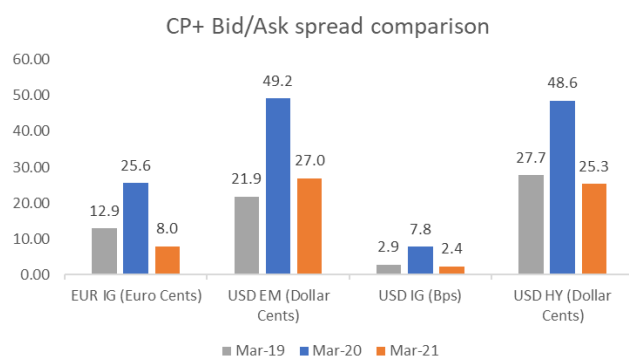
Figure 3: USHG Open Trading Inquiry Volume by Hour and Inquiry Size

# Global credit market bid/ask spreads return to normal

## HIGHLIGHTS

- Median Composite+™ bid/ask spreads are significantly lower in March 2021 compared to March 2020 at the height of the crisis. The bid/ask spreads are now closer to the pre-crisis levels.
- Most major markets' bid/ask spreads have reverted to pre-crisis levels or lower, such as EUR IG whose spreads are now 38% lower than pre-crisis. USD EM stands out as an exception as spreads remain 23% higher compared to pre-crisis.

## Composite+ bid/ask spread comparison



At the peak of the COVID-19 crisis in March 2020, bid/ask spreads spiked across all major markets (See [“A new normal for global credit market bid/ask spreads”](#)). Bid/ask spreads have since continued their trajectory falling back to pre-crisis levels a year later. USD IG is now at 2.4 bps, USD HY is at 25 cents, USD EM is at 27 cents, and EUR IG at 8 Euro cents indicating a return to the pre-crisis tighter spread regime.

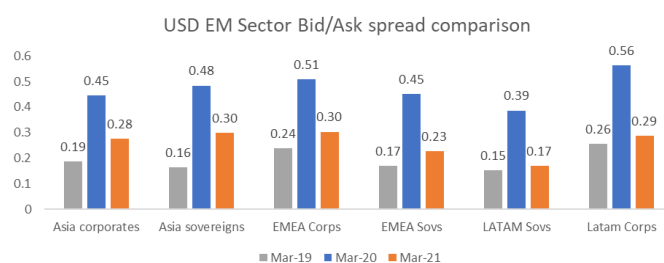
From March 2019 to March 2021, credit spreads, measured by Composite+, saw changes of:

- -17% for USD IG (2.9 bps to 2.4 bps);
- -8.7% for USD HY (28 cents to 25 cents);
- +23% for USD EM (22 cents to 27 cents);
- -38% for EUR IG (13 Euro cents to 8 Euro cents).

## Redefined real-time bond pricing

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## USD-denominated EM Composite+ bid/ask spread comparison



The increase in bid/ask spread in USD EM appears to be uniform with some variance in magnitude. All sectors' bid/ask spread remain elevated compared to their pre-crisis levels.

From March 2019 to March 2021, USD EM bid/ask spreads across sector, measured by Composite+, saw increases of:

- +47% for Asia Corporates (19 cents to 28 cents);
- +88% for Asia Sovereigns (16 cents to 30 cents);
- +25% for EMEA Corps (24 cents to 30 cents);
- +35% for EMEA Sovs (17 cents to 23 cents);
- +6.3% for LATAM Sovs (16 cents to 17 cents);
- +12% for LATAM Corps (26 cents to 29 cents).

Bid/ask spreads across major products have largely returned to pre-crisis levels or lower except for USD EM. For USD EM, across all sectors, bid/ask spreads remain higher than pre-crisis levels. This is particularly pronounced in Asia sovereigns where spreads remain 88% higher now compared to pre-crisis.

# Quantifying the Efficiency Opportunity for Automation

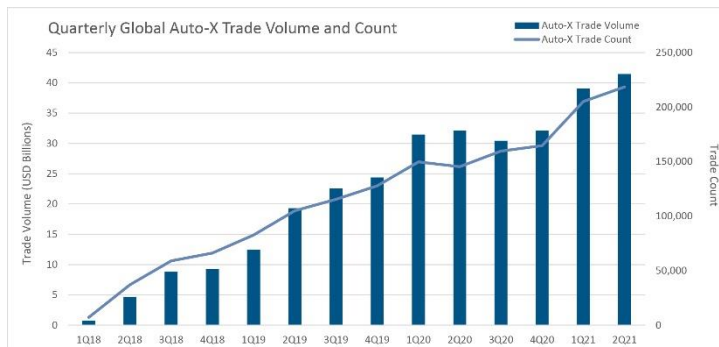
## HIGHLIGHTS

- Auto-X RFQ has seen steady growth as a tool for traders and now encompasses 17% of all trade tickets on MarketAxess.
- In Q2 2021, traders saved approximately 131 seconds per inquiry when successfully trading via Auto-X RFQ, totaling over 3600 hours overall.

## GROWTH OF AUTOMATION ON MARKETAXESS

One of the larger areas of growth in bond markets in recent years has been the emergence of tools for automating workflows. A 2020 Greenwich Associates [report](#) determined that 61% of market participants have already begun using or plan to soon employ automation in some form. On the MarketAxess platform, Auto-X RFQ allows clients to automate inquiry orders based on pre-defined tolerance settings around an inquiry's size, liquidity, and quality of responses. If all limits are met, then a trade will automatically occur.

Auto-X RFQ has seen significant adoption over the past 2 years (see below) as trading desks seek to improve efficiency. Q2 2021 saw a YOY growth in completed orders of 50%. The rolling 6 quarters from the start of 2020 onwards have all seen greater than \$30B of automated volume, with Q2 2021 setting a record as the first quarter over \$40B. Nearly 100 unique clients now take advantage of automation functionality on the system.



## TIME SAVED BY UTILIZING AUTO-X RFQ

An exercise in measuring the value of automation is putting a tangible figure on what traders have gained by shifting their flows to Auto-X RFQ. In Q2 2021, the median length of time

### Auto-X RFQ on MarketAxess

Auto-X RFQ is an execution tool for corporate bond trading on MarketAxess where a trader specifies criteria for a given inquiry's size, liquidity and level. Auto-X RFQ evaluates these criteria against bids and offers, checks for outlier prices, and when all parameters are met, the system automatically executes the transaction.

between the bin of responses becoming available to view and the trader choosing to accept on traded orders was 130.8 seconds. In addition, on a traditional high-touch RFQ it takes a trader between 2 and 5 clicks to navigate the order screen. In this time, they have to evaluate the stack of responses and potential counterparties, confirm spot type, and check calculated price/yield/spread.

Over the same period, there were 219,000 fully automated trades completed on MarketAxess. Even if we assume that a trader isn't actively evaluating their options for the full length of the gap, we can approximate that a trader spends 60 seconds to validate all of the available data. Using this conservative estimate, traders saved over 3600 hours and 410,000 clicks in the three-month period. That adds up to roughly 400 trading days of additional opportunity that were opened up through parameter-based automated trading.

These numbers are striking and this is likely just the beginning of the shift toward automation. Even accounting for the positives listed above, trades sent through Auto-X RFQ only accounted for 17% of all trade tickets on MarketAxess in Q2 2021, up from 11% in Q2 2020.

We expect this number to continue to rise through client adoption and expansion across markets. US High Grade is a market that has seen substantial adoption; 80% of all automated RFQ trades were in USHG in 2020. Other markets have started to make progress with share of US High Grade falling to 75%. As clients become increasingly confident in the functionality and integrate the functionality across other markets, the path toward greater automation is clear given the efficiency gains.



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# Understanding TCA Outcomes in European Credit Markets

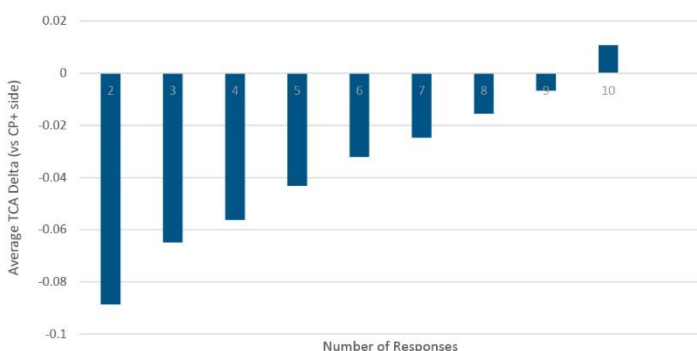
## HIGHLIGHTS

- A key driver in determining price outcomes when trading electronically is the number of responses received on an RFQ. More responses equate to improved pricing with more competition among liquidity providers.
- We estimate every additional response in European Credit, YTD, improved average TCA by ~1.2 Euro cents.
- To maximize the number of responses received, clients should invite as many disclosed dealers as possible alongside seeking anonymous liquidity via Open Trading®.

## WHAT'S THE MAIN TCA DRIVER IN ELECTRONIC EURO CREDIT?

Transaction Cost Analysis (TCA) is used by participants in corporate bond markets as a post-trade tool to assess the pricing and execution quality of their trading activity. When trading on an electronic venue, we see the major explanatory variable influencing TCA outcomes as the number of responses received on an order.

Using MarketAxess trading platform data, YTD, in European Credit, we see a clear correlation between responses and pricing outcomes (a similar result to our US IG analysis, [here](#)). The below shows average TCA vs number of responses, with each additional response improving TCA by ~1.2 cents. TCA outcomes are clearly strongly correlated with realized responses, as we see a linear correlation co-efficient (R-squared) >95%. In 2021 YTD, Euro Credit RFQs that received ten or more responses outperformed Composite+™ bid/offer, while over ~44% of trades received at least ten responses and outperformed Composite+ side.

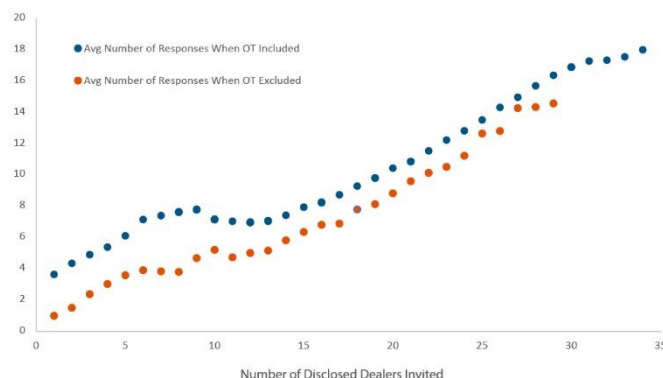


## Transaction Cost Analysis (TCA)

TCA is defined relative to Composite+ and is calculated as the difference between the trade price and the Composite+ price on the corresponding side, at inquiry time. A positive value means the trade occurred inside (more competitive than) Composite+ bid or offer, while a negative value means the trade occurred outside (less competitive than) the Composite+ bid or offer.

## NUMBER OF RESPONSES IN ELECTRONIC EURO CREDIT

To obtain maximum TCA benefits, and hence best-ex, it's imperative that clients receive as many responses as possible. To understand response outcomes, we investigate MarketAxess trading platform data, YTD, in European Credit, and plot the number of disclosed dealers invited vs the number of responses received, when inviting Open Trading or not, see below; each dot contains data from at least 100 trades.



The above demonstrates how inviting more disclosed dealers does increase the response pool, with an uptick in responses when using Open Trading. The orange line has a constant gradient (a measure of the response rate) and, so, disclosed counterparties will respond regardless of whether they are put in competition or not. Moreover, the blue line also exhibits a circa constant gradient, emphasizing how **counterparties will respond regardless of whether Open Trading is invited or not**.

Understanding TCA outcomes is critical when making trading decisions to satisfy best-execution requirements. Superior pricing is obtained when more responses are obtained, which can be acquired by inviting as many disclosed dealers as possible alongside seeking anonymous liquidity via Open Trading.

# The Next Generation of European Supranationals & Agencies

## HIGHLIGHTS

- The European Commission's Support to mitigate Unemployment Risks in an Emergency (SURE) and NextGenerationEU (NGEU) pandemic recovery bonds have significantly increased volumes in the European Supranational bond market.
- Prior to the issue of the inaugural SURE bonds in October 2020, the Average Daily Volume (ADV) for EUR denominated Supranational bonds was just 547MM - compared to 2BN in September 2021.
- EU SURE and NGEU bonds now make up a combined 78% of EUR denominated Supranational ADV and trade in volumes comparable to safe assets such as EGBs.

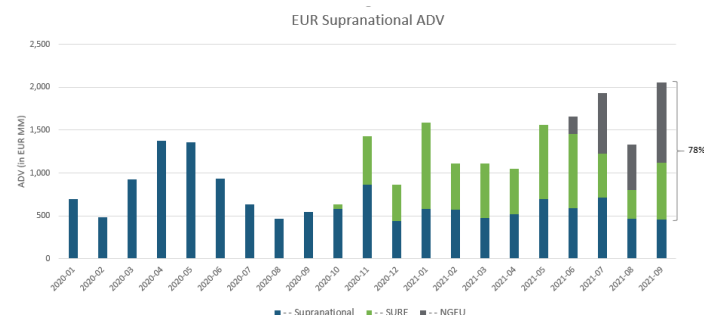
## Deeper insights with TraX® data

TraX data from MarketAxess aggregates bond market activity executed by European banks, asset managers and trading firms across both voice and electronic trading methods that is validated in near real-time through a post-trade regulatory reporting and trade confirmation engine.

## EGB comparison

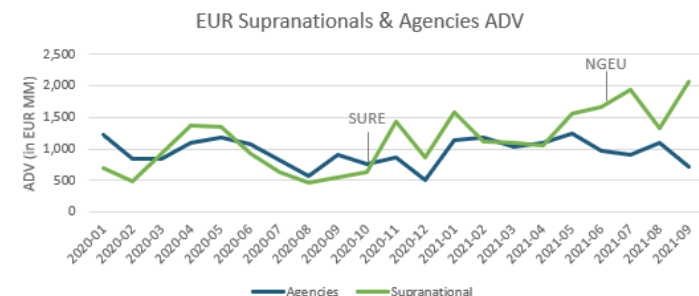
EU SURE and NGEU bonds now trade in volumes traditionally limited to top traded EGBs. When ranked against EGBs in ADV, the combined SURE and NGEU issuance ranks 7<sup>th</sup>.

| Sep-21 |                    |             |                     |            |              |
|--------|--------------------|-------------|---------------------|------------|--------------|
| Rank   | Eurozone Govts     | ADV (in BN) | Outstanding (in BN) | ISIN Count | Turnover     |
| 1      | ITALY              | 16.67       | 2122.72             | 154        | 0.79%        |
| 2      | GERMANY            | 12.84       | 1254.77             | 75         | 1.02%        |
| 3      | FRANCE             | 12.65       | 2015.78             | 84         | 0.63%        |
| 4      | SPAIN              | 5.49        | 1010.39             | 69         | 0.54%        |
| 5      | AUSTRIA            | 2.66        | 229.99              | 26         | 1.16%        |
| 6      | BELGIUM            | 2.42        | 398.73              | 74         | 0.61%        |
| 7      | <b>SURE / NGEU</b> | <b>1.60</b> | <b>146.13</b>       | <b>16</b>  | <b>1.09%</b> |
| 8      | NETHERLANDS        | 1.12        | 328.69              | 26         | 0.34%        |
| 9      | GREECE             | 0.82        | 187.59              | 36         | 0.44%        |
| 10     | PORTUGAL           | 0.72        | 154.18              | 22         | 0.47%        |



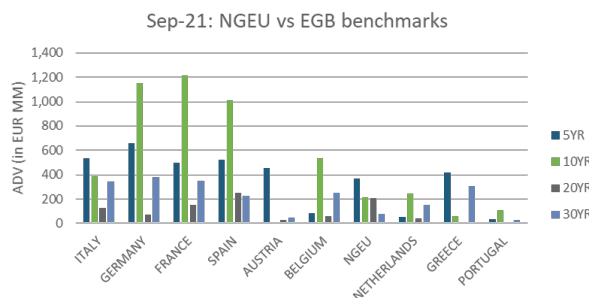
## Supranational and Agencies trends

The EUR Supranational and Agencies markets have traditionally followed similar trends but the launch of the SURE and NGEU programmes in October 2020 and June 2021 caused a boost in the Supranational market and a noticeable divergence.



## EGB Benchmark comparison

Ticker NGEU is very active in the 5YR. This contrasts with the other EGBs, with the exception of Italy and Greece, where the 10YR benchmark bond trades significantly more than the 5YR benchmark bond.



# Pricing Dynamics of EU Bonds in the Wake of SURE and NGEU

## HIGHLIGHTS

The European Union's SURE and NGEU programs (launched in October 2020 and June 2021 respectively) was unlike anything the bloc had undertaken before. Issuing debt in amounts normally reserved for sovereign nations, SURE and NGEU transformed the size of the European supranational bond market and elevated EU bonds to trading levels of European Government Bonds (see [here](#)).

As a follow up, we here investigate the price comparison between these EU bonds and EGBs, demonstrating:

- EU bonds offer very similar yields in the belly of the curve (5-10 years) to France.
- EU bonds have a yield curve comparable to safe-haven assets such as Germany and the Netherlands.
- EU bonds have higher transaction costs than Germany and Netherlands with a wider bid/ask spread.

## Issuer Curves

Unlike the peripheral EGB countries (such as Italy and Spain) where investors want to be compensated with higher yields for assuming the added risk of investing in longer-term bonds, EU bonds are priced with a lower yield on the long end of the curve alongside German Bunds and Netherlands DSLs, which have less associated risk (see the below yield curves).

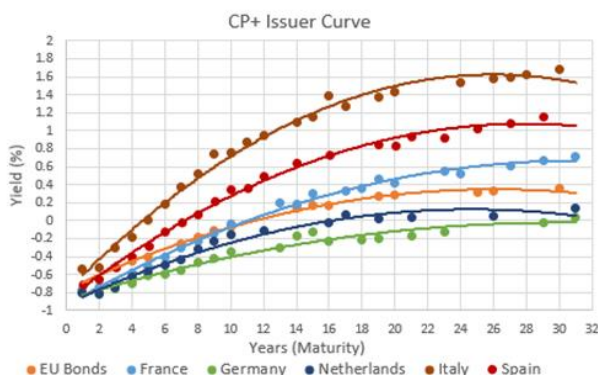


Fig 1: Chart displaying government bond yield curve using CP+. Yield value is the mid CP+ value taken at 4pm UK time on 09/11/2021.

## Redefined real-time bond pricing

Composite+ (CP+) is MarketAxess' proprietary AI-powered pricing engine for corporate bonds. It produces an unbiased, two-sided market for more than 30,000 instruments globally. Updated every 15 to 60 seconds, the engine generates nearly 30 million levels per day covering 90-95% of trading activity in its markets.

Although the whole EU bonds curve is not negatively yielding like Germany, they are closer on the belly and long end of the curve to all the safe-haven bonds. The EU yield curve indicates they are viewed as the third safest asset available in the Eurozone, with the third lowest long end yields.

## Transaction costs

Bid/ask spreads for EU bonds are wider than core EGBs and more akin to the semi-core and peripheral countries (e.g Spain, see below). The largest difference to the core EGBs can be found on the belly of the curve (see maturity bucket ">5Yrs and <=10Yrs" above) where the transaction costs for EU bonds are two cents higher than Bunds.

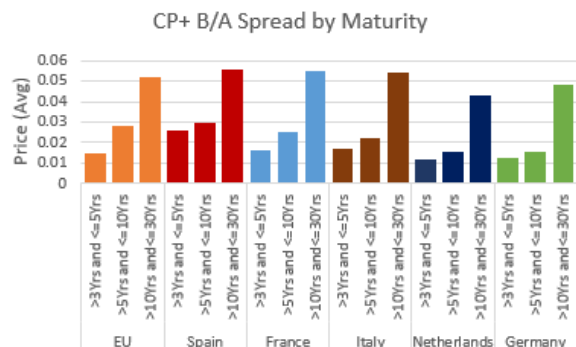


Fig 2: Chart displaying average bid/ask price spread by bond country and maturity in Nov-21 using CP+. Average price values in EUR e.g., €0.01 = 1 euro cent.

As it was recently announced, the ECB's bond Pandemic Emergency Purchase Program (PEPP) would end in March, impacting confidence in semi-core and peripheral EGBs, EU bonds now offer an appealing alternative to ultra-safe Bunds.



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