



# 2021 Investor Day

September 14, 2021

# Speakers and agenda

## Strategic overview



**Rick McVey**  
*Chairman and Chief Executive Officer*



**Chris Gerosa**  
*Chief Financial Officer*

## Core products



**Kevin McPherson**  
*Global Head of Sales*



**Christophe Roupie**  
*Head of EMEA and APAC*

## New products



**Chris Concannon**  
*President and Chief Operating Officer*



**Nichola Hunter**  
*Head of Rates*

## Data



**Chris Concannon**  
*President and Chief Operating Officer*



**David Krein**  
*Global Head of Research and Data*

## New protocols



**Rich Schiffman**  
*Head of Open Trading*



**Chiqui Matthew**  
*Sales Manager*

## Automation



**Gareth Coltman**  
*Global Head of Trading Automation*

## Technology



**Nick Themelis**  
*Chief Information Officer*



**Madhu Chalamani**  
*Chief Technology Officer*



**Christine Nolan**  
*Head of Trading Technologies*

## Q&A session

## Forward Looking Statements

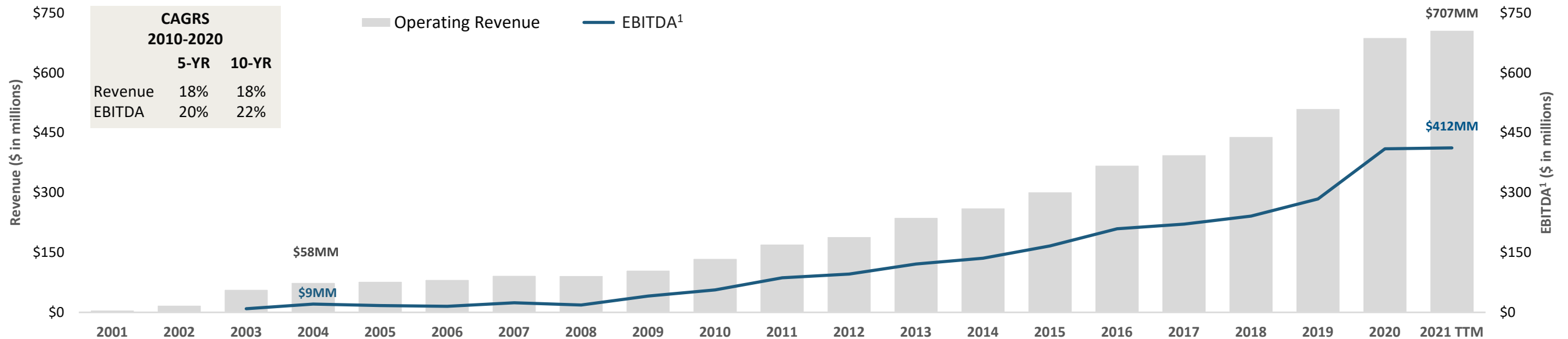
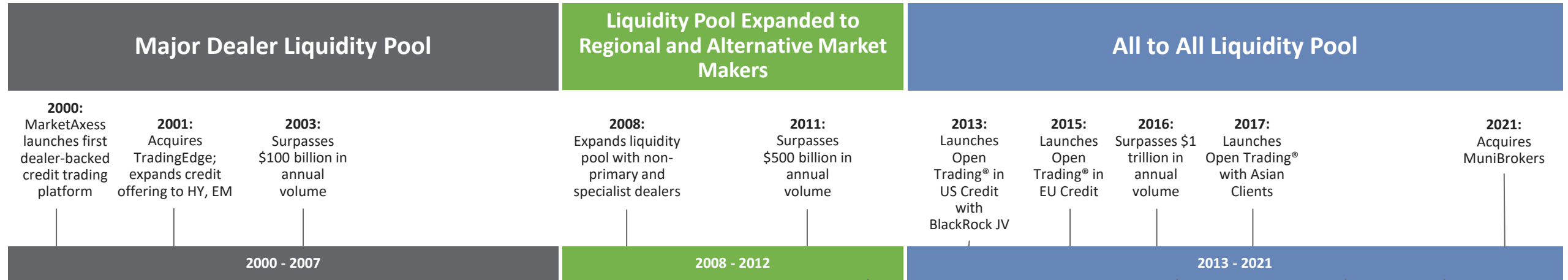
This presentation may contain forward-looking statements, including statements about the outlook and prospects for Company and industry growth, as well as statements about the Company's future financial and operating performance. These and other statements that relate to future results and events are based on MarketAxess' current expectations. The Company's actual results in future periods may differ materially from those currently expected or desired because of a number of risks and uncertainties, including: global economic, political and market factors; risks relating to the COVID-19 pandemic, including the possible effects of the economic conditions worldwide resulting from the COVID-19 pandemic; risks related to the U.K. exit from the European Union; the level of trading volume transacted on the MarketAxess platform; the rapidly evolving nature of the electronic financial services industry; the level and intensity of competition in the fixed-income electronic trading industry and the pricing pressures that may result; the variability of our growth rate; our ability to introduce new fee plans and our clients' response; our ability to attract clients or adapt our technology and marketing strategy to new markets; risks related to our growing international operations; our dependence on our broker-dealer clients; the loss of any of our significant institutional investor clients; our exposure to risks resulting from non-performance by counterparties to transactions executed between our clients in which we act as an intermediary in matched principal trades; risks related to self-clearing; the effect of rapid market or technological changes on us and the users of our technology; our dependence on third-party suppliers for key products and services; our ability to successfully maintain the integrity of our trading platform and our response to system failures, capacity constraints and business interruptions; the occurrence of design defects, errors, failures or delays with our platforms; our vulnerability to cyber security risks; our actual or perceived failure to comply with privacy and data protection laws; our ability to protect our intellectual property rights or technology and defend against intellectual property infringement or other claims; our ability to enter into strategic alliances and to acquire other businesses and successfully integrate them with our business; our dependence on our management team and our ability to attract and retain talent; limitations on our flexibility because we operate in a highly regulated industry; the increasing government regulation of us and our clients; our exposure to costs and penalties related to our extensive regulation; our risks of litigation and securities laws liability; our future capital needs and our ability to obtain capital when needed; limitations on our operating flexibility contained in our credit agreement; and other factors. The Company undertakes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise. More information about these and other factors affecting MarketAxess' business and prospects is contained in MarketAxess' periodic filings with the Securities and Exchange Commission and can be accessed at [www.marketaxess.com](http://www.marketaxess.com).



# Strategic Overview

Rick McVey, *Chairman and Chief Executive Officer*  
Chris Gerosa, *Chief Financial Officer*

# Pioneer in Innovation and Expansion of Electronic Trading



1. EBITDA is a non-GAAP measure. Please see the investor relations website on <http://investor.marketaxess.com> for a reconciliation of GAAP net income to EBITDA

# Global debt market trends

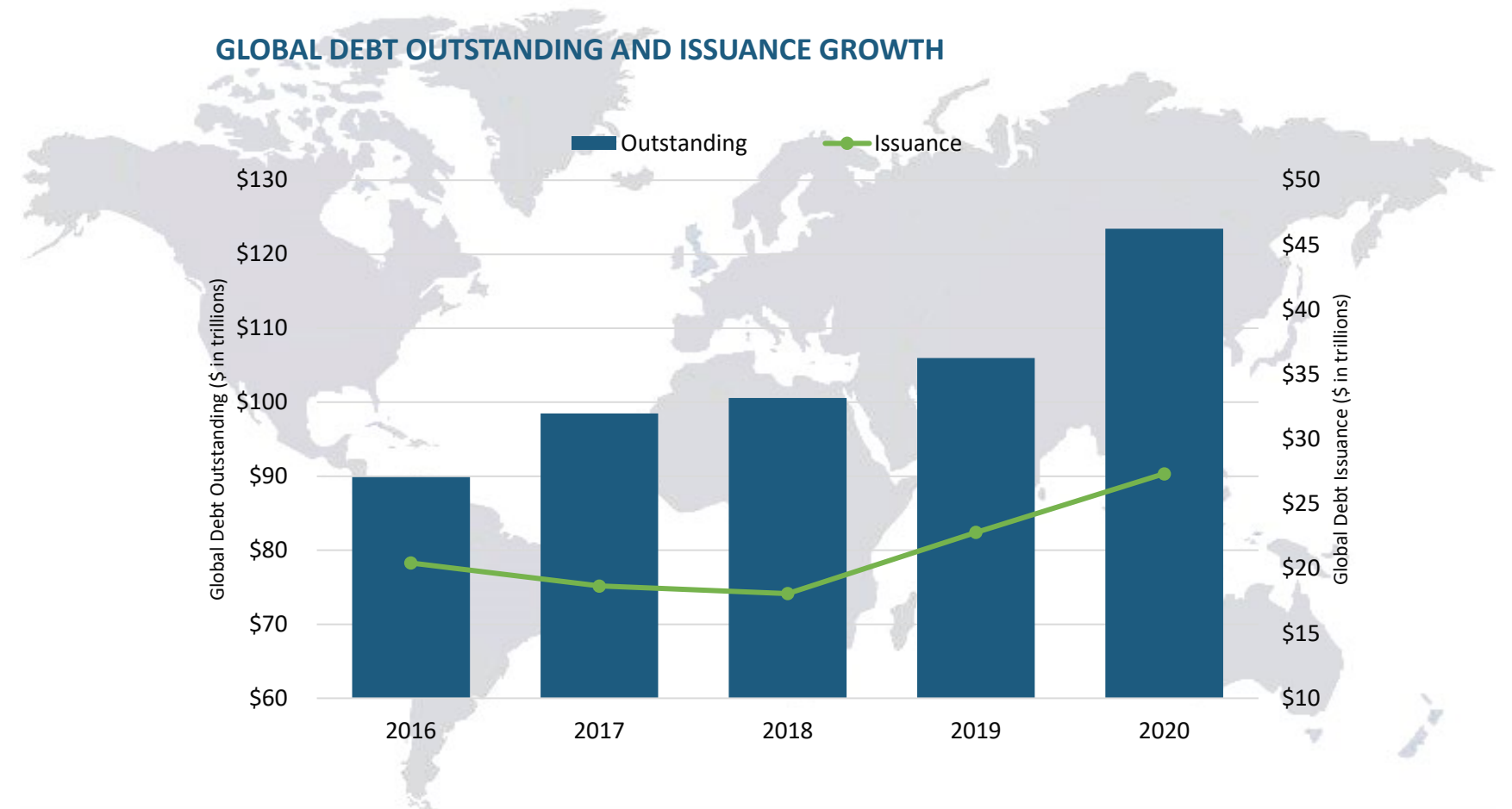
- Global bond market debt outstanding increased 16.5% to \$123.5 trillion in 2020
- Global long-term bond issuance increased by 19.9% to \$27.3 trillion in 2020
- U.S corporate bond outstanding increased by 10.3% to \$10.6 trillion in 2020
- U.S corporate bond issuance increased by 60.4% to \$2.3 trillion in 2020

**4.6%**  
U.S Corporate  
Bond Outstanding  
5-Year CAGR

**9.7%**  
U.S Treasury  
Outstanding  
5-Year CAGR

**5.0%**  
U.S Corporate  
Bond Outstanding  
10-Year CAGR

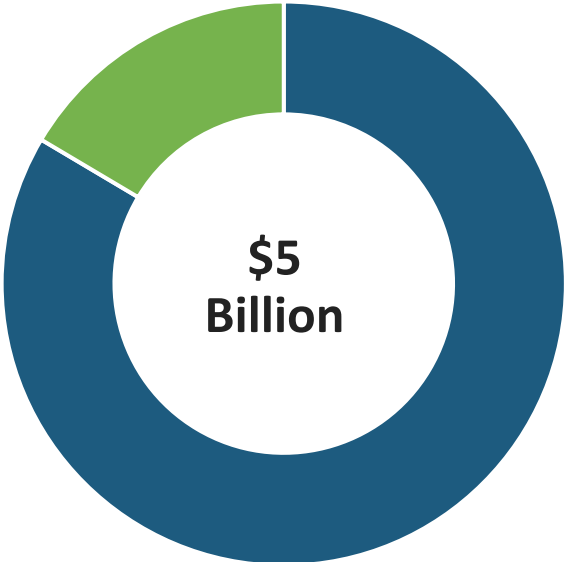
**9.0%**  
U.S Treasury  
Outstanding  
10-Year CAGR



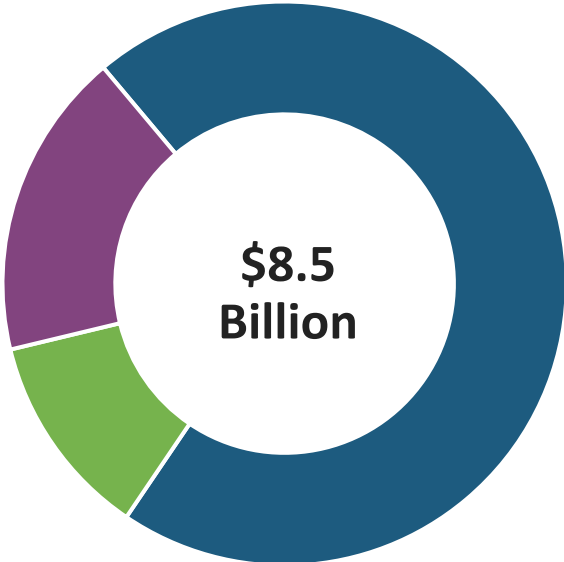
Source: SIFMA

# Expanding the MKTX addressable market opportunity

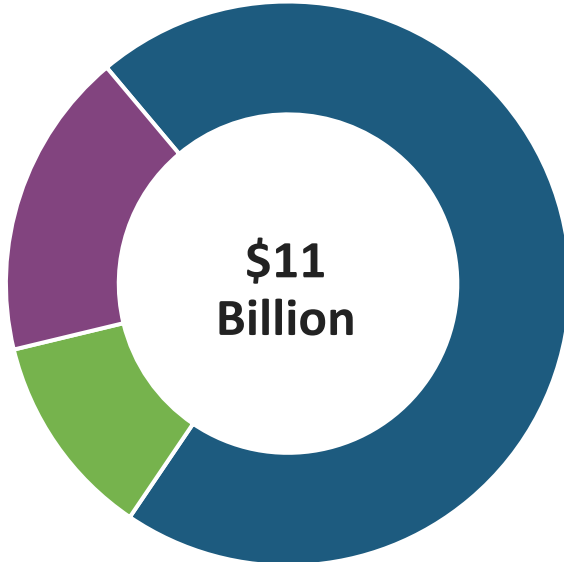
Current Estimated Revenue Opportunity<sup>1</sup>



2031 Estimated Revenue Opportunity<sup>1</sup>



2031 Aspirational Revenue Opportunity<sup>1</sup>

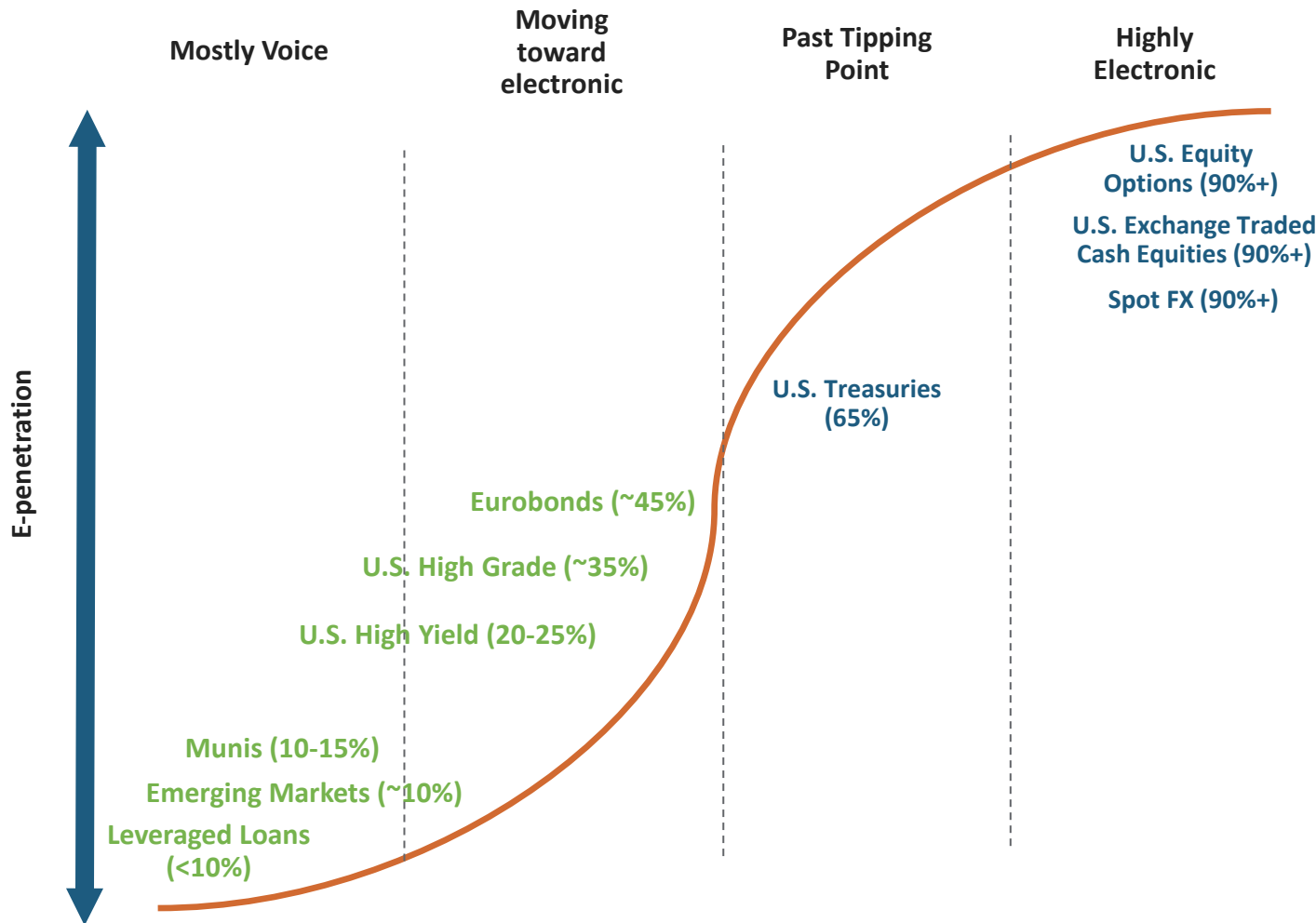


CREDIT	RATES	NEW PRODUCT OPPORTUNITIES
U.S. High Grade	U.S. Treasuries	China Bond Connect
U.S. High Yield	Agencies	ETF Trading
Emerging Markets	European Gov't Bonds	Mortgages
Eurobonds		ABS
Munis		Swaps
Leveraged Loans		Other

**Estimated Other Revenue Opportunity**  
 Global Market Data: \$13-14 billion<sup>2</sup>  
 Post-Trade Services: \$1 billion<sup>3</sup>

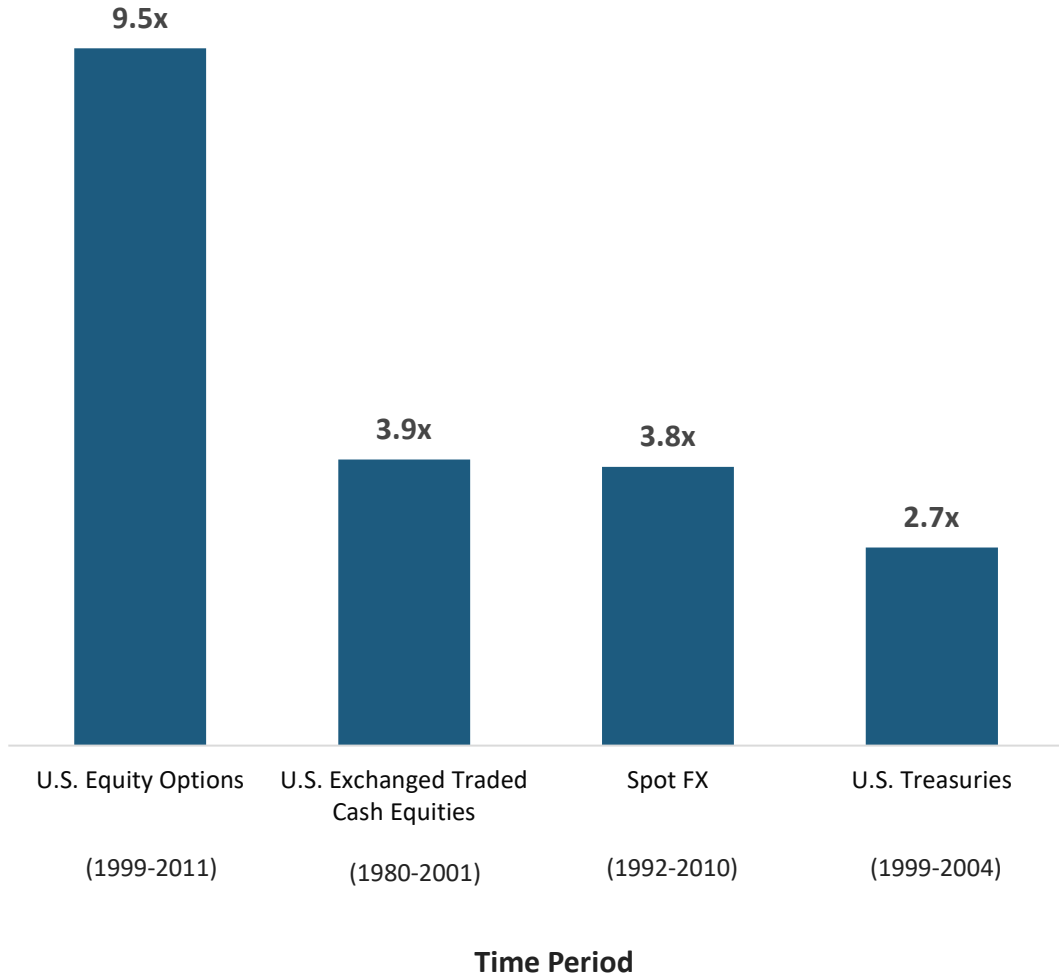
1. MarketAxess estimates; TRACE, TRAX, MSRB, SIFMA, LSTA, NYFRB, ISDA, Bond Connect, SSGA  
 2. Burton-Taylor Financial Market Data and Analysis, MarketAxess estimates  
 3. MarketAxess estimates, TRAX, DTCC

# Early innings for fixed income electronification



Source: FINRA TRACE, TRAX, Coalition Greenwich, McKinsey & Company, Celent, MarketAxess Estimates

## VOLUME INCREASE FROM ELECTRONIFICATION



Source: McKinsey & Company



# MarketAxess Growth Strategy

**1**

**Increase Penetration in Core Credit Products**

**2**

**Expand Into New Products**

**3**

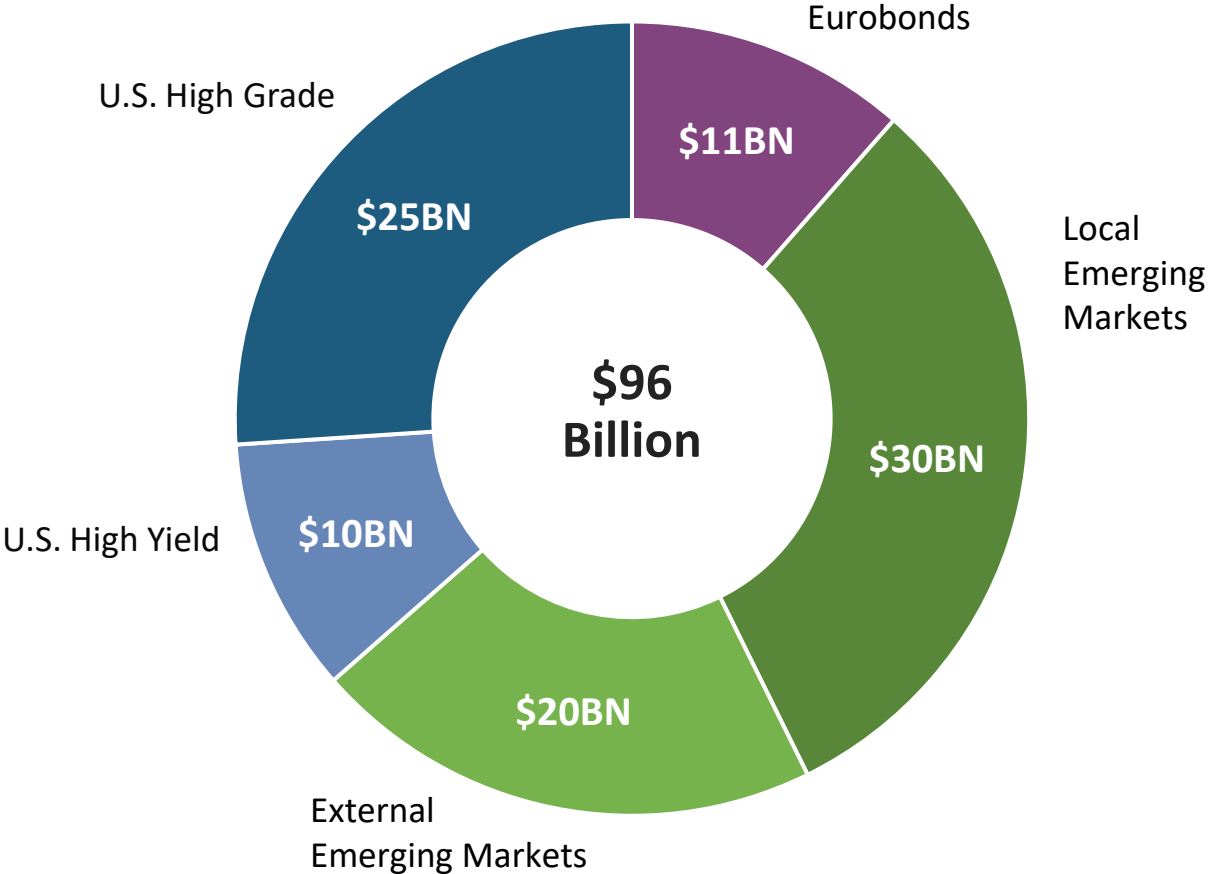
**Expand Trading Protocols and Leverage The Open Trading<sup>®</sup> Network**

**4**

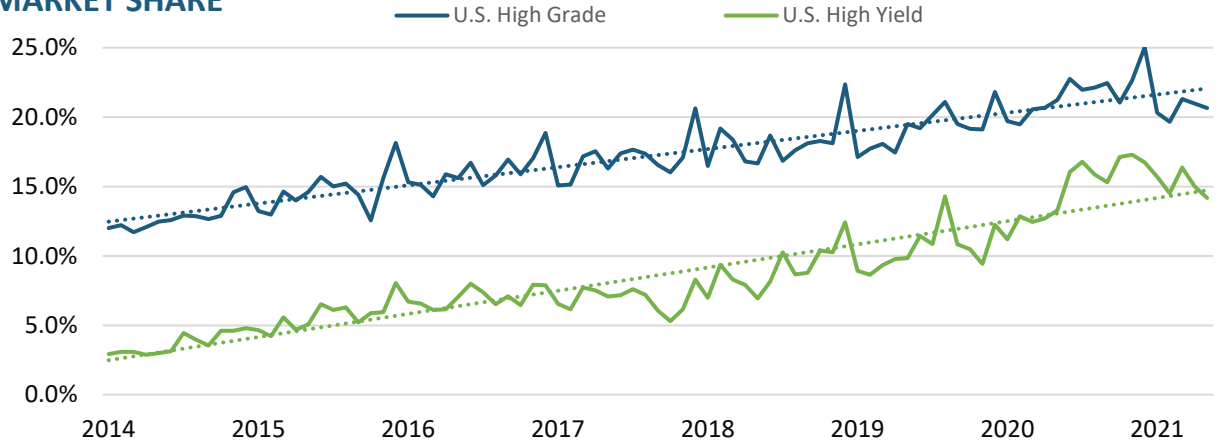
**Continue To Invest In and Grow Our Business Through Geographic Diversification**

# 1. Increase penetration in core credit products

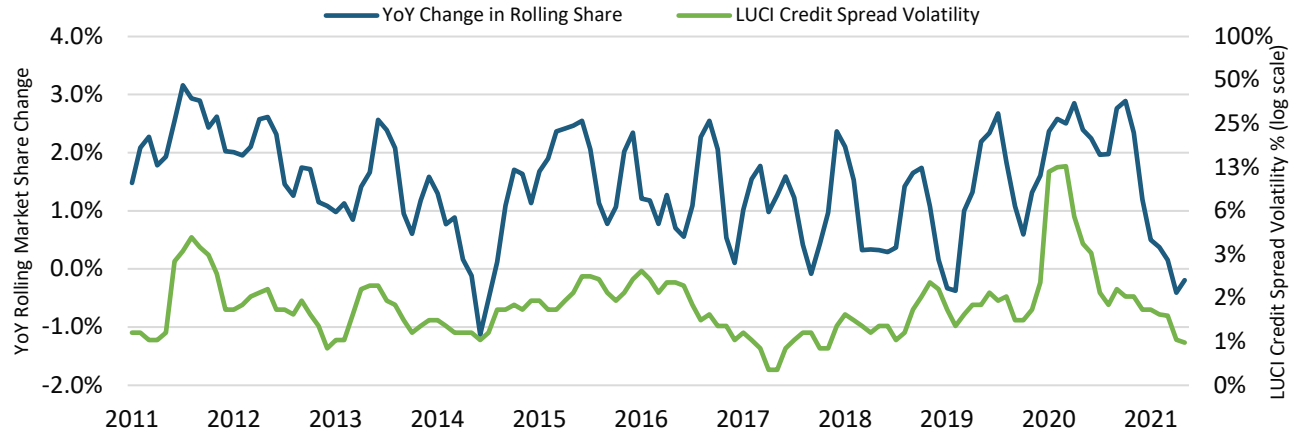
ESTIMATED AVERAGE DAILY VOLUME FOR ADDRESSABLE CORE CREDIT PRODUCTS



ESTIMATED MONTHLY U.S. HIGH GRADE AND U.S. HIGH YIELD MARKET SHARE



U.S. HIGH GRADE YOY ROLLING SHARE CHANGE VS. LUCI CREDIT SPREAD VOLATILITY



Source: Market volumes calculated using the most recently available market data for TRACE, Trax, Emerging Markets Trade Association, JPMorgan Research and various local market central banks

Source: Credit Suisse

## 2. Expand into new products

### Existing Products

U.S. High Grade

U.S. High Yield

Emerging Markets

Eurobonds

Agencies

Leveraged Loans

### New Products

Municipal Bonds

U.S. Treasuries

European Government Bonds

Chinese Government Bonds

### 3. Expand trading protocols and leverage the Open Trading® network

#### BROADEST AND DEEPEST GLOBAL LIQUIDITY POOL



#### Expanding Trading Protocols

Request-For-Quote

Portfolio Trading

Streaming

Central Limit Order Book

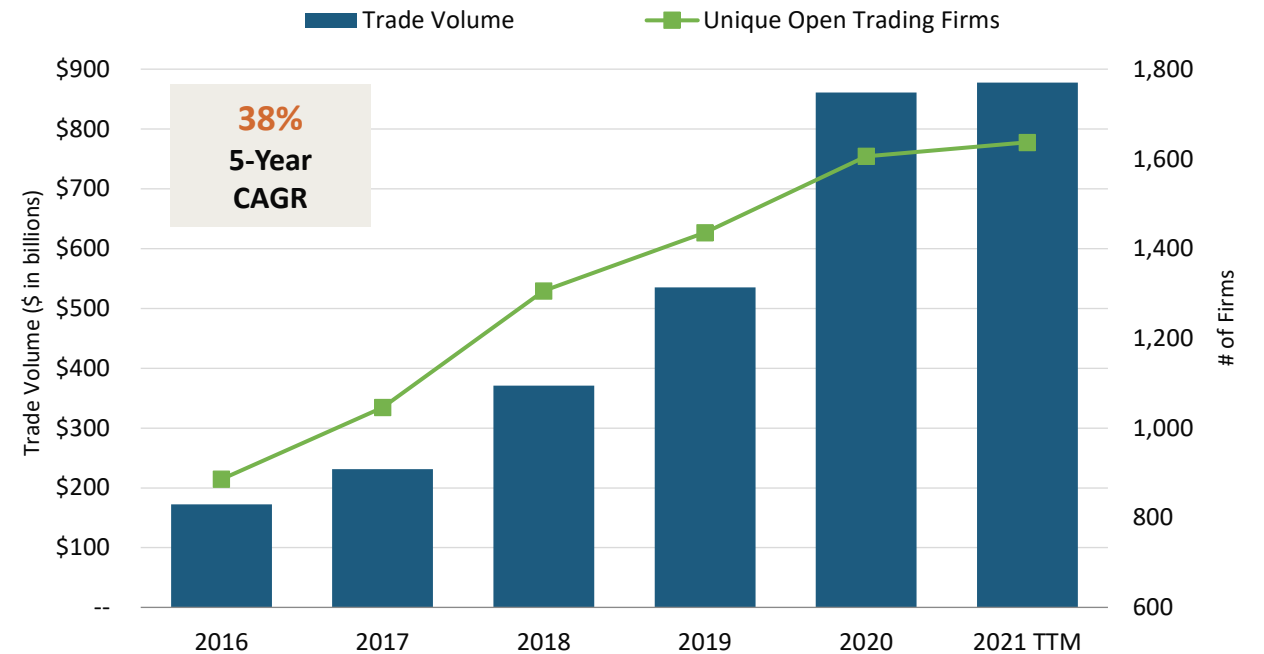
Matching Sessions

DAILY NOTIONAL VALUE AVAILABLE  
**\$15 BN**

DAILY ORDERS AVAILABLE  
**29,000**

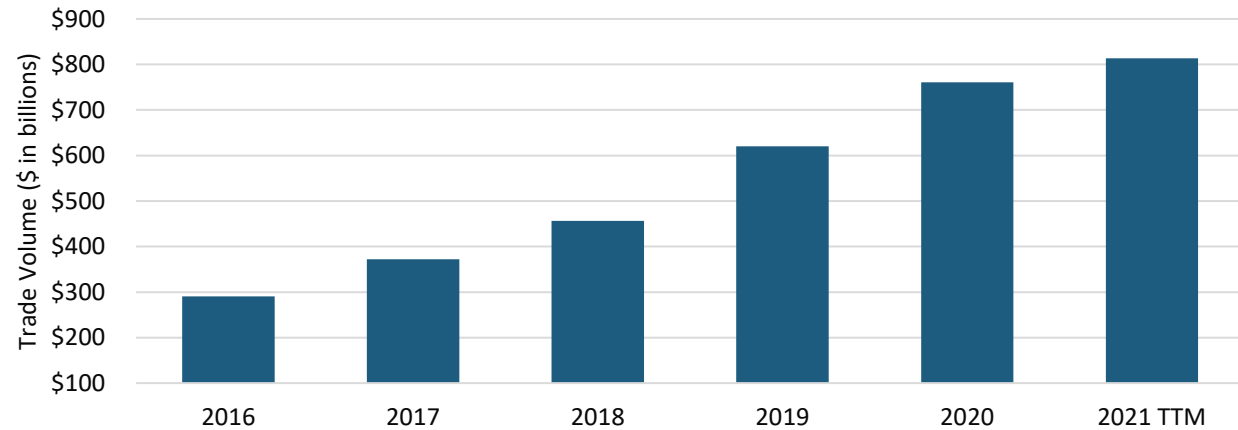
% OF TOTAL PLATFORM ORDERS AVAILABLE  
**97%**

#### OPEN TRADING GROWTH

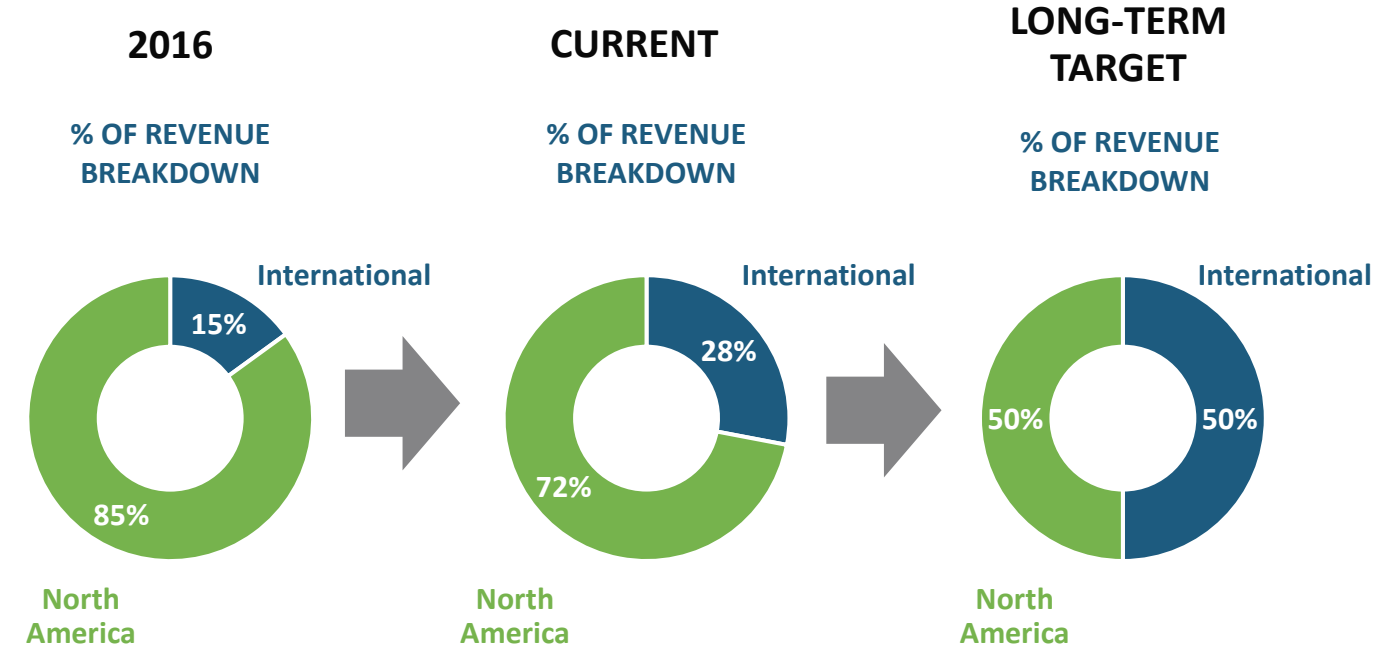


# 4. Continue to invest in and grow our business through geographic diversification

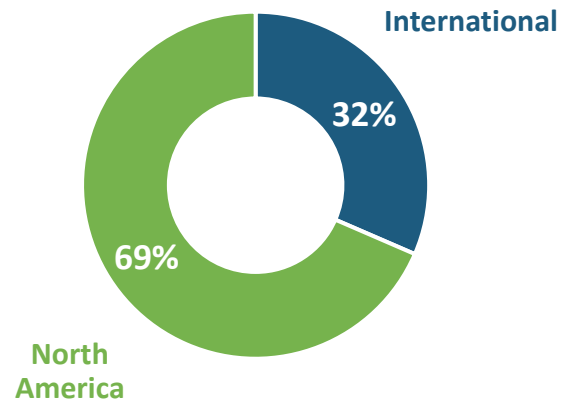
INTERNATIONAL CLIENT VOLUME



REVENUE DIVERSIFICATION

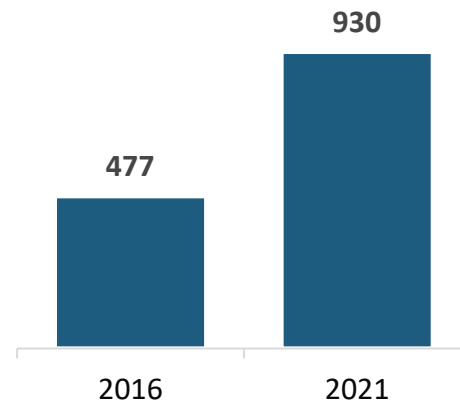


% OF VOLUME BREAKDOWN



- 1,800+** Client Firms
- 64** Countries
- 35+** Currencies

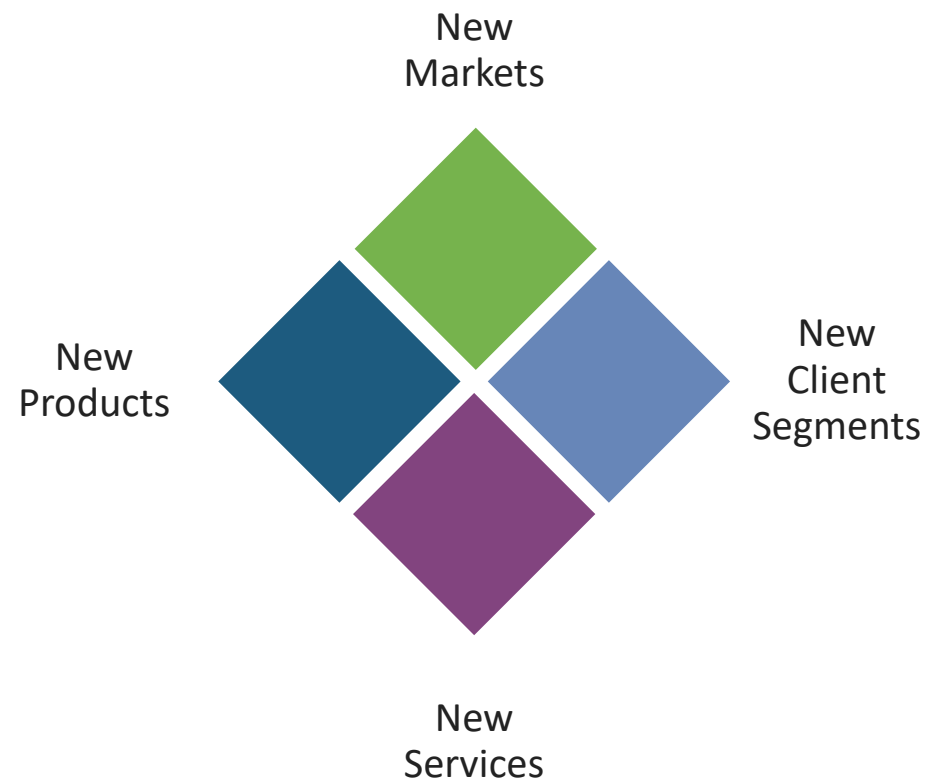
ACTIVE INTERNATIONAL CLIENTS



# M&A to accelerate expansion of addressable market and growth in core markets

- Augment our core internal growth through expansion into new markets, new products or services
- Enhance the value of the platform and trade-related services to become a leading global electronic trading venue

## ENHANCING THE VALUE OF THE PLATFORM



## RECENT ACQUISITIONS

- **LiquidityEdge**
  - Provides opportunity to connect and offer treasury trading to our investor client network, and the ability to expand into European government bonds and other rates products
  - Provides enhanced treasury hedging capabilities for corporate bond trading
- **Regulatory Reporting Hub**
  - Enhances and adds scale to our post-trade regulatory reporting footprint by adding over 500 clients across Europe, predominantly in Germany, France and the Nordics
  - Enhances our current data offering by building on our existing Trax data solutions to create a broader, deeper set of European trading data for all clients
- **MuniBrokers**
  - The acquisition bolsters MarketAxess's footprint in the municipal bond market by connecting our leading trading technology with the liquidity of one of the industry's largest electronic inter-dealer marketplace
  - Unique combination creates a compelling and diverse liquidity solution that will ultimately deliver an improved execution experience for our clients
  - Potential to leverage rich municipal bond trade data to build out MarketAxess municipal bond data suite

# Long-term fee capture stability

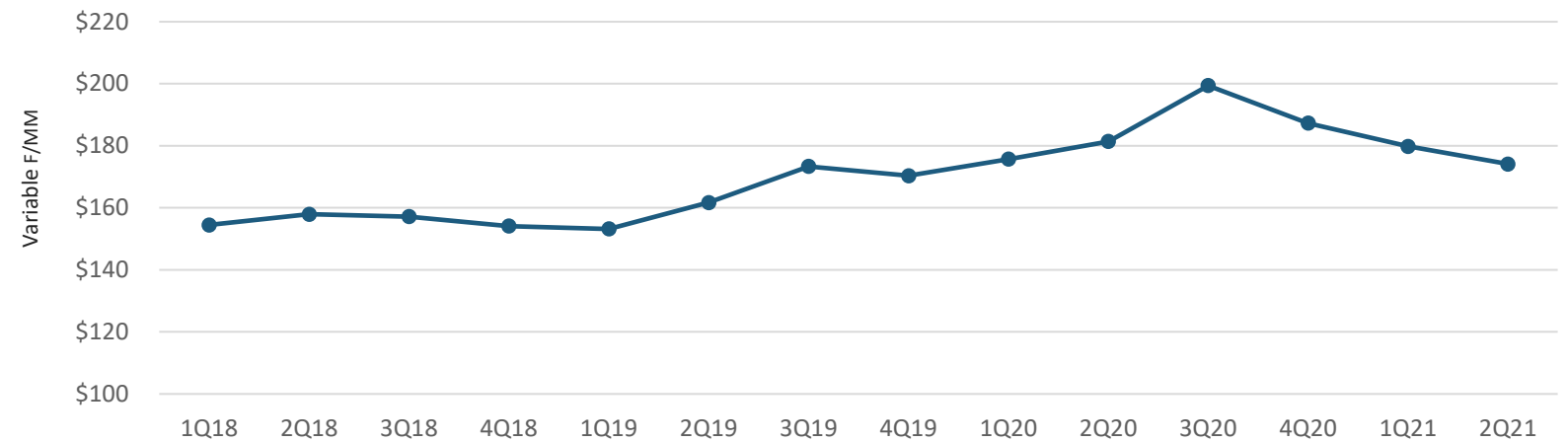
## U.S. HIGH GRADE

- Last major fee plan change over 15 years ago
- Fee capture sensitive to:
  - Years to maturity
  - Trade size
  - Yields
  - Distribution vs. all-variable fee plans

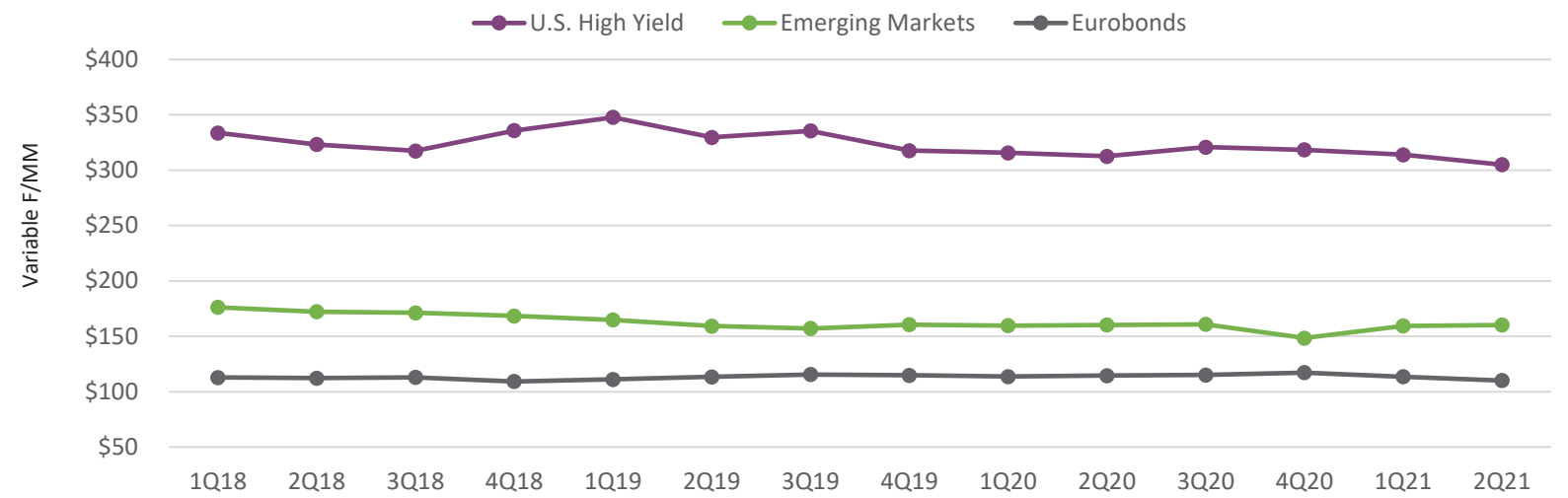
## OTHER CREDIT (U.S. HIGH YIELD; EMERGING MARKETS, EUROBONDS)

- Last major fee plan change:
  - Eurobonds: January 2018
  - U.S. High Yield: August 2017
- Not impacted by same factors as U.S. High Grade
- Quarterly variability mainly due to mix shift in trading volume among HY, EM and Eurobonds
- U.S. High Yield fees impacted by distribution vs. all-variable fee plans
- Significant cost savings through Open Trading are well in excess of current commissions charged

## U.S. HIGH GRADE FEE CAPTURE



## OTHER CREDIT FEE CAPTURE

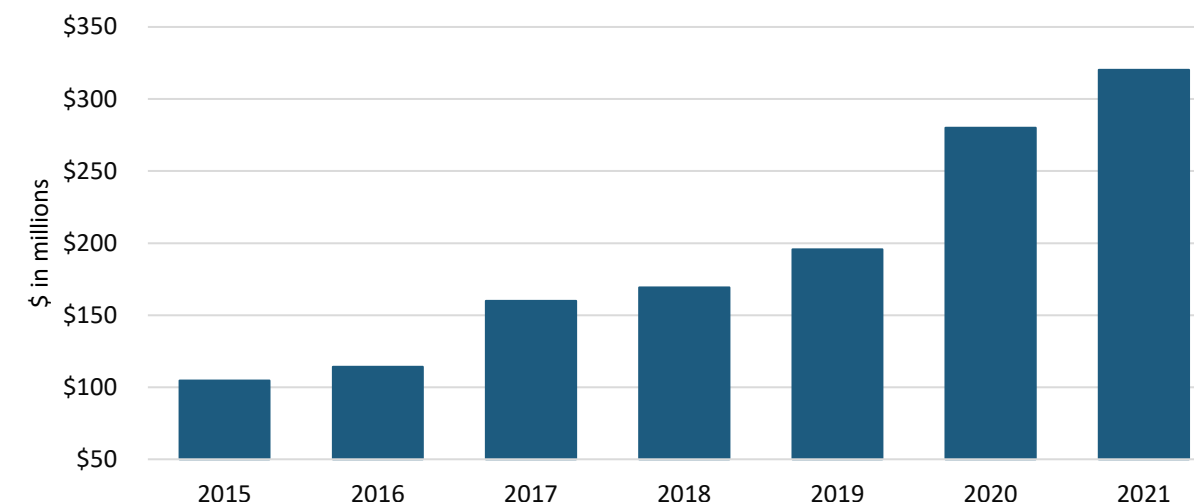


# Capital resources and capital management

## OVERVIEW

- **Total cash and investments** of \$440 million
  - Excludes \$132 million of cash deposits supporting self-clearing obligations
- **Trailing 12-months free cash flow** of \$320 million, up \$40 million from June 30<sup>th</sup>, 2020
- **Strong Regulatory Capital Profile**
  - Regulated entities had excess net regulatory capital of \$550 million as of June 30<sup>th</sup>, 2021, including \$343 million at our self-clearing broker-dealer
- **Continued investment in trading system enhancements**
  - Maintaining full year Capex guidance of \$50 million to \$55 million
- **Returned \$100 million in capital** during 1H 2021 through dividends and share repurchases
  - Dividends and share repurchases approximate 50% of free cash flow
- **No outstanding debt on borrowing facilities**
  - \$500 million 365-day credit agreement
    - Additional \$250MM accordion included
  - \$200 million secured facility

## TRAILING TWELVE MONTHS FREE CASH FLOW<sup>1</sup>



## LIQUIDITY SOURCES

Liquid Cash	\$415MM
Investments	\$25MM
Secured borrowing facility	\$200MM
365-day credit agreement	\$750MM
<b>Total Liquidity Available</b>	<b>\$1.4BN</b>

1. Free cash flow is a non-GAAP measure. Please see the investor relations website on <http://investor.marketaxess.com> for a reconciliation of GAAP cash flow from operating activities to free cash flow



# Core Products

Kevin McPherson, *Global Head of Sales*

Christophe Roupie, *Head of EMEA and APAC*

# Award-winning trade execution & data solutions for the world's largest network of institutional participants

## PRE-TRADE PRICE DISCOVERY

- MarketAxess BondTicker®
- Axess All®
- Multi-dealer streaming prices
- Multi-dealer product inventories
- Composite+™
- Liquidity Score

## POST-TRADE SERVICES

- Regulated as an ARM & APA in UK and EU
- Multi-regulatory reporting offering (SFTR, EMIR, MiFIR)
- Longest standing inter-dealer matching platform & largest global bilateral Repo matching community across the US, UK, and Europe

## TRADE EXECUTION

- Open Trading®
- Patented multi-dealer request-for-quote (RFQ)
- Streaming price and live market execution
- Automation tools; Auto-X, Auto-R
- Mid-X session-based trading
- Portfolio Trading

## STRAIGHT THROUGH PROCESSING (STP)

- Electronic audit trails and trade blotters
- Post Trade APIs for trade capture and TRACE reporting
- Transaction Cost Analysis (TCA)

Over 1,800  
active institutional  
investor and dealer  
firms

## CORE PRODUCTS

Emerging Markets

U.S. High Grade

U.S. High Yield

Eurobonds

## NEW PRODUCTS

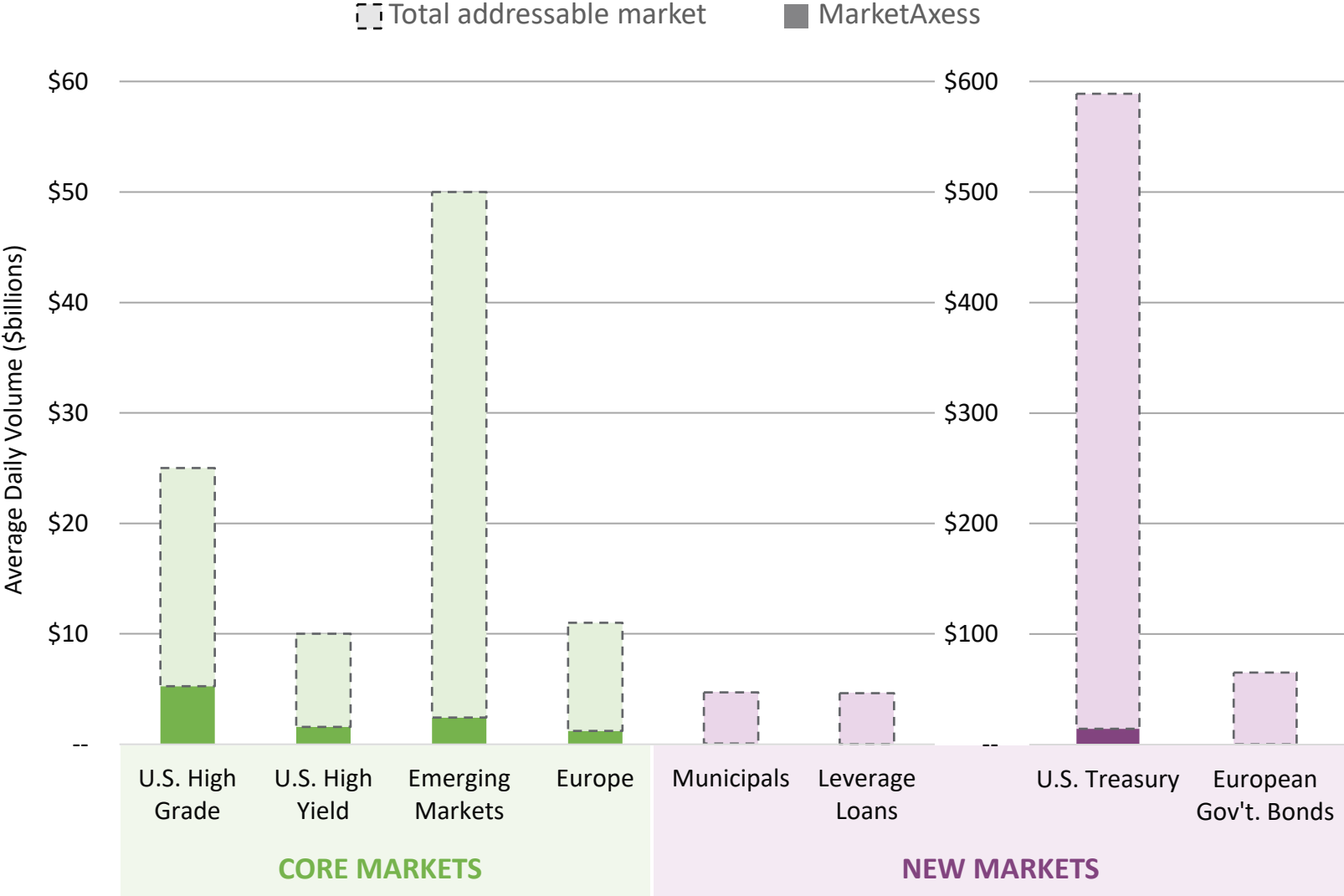
Municipals

U.S. Treasuries/Rates

# Runway of potential: Electronic trading still in early stages across markets

- ~\$96 billion average daily volume in the credit market of which MarketAxess represents only a portion<sup>1</sup>
- \$50 – 60 million in additional annual revenue, from a +1% change in MKTX estimated market share, illustrates the potential
- Electronification of trading varies by market with U.S. Treasuries being the most electronic, versus Municipals and Loans with limited penetration
- While each product is different, our unmatched suite of protocols and industry-leading liquidity pool position us to benefit from continued progress in electronification across markets

TOTAL ADDRESSABLE MARKET



1. Source: Market volumes calculated using the most recently available market data for TRACE, Trax, Emerging Markets Trade Association, Municipal Securities Rulemaking Board, Loan Syndications and Trading Association, JPMorgan Research and various local market central banks

# Innovative and client-focused technology to meet everchanging market needs

20+ YEARS OF UNPARALLELED EXPERIENCE AND GROWTH



## RESPONDING TO EVOLVING CLIENTS NEEDS

- Agile, client-centric development
- Intuitive UI and user enhancements
- Broader and deeper global liquidity pool

## PROGRESSIVE PROTOCOL SOLUTIONS

- Automation
- Mid-X Session
- Portfolio Trading
- UST Hedging
- Block Trading

## NEW PRODUCT AREAS

- Municipal Bonds
- Loans
- Rates (inc. EGBs)

## GROWING THE GLOBAL NETWORK

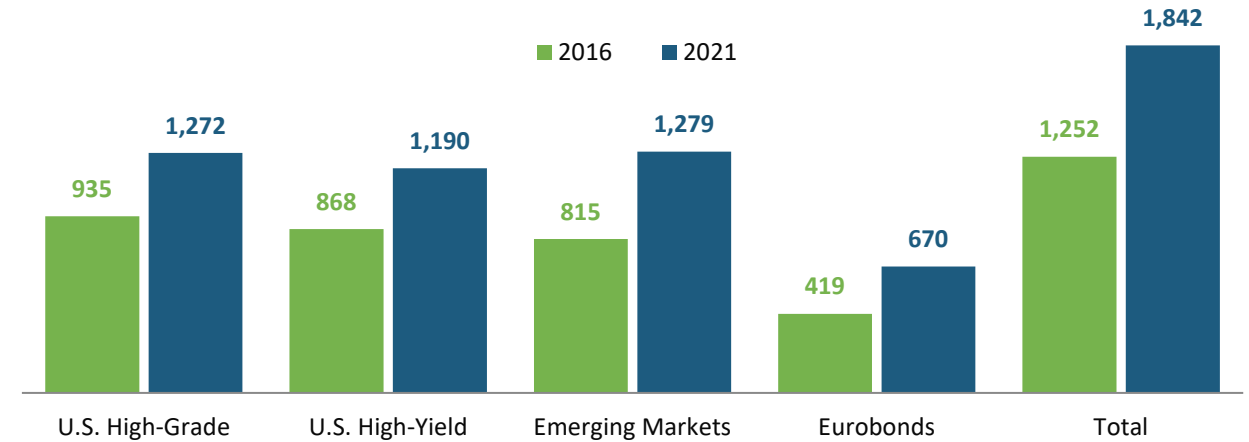
- Central and Eastern Europe
- Middle East & Africa
- APAC
- Latin America

# Growing & diversifying our trading network

## NEW CLIENT SEGMENT GROWTH

- **Dealers**
  - Dealer RFQ up over 100% year-over-year
- **Private Banks**
  - Private bank revenue now nearly 5% of overall MA revenues. Greenwich: “...a historic strength for BBG, but one where MarketAxess is now a close second”
- **Hedge Funds, ETF Market Makers, Central Banks**
  - Hedge funds ADV across EMEA & APAC has tripled since beginning 2019

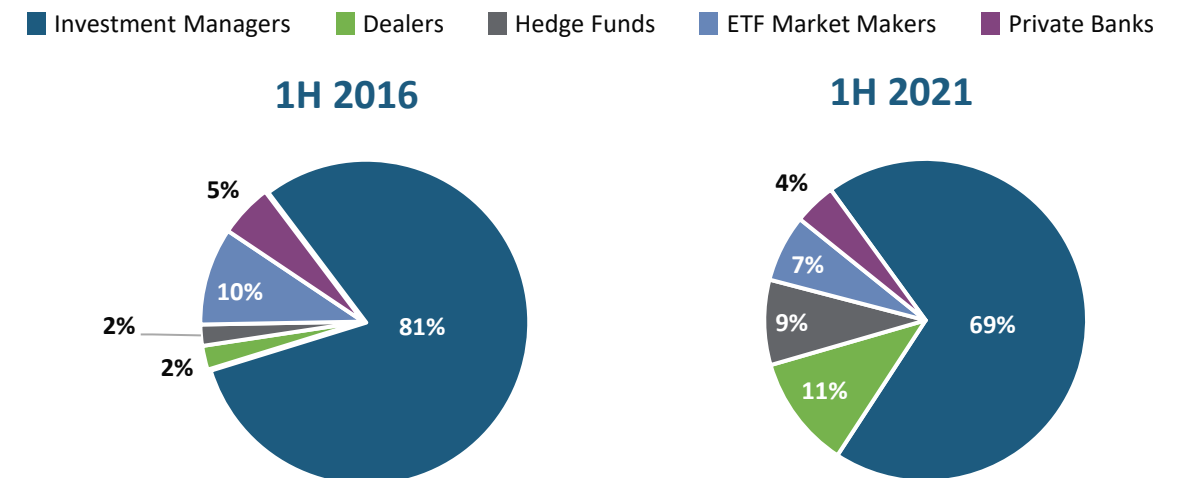
## TOTAL ACTIVE CLIENT FIRMS BY PRODUCT



## DEALER RFQ VOLUME



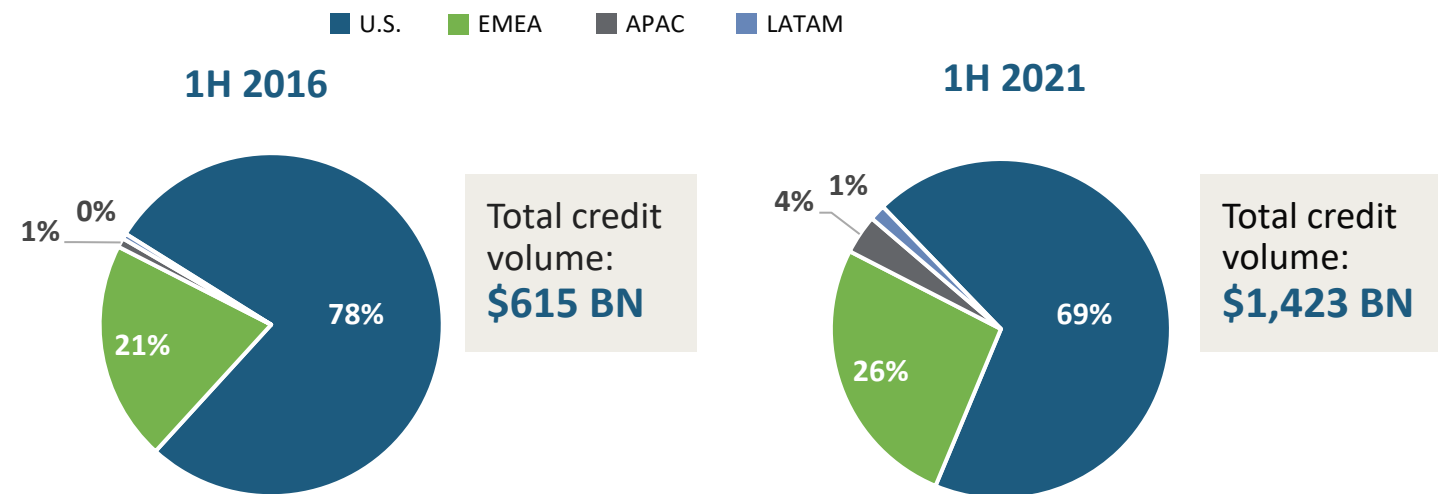
## GROWING CLIENT SEGMENT DIVERSIFICATION



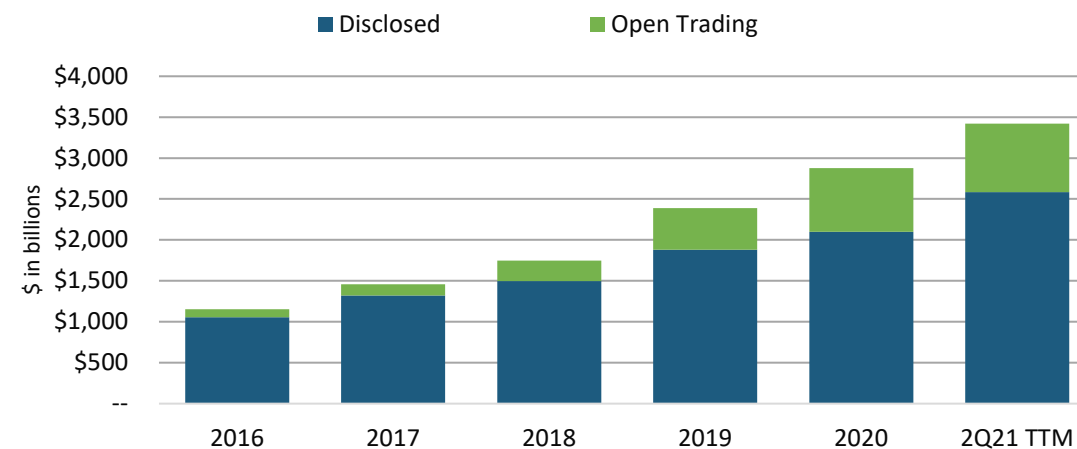
# EMEA & APAC have experienced rapid client growth over the last five years

- Significant growth in EMEA and APAC average daily volume **with a 26% compound annual growth between 2016 and 2020**
- Open Trading has gained significant traction in EMEA and APAC **with a 68% compound annual growth between 2016 and 2020**
- EMEA and APAC Dealer RFQ is driving a significant amount of growth with **nearly \$6 billion traded in 1H 2021**
- EMEA and APAC combined **dealer network almost doubled** from 1H 2016 to 1H 2021
- **We have become more sticky to clients. 300+ more clients** trading 3 or more products in 1H 2021 vs 1H 2016

INTERNATIONAL DIVERSIFICATION – TOTAL CREDIT VOLUME BY REGION



EMEA & APAC AVERAGE DAILY VOLUME

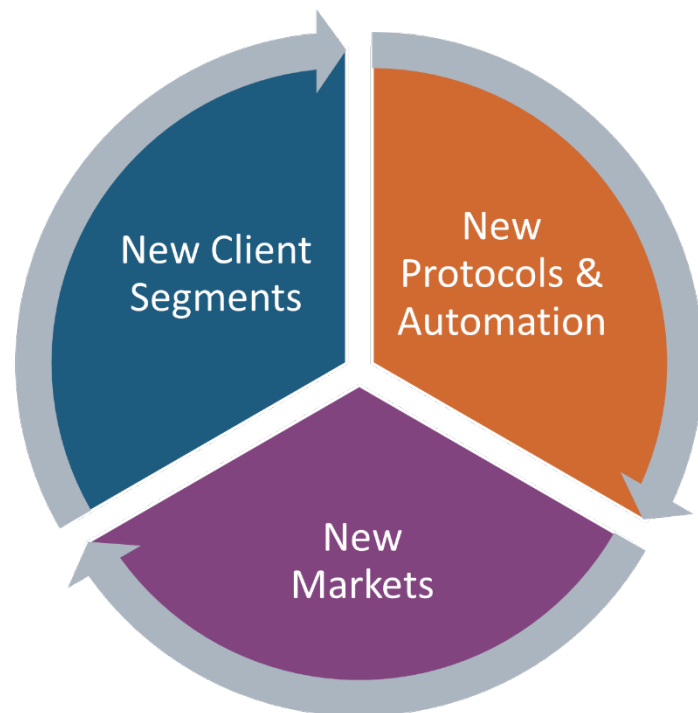


# APAC provides a long runway of growth opportunity

- APAC volume growth up nearly **40% year-over-year**, building on an existing record year in 2020
- Regional client / dealer mix continues to grow. Local markets now around **50%** of total Asia volume
- Shifting investor demographics and trading behaviors offer **big opportunity**



## Drivers for Success



### New markets joining global network

- Global overseas investment in markets such as China set for significant growth

### Regional diversification and new client segments

- Regional private banks
- Hedges funds, regional lifers, central banks
- Dealer participation growing fast – Dealer RFQ up over 100% YOY.
- Already seeing significant client growth in Japan, Australia, Taiwan

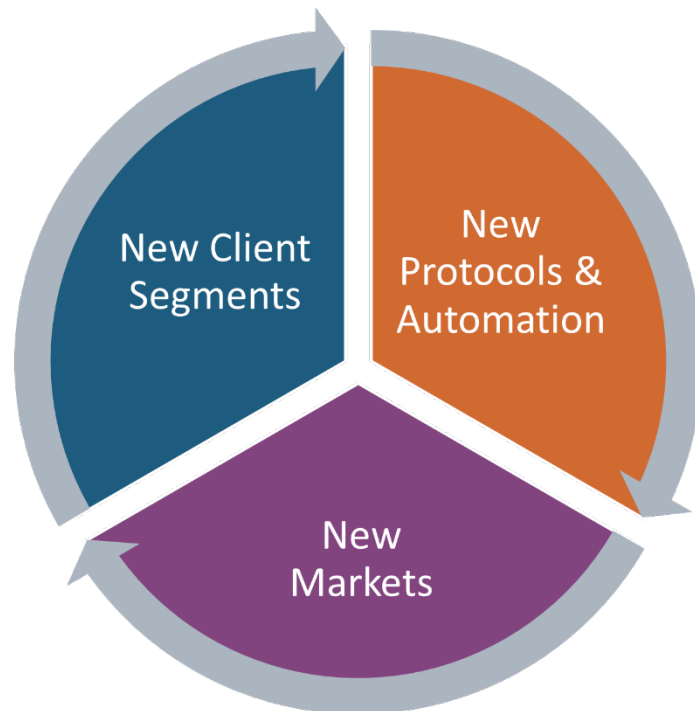
### Protocol innovation and automation

- Open Trading liquidity continues to be a big USP and driver of new client volumes
- Protocols such as RFM becoming more embedded, driving larger blocks
- Scheduled RFQ will help drive up volumes for U.S. Credit etc.
- Increased data availability & quality across Asia credit

# The world's best EM trading platform<sup>1</sup>

- Emerging Markets ADV up over **15% YOY**, having hit several record months in 2020 / 2021
- Market share continues to grow with onshore clients and local markets making up a significant portion of growth

## Drivers for Success



## Protocol innovation & diversification

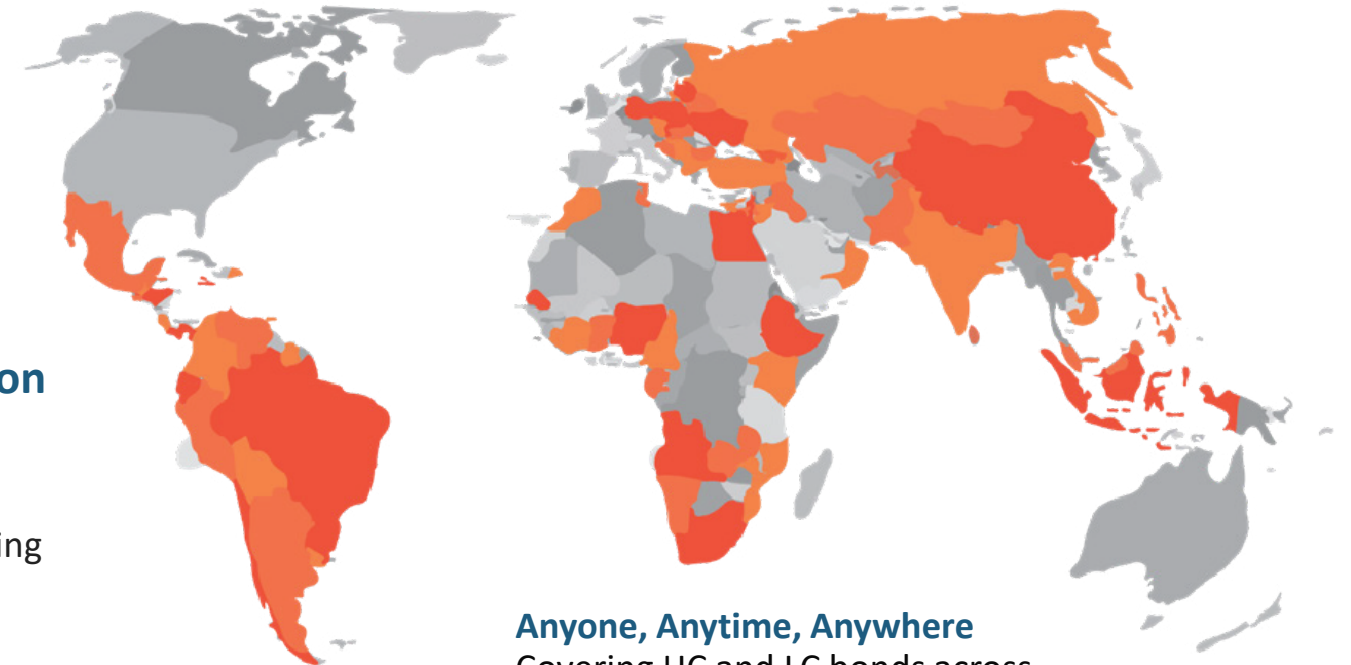
- Portfolio Trading
- Auto-X and EMS integration
- Request-for-Market (RFM) and block trading
- Switch and Curve Trading
- Mid-X

## Liquidity Pool Expansion

- New markets aligned to index inclusion
- Frontier markets
- Local currency and onshore liquidity expansion

## Enhanced data & execution efficiency

- Deeper pre-trade price transparency



**Anyone, Anytime, Anywhere**  
Covering HC and LC bonds across major EM indices

1. as voted for by clients in the 2020 Global Capital Bond Awards.



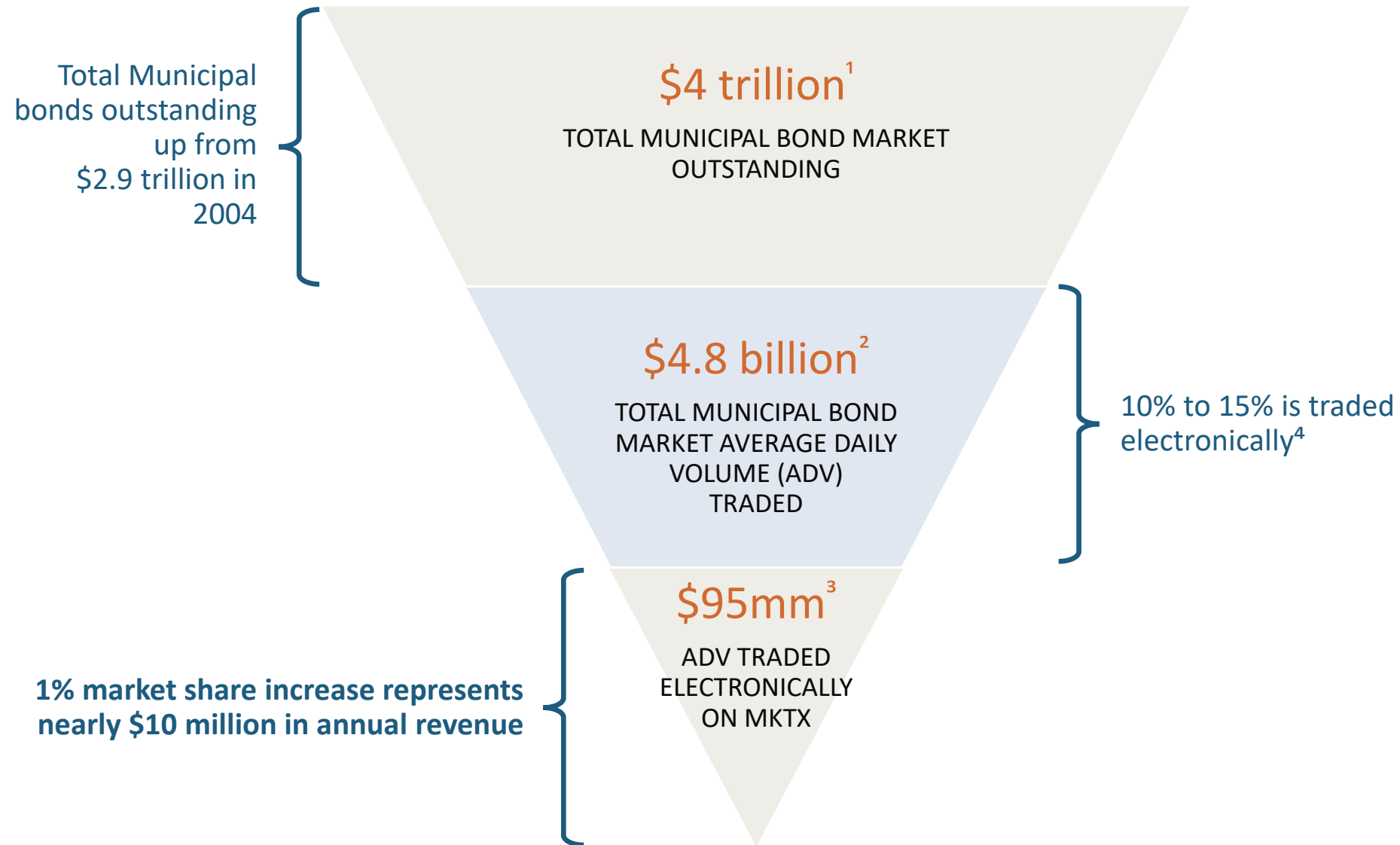


# New Products

Chris Concannon, *President and Chief Operating Officer*

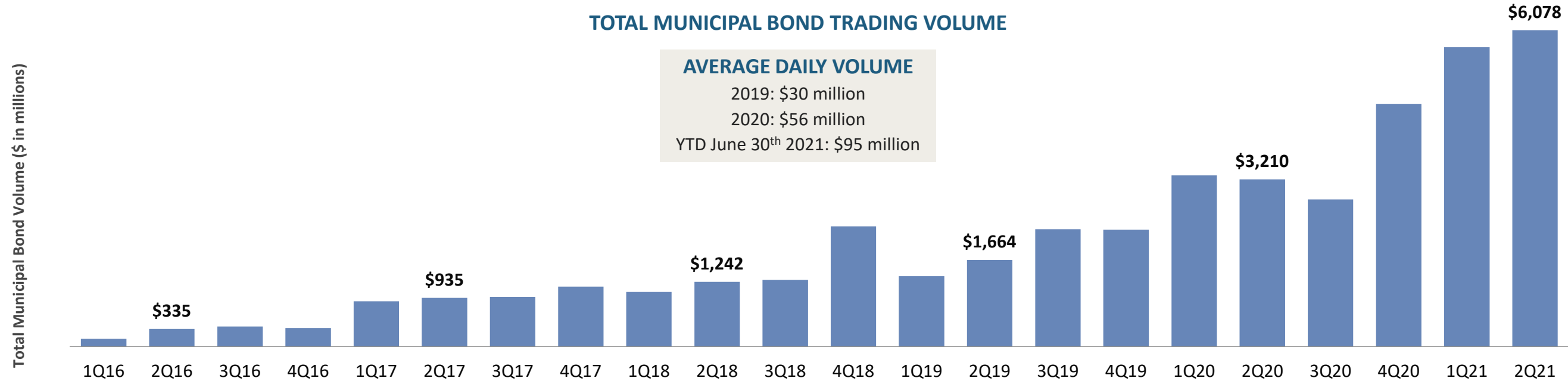
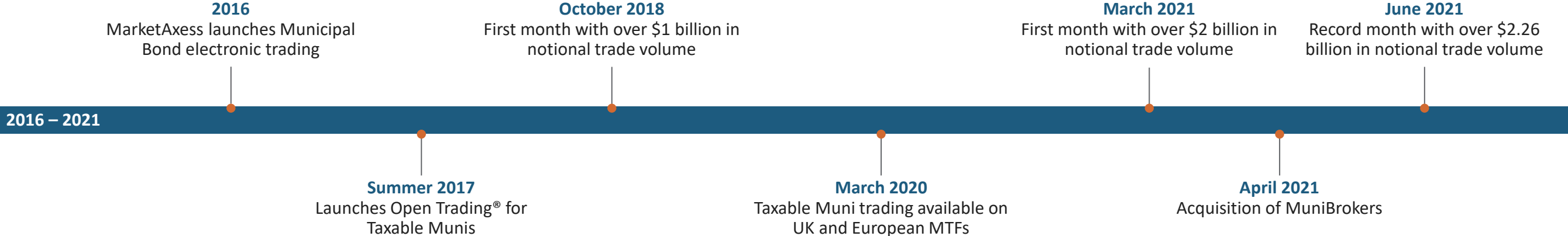
Nichola Hunter, *Head of Rates*

# We are driving innovation and electronification of the Municipal bond market



1. SIFMA as of 2Q 2021.  
2. June 30th, 2021 year-to-date municipal bond market volume.  
3. June 30th, 2021 year-to-date MarketAxess traded volume; Excludes volume reported through Munibrokers.  
4. Greenwich Associates, The Modernization of Municipal Bond Trading, May 2019. MarketAxess is inclusive of Munibrokers.

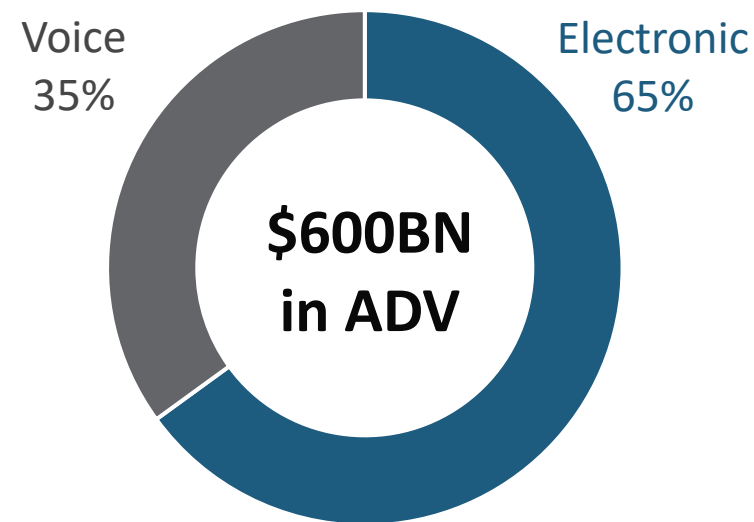
# Evolution of the institutional municipal bond market



# Global Rates: Large opportunity for revenue growth by establishing the first successful all-to-all trading venue

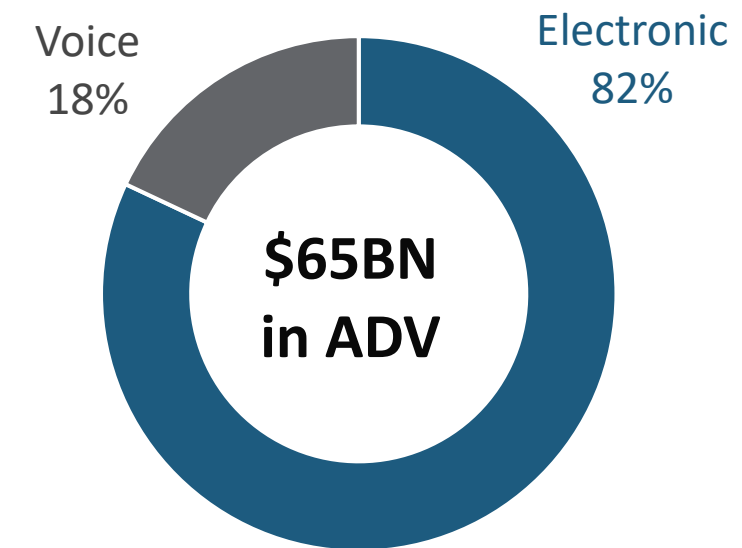
## US TREASURY OPPORTUNITY

- U.S. Treasuries trade in excess of **\$600 billion per day** leveraging multiple protocols, across multiple time zones, geographies and trading venues
- Following the liquidity issues early in the pandemic, heighten market structure scrutiny creates opportunities which will drive innovation and change



## EUROPEAN GOVERNMENT BONDS OPPORTUNITY

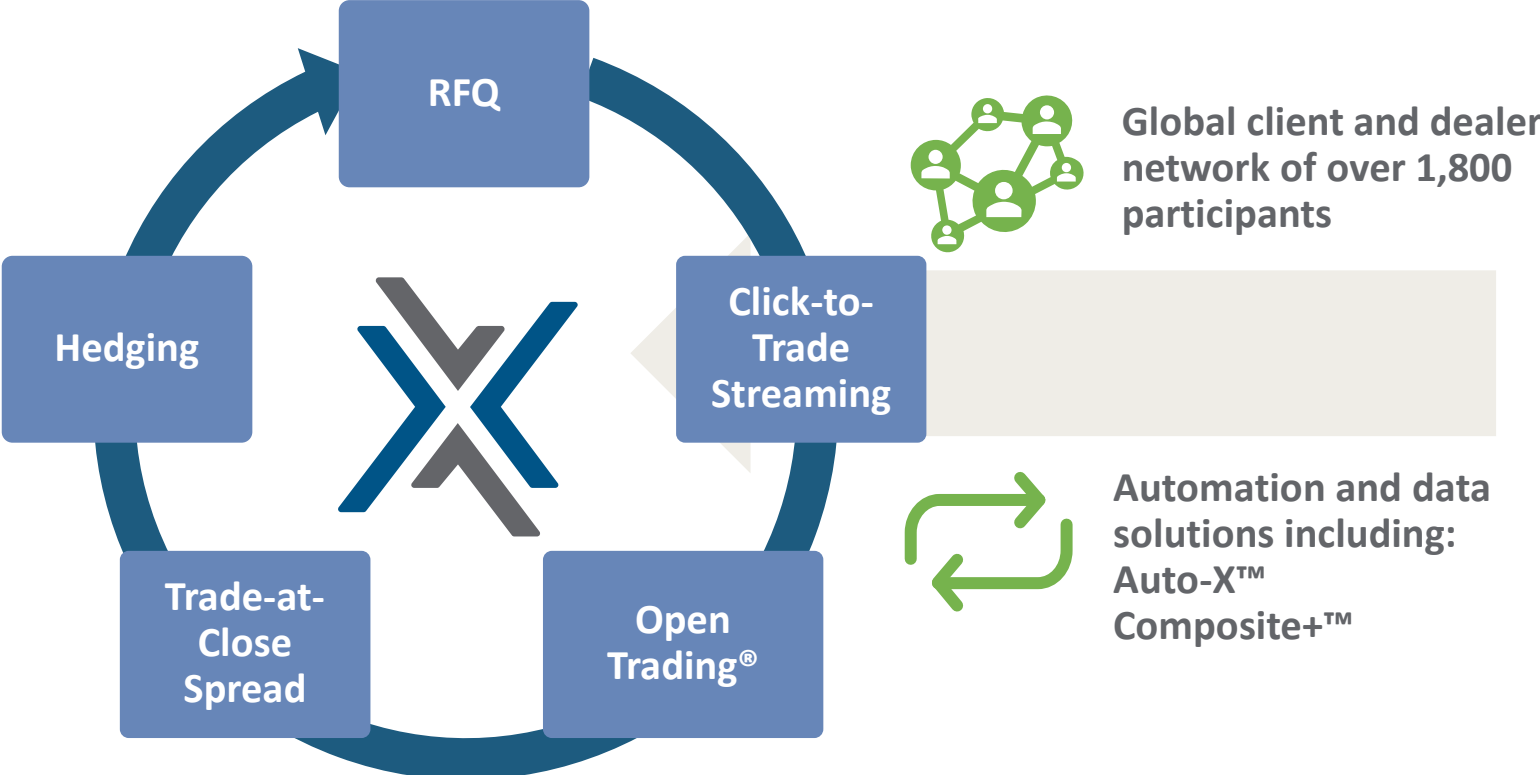
- EGBs trade in excess of **\$65 billion per day** with France, Germany and Italy the most actively traded of issues
- Automation features heavily in the client workflow with increasing volumes executed via algos & low-touch workflows



1. Electronic Percentage of the Total Market calculated by Greenwich Associates.

# Full-suite of solutions for the everchanging global rates market

## GLOBAL RATES EXECUTION



## MARKET STRUCTURE EVOLUTION (High-Level Group of 30 Recommendations)

1. Increased Transparency
2. Market regulation
3. Liquidity Facilities
4. Central Clearing
5. Prudential regulation of dealers

***"Other possible avenues to explore include the potential for wider access to platforms that promote forms of "all to all" trading....."***  
***Lael Brainard - Fed Reserve Board of Governors***

# Ongoing commitment to corporate responsibility

## OUR FOUR PILLARS OF CORPORATE CITIZENSHIP



An enduring commitment to high standards of governance



Helping communities become more resilient



Building a strong, diverse workforce



Adopting sound sustainability practices across our business operations

## KEY ONGOING INITIATIVES



In 2020, MarketAxess signed the UN Women's Empowerment Principles (WEPs), reflecting our commitment to advance gender equality in our workplace, marketplace, and our community



Through our "Trading for Trees" program, MarketAxess has planted over 130,000 trees globally during 2020



During the pandemic in 2020, the MarketAxess Charitable Foundation partnered with three food rescue organizations to help bring meals to those in need in our local communities and with World Central Kitchen to feed front-line workers

# Supporting our clients ESG objectives through an integrated product offering

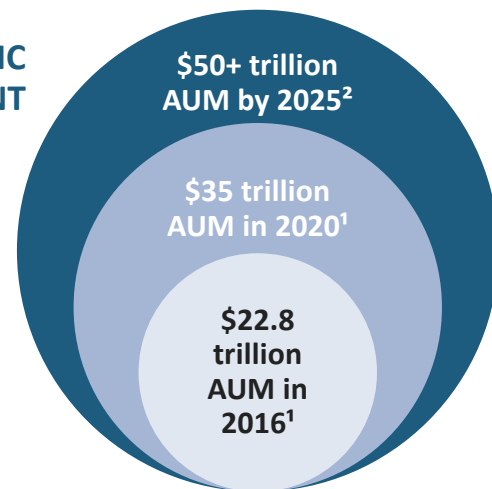
## ESG INVESTING IS TRANSFORMING THE GLOBAL MARKET

- ESG investing has become a large part of the global assets under management with **over \$35 trillion in 2020**, up from \$23 trillion in 2016<sup>1</sup>
- ESG AUM is currently projected to account for **one third of all global assets under management** by 2025<sup>2</sup>
- Firms are increasingly adopting ESG mandates in their investment process
  - Signatories of the UN-supported Principles for Responsible Investment has grown from 1,050 to almost 2,400 funds
  - This group controls a staggering \$86 trillion in total capital<sup>3</sup>

## HOW MARKETAXESS HELPS CLIENTS MEET THEIR ESG NEEDS

- On a commercial level, we offer two ESG-integrated products on our platform: Green bonds through our **Trading for Trees** program, and the newly launched **Diversity Dealer Initiative**
- In response to investor mandates, MKTX launched the Diversity Dealer Initiative to enable buy side firms to more easily trade with minority-, women- and veteran-owned broker dealers, while still achieving best execution
- Through Trading for Trees, MKTX partners with One Tree Planted to plant five trees for every \$1mm in green bonds traded on the platform

### GLOBAL ESG SPECIFIC ASSETS UNDER MANAGEMENT



### TRADING FOR TREES: FULL YEAR 2020 RESULTS



1. Global Sustainable Investment Association, Global Sustainable Investment Review 2020.  
 2. Bloomberg Intelligence, <https://www.bloomberg.com/professional/blog/esg-assets-may-hit-53-trillion-by-2025-a-third-of-global-aum/>.  
 3. Bain's 2020 Global Private Equity Report.

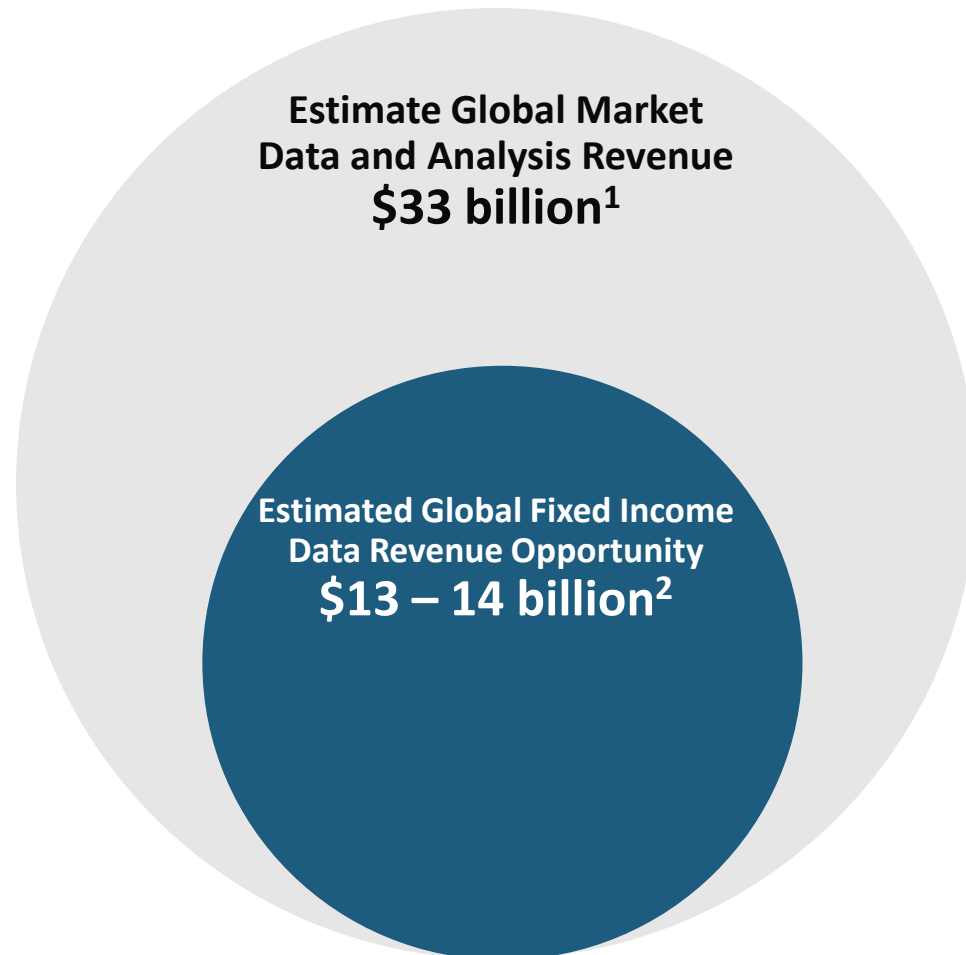
# Data

Chris Concannon, *President and Chief Operating Officer*  
David Krein, *Global Head of Research and Data*



# Global Market Data Revenue Opportunity

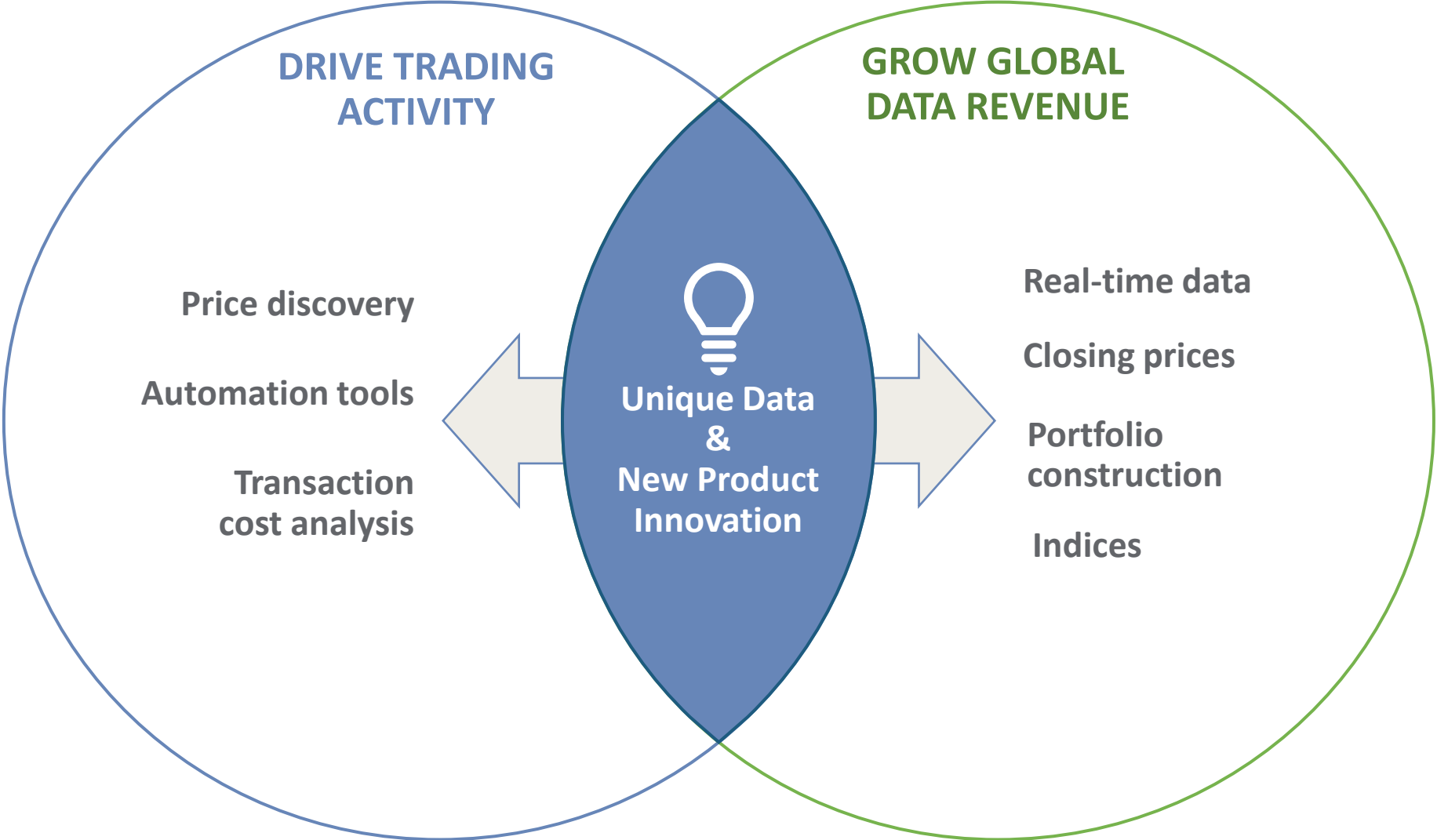
## ESTIMATED GLOBAL DATA REVENUE OPPORTUNITY



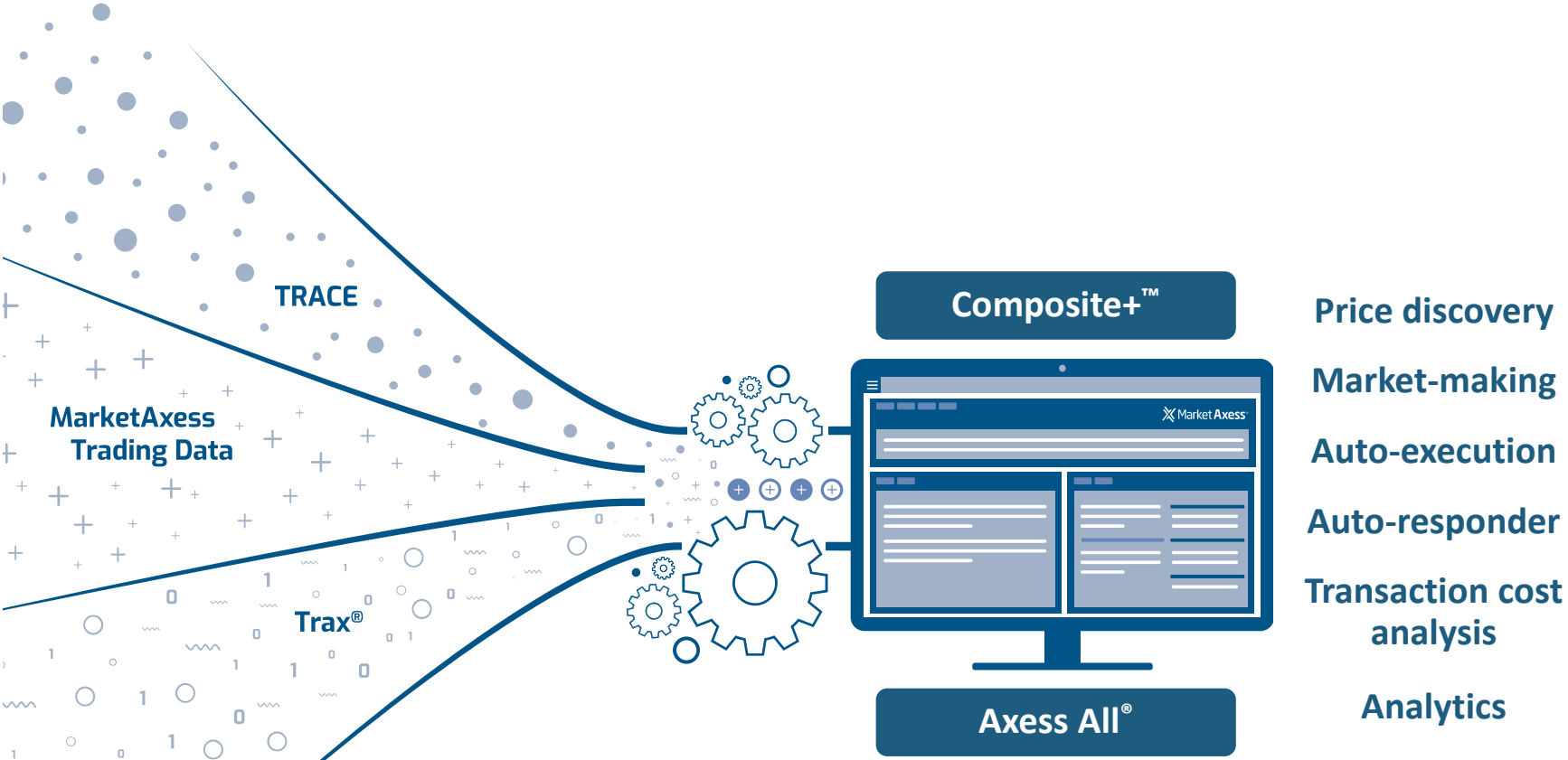
- The estimated global market data and analysis spend grew 5.9% in 2020<sup>1</sup>
- The global fixed income data revenue opportunity is estimated to be \$13-\$14 billion<sup>2</sup>
- **Opportunities to grow our data revenue in new areas include:**
  - Real-time pricing data
  - Middle and back-office data
  - End-of-day portfolio valuation data
  - Portfolio and index construction data
  - Robust analytics

1. Burton-Taylor Financial Market Data/Analysis Global Share & Segment Sizing 2020  
2. Burton-Taylor Financial Market Data and Analysis, MarketAxess Estimates

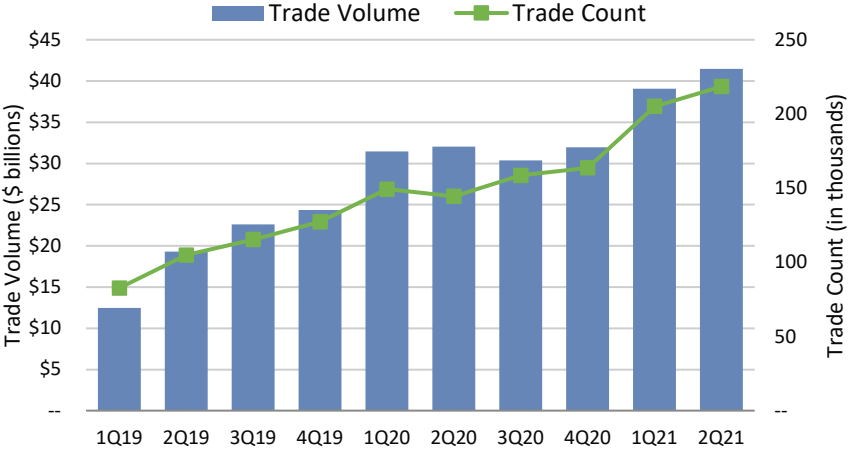
# Our 2-part data strategy focuses on growth, both in trading activity and data revenue



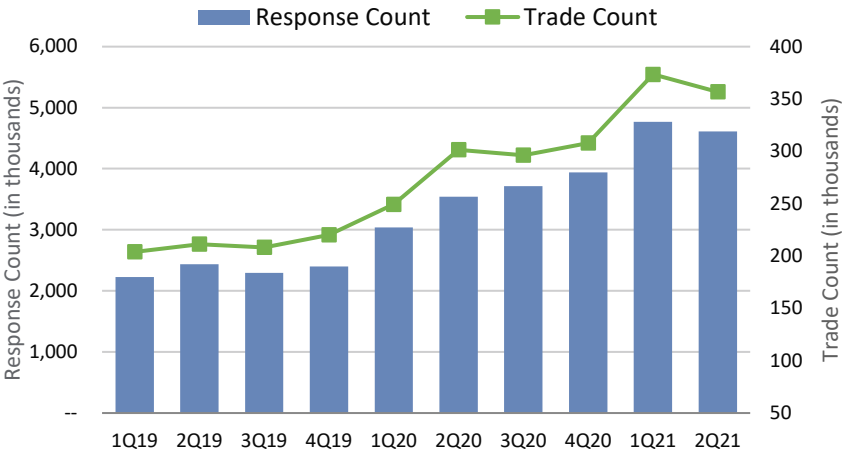
# Using data to drive trading activity on our platform



## AUTO-X TRADE VOLUME AND COUNT



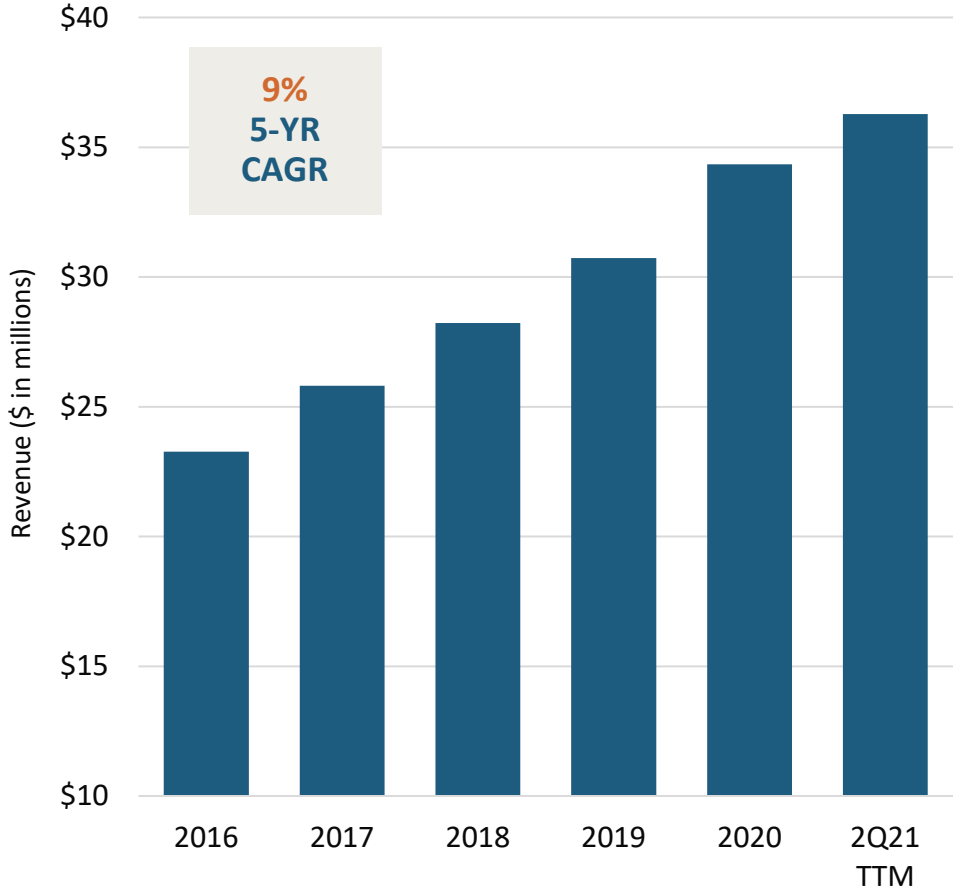
## TOTAL ALGO TRADES & RESPONSES<sup>1</sup>



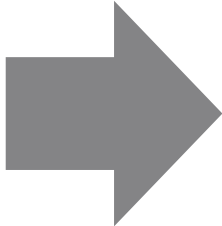
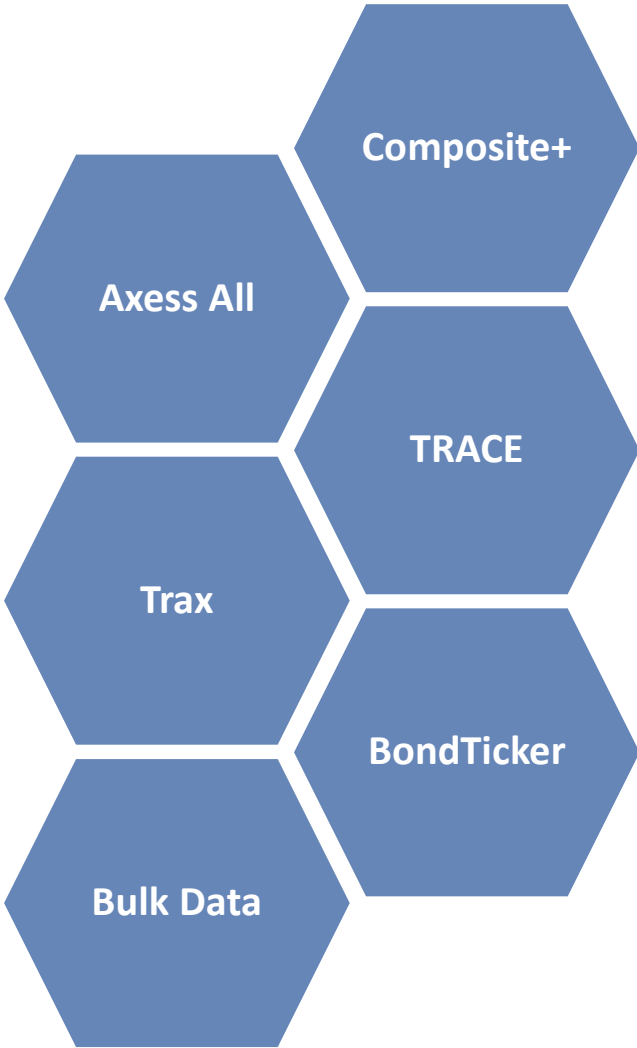
1. Algorithmic trades for U.S. high-grade and U.S. high-yield spread based trades only

# Global data revenue growth

## INFORMATION SERVICES REVENUE



## CURRENT PRODUCT SUITE



## OPPORTUNITY TO GROW DATA REVENUE

- REAL-TIME PRICING DATA
- MIDDLE AND BACK-OFFICE USES
- PORTFOLIO AND INDEX VALUATION & CONSTRUCTION
- ANALYTICAL APPLICATIONS

# Composite+™

**90%**

global credit  
market coverage

**35k**

bonds with a price  
generated per day

**30mm**

level generated  
per day

THE MOST ACCURATE AND VALUABLE PRICING SOURCE AVAILABLE



**Launched May 2017**

- U.S. Corporates

**Consistently expanding  
product coverage**

- Europe
- Emerging Markets
- EGBs, SSA, Non-Core

**Increasing depth of  
coverage**

- Composite+  
Extended Markets



**waters**

Rankings Winner 2020

Best Artificial Intelligence  
Technology Provider  
MarketAxess



**Buy-Side Technology  
Awards Winner 2020**

Best buy-side AI (artificial intelligence)  
platform or tool  
MarketAxess



2021 WINNER  
BEST TRADING  
ANALYTICS TOOL  
MARKETAXESS

# Portfolio Construction and Indices: Creating opportunity

- **We are near the center of the index and asset management ecosystem**
  - Managers, issuers, and ETF APs all trade here
- **We've seen specific challenges related to global corporates**
  - Poor relationship between a bond's inclusion and its tradability
  - Minimizing slippage in on-demand trading of bonds and baskets
- **Our data can be used to better define "liquid" instruments**
  - Focus on accurate, real-time pricing and demonstrable liquidity
  - Helps resolve these pressing issues and enables further AUM growth, especially in the ETF space
- **The approach will be expanded geographically**
  - Begin with US corporates and move towards Europe and Emerging Markets, but also across specialty and custom designs; e.g. ESG

Solving portfolio construction and index industry challenges through **data innovation** creates a virtuous circle that further concentrates trading activity within MarketAxess. How?





# New Protocols

Rich Schiffman, *Head of Open Trading*  
Chiqui Matthew, *Sales Manager*

## What is Open Trading®?

Open Trading provides unparalleled levels of credit market liquidity and **significant transaction costs savings** by seamlessly connecting global participants in an all-to-all trading marketplace

No matter the size, no matter the trading strategy, Open Trading supports **both investors and dealers** with award-winning technology



Trading with  
anonymity, without  
counterparty  
restrictions



Automation  
opportunities for  
market making



“Around the clock”  
global trading in  
fixed income



Superior data to  
support price making



# Our network provides access to a diverse and unmatched global liquidity pool

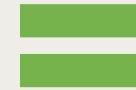
## A POWERFUL NETWORK

Over 1,800 investor and broker-dealer firms

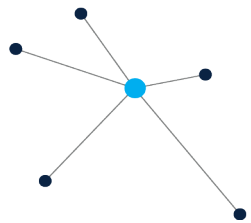


## ADVANCED FEATURES

Cutting-edge technology



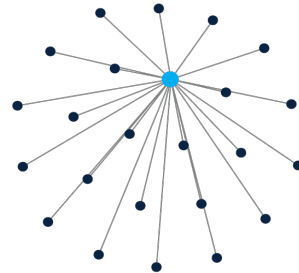
**Greater source of global liquidity and cost savings**



### Pre-2000

#### One to few

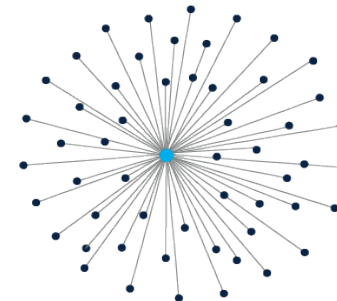
One investor (center blue) can trade with a few dealers over the phone



### 2007

#### One to more

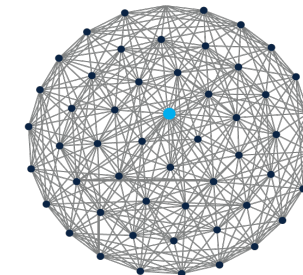
One investor can trade with up to 30 dealers on MarketAxess



### Financial crisis

#### One to many

We expanded our liquidity pool to include over 90 major and regional dealers



### Today

#### All-to-all

**Open Trading** allows global market participants to trade with over 1,800 investor and dealer firms

# Significant investment in new trading protocols

**X** Market **Axess**<sup>®</sup>  
Open Trading<sup>®</sup>  
Liquidity Pool

Request-for-Quote  
(RFQ)

Portfolio Trading

Streaming  
Dealer Direct & Public Axes

Central Limit Order Book  
(CLOB)  
Live Markets

Matching Sessions  
Mid-X

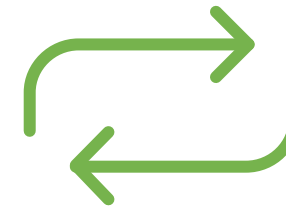
## ALL PROTOCOLS POWERED BY



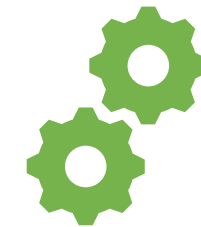
GLOBAL CLIENT &  
DEALER NETWORK



MARKET DATA

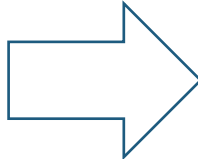


STRAIGHT-THROUGH  
PROCESSING

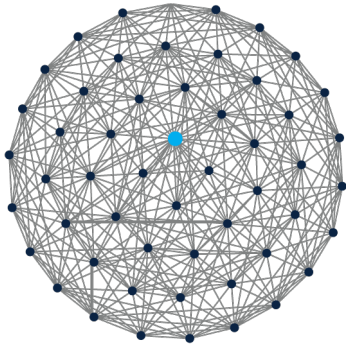
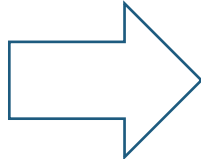


AUTOMATION  
SERVICES

# Diversity Dealer Initiative: Forging connections using the MKTX network



MINORITY-, WOMEN- AND VETERAN- OWNED BROKER-DEALERS



OPEN TRADING LIQUIDITY POOL

### BENEFITS

- Best execution achieved on every trade
- Implemented at the firm level; no change to trader’s workflow; no additional effort required
- Account – dealer restrictions from order management system are maintained
- Automatic round-robin selection of the diversity dealers to generate a specified amount of total activity

### BENEFITS

- Diversity dealers participate in the information flow they wouldn’t typically see
- Average trade size is 2X the platform value
- Dealers receive valuable trade information
- Dealers are compensated and are in a better position to grow their business

### BENEFITS

- Opportunity = Access
- Helping our clients to achieve their mandates and broaden their connectivity with diversity brokers
- A win-win for both clients and dealers = a win-win for MarketAxess

# Diversity Dealer Initiative

## HOW DOES IT WORK?

- **Meets the needs of asset managers** focused on diversifying their counterparties
- **Clients specify a list of diversity dealers** to distribute business through using a round-robin methodology and the power of our anonymous all-to-all Open Trading network
- **The round-robin rotates between dealers** to distribute traded volume as equally as possible
- **Diversity Dealers gain opportunity** to participate in institutional flow while helping our investor clients meet their diversity distribution goals

## OUR PROGRESS SO FAR

- **Over \$3.0 billion traded** through Diversity Dealers since the program's launch in November 2020
- **1,400+ trades** executed
- **24 live buy-side clients**
- **6 Diversity Dealers currently live:** Loop, Cabrera, C.L. King, Samuel Ramirez, Seelaus, Siebert

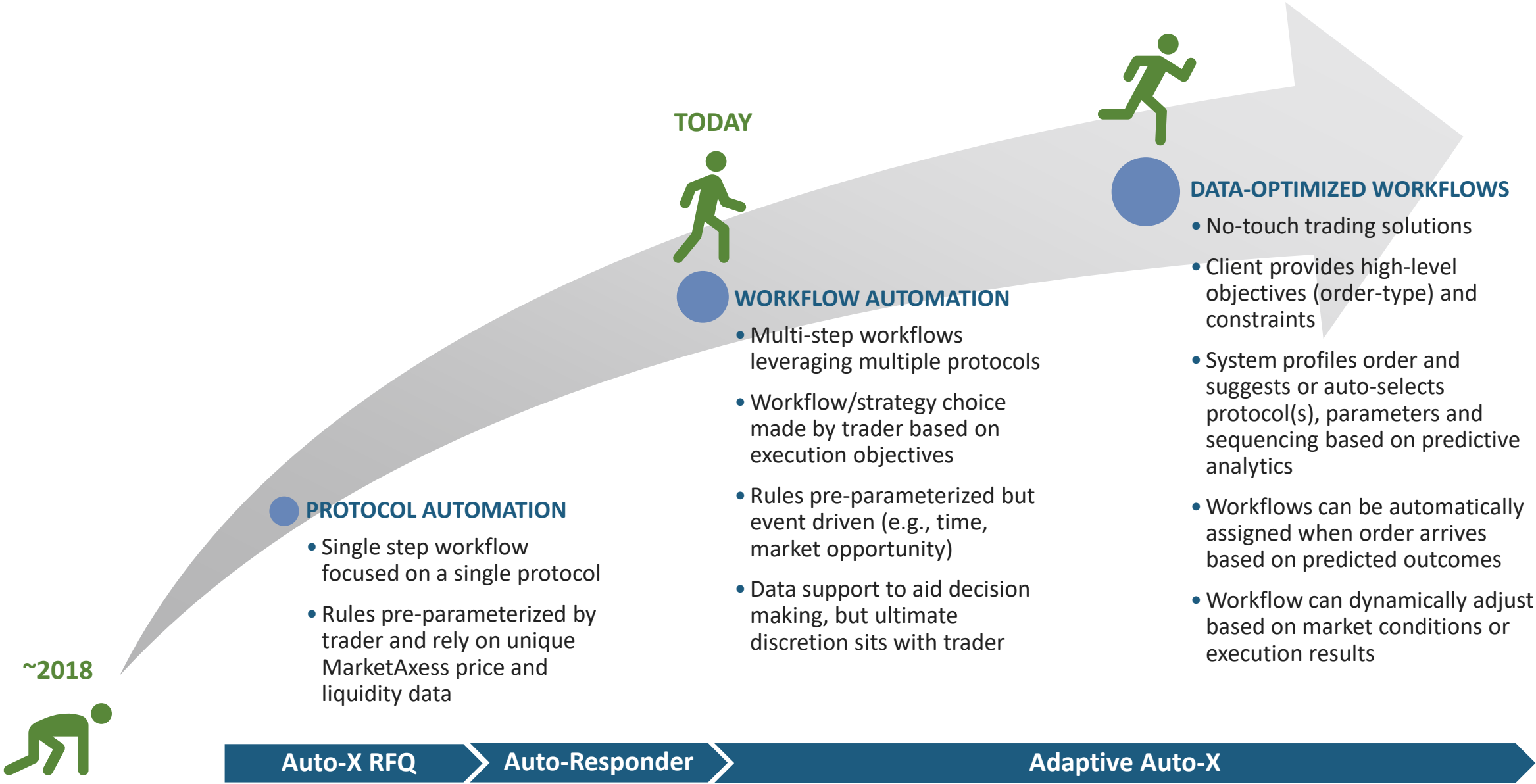
## The Network Effect

Using the most powerful network in the market to empower minority and women owned broker dealers.

# Automation

Gareth Coltman, *Global Head of Trading Automation*

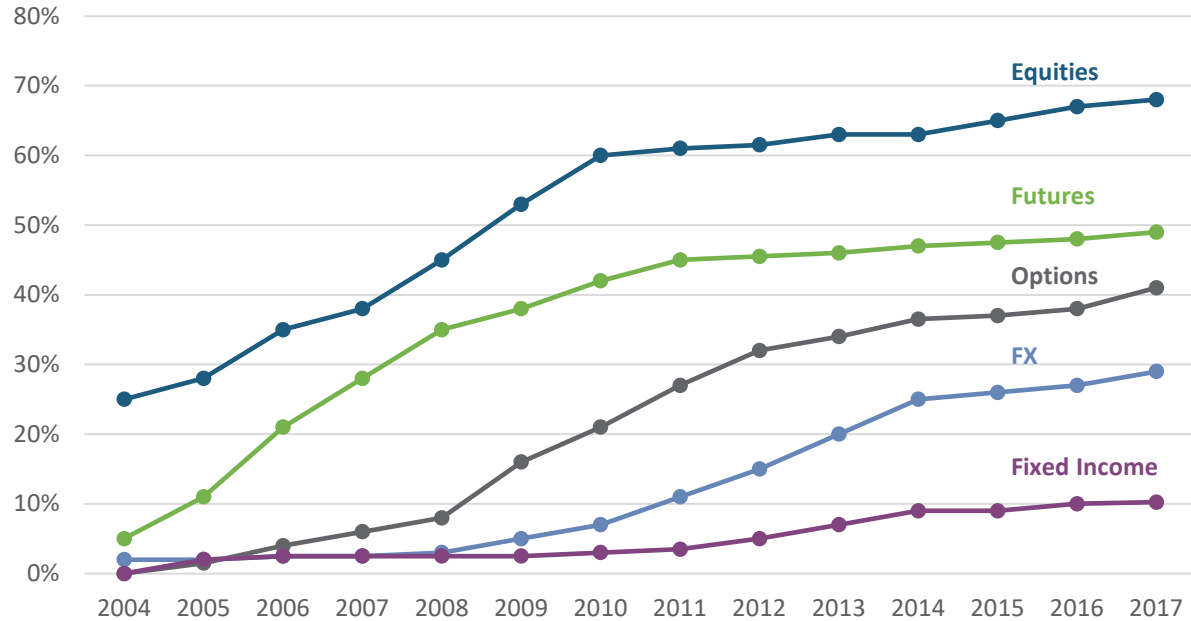
# MarketAxess fixed income trading automation solutions are evolving



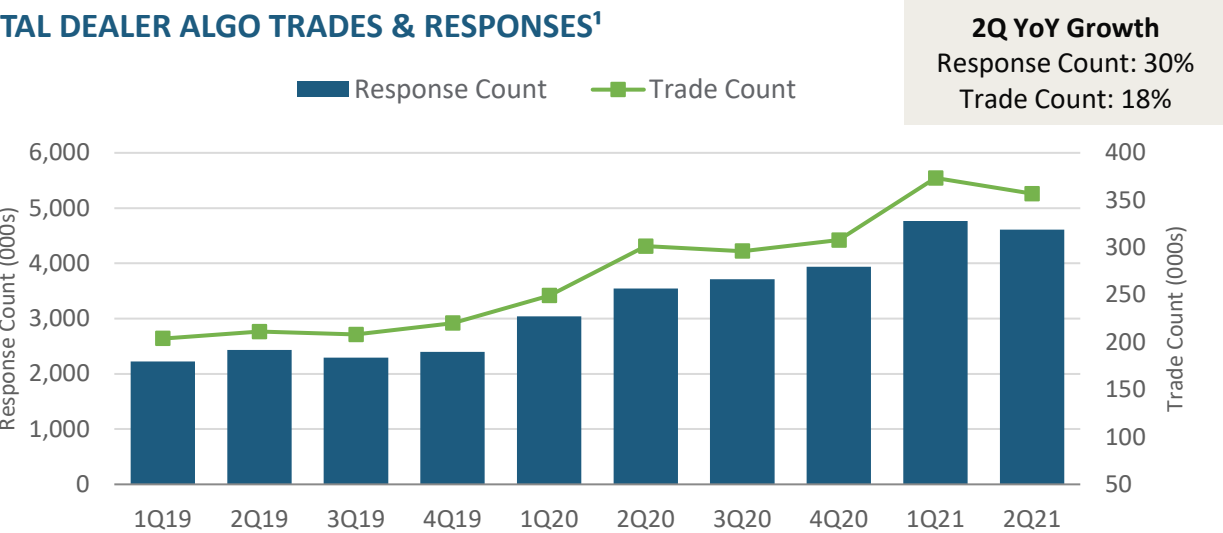
# Market structure change is fueling trading automation in fixed income

- Automated trading in fixed income has lagged, historically, behind other markets due to opaque liquidity and price discovery
- Growth of passive products has increased cost pressure, market velocity and demand for efficiency
- Data and technology enablers for automation, such as AI pricing, have emerged and created market standards
- Today, large asset managers are automating more than a quarter of all their activity on MarketAxess

MARKET SHARE OF ALGORITHMIC TRADING BY ASSET CLASS<sup>2</sup>



TOTAL DEALER ALGO TRADES & RESPONSES<sup>1</sup>



- Large dealers and professional firms have begun to make significant investment in automated market-making solutions
- Both buy- and sell-side firms are using automation to access Open Trading liquidity pools and protocols

1. Algorithmic trades for U.S. high-grade and U.S. high-yield spread based trades only.  
 2. Source: Goldman Sachs, Aite Group

# Demand for MarketAxess trading automation solutions is growing rapidly

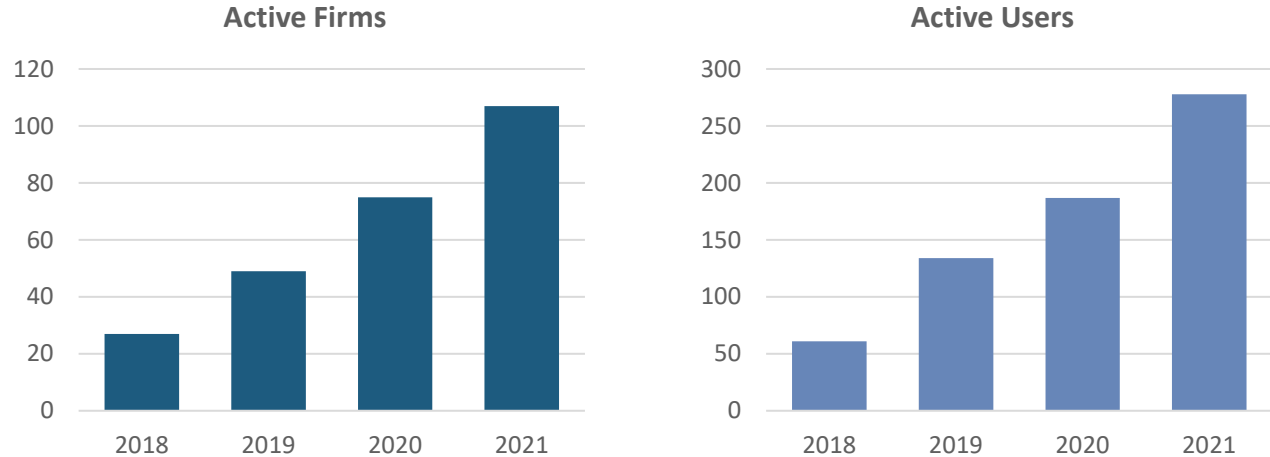
## CLIENT TRADING AUTOMATION OBJECTIVES ARE CLEAR

- Improve operational efficiency and reduce execution costs
- Create and systematize opportunities for price improvement
- Keep up with an increasingly competitive and sophisticated market

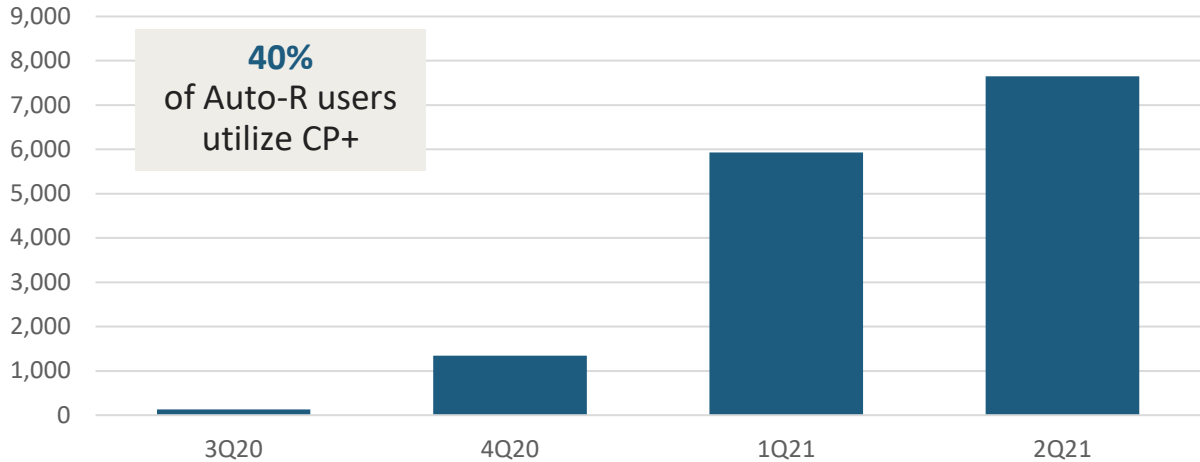
## MARKETAXESS IS UNIQUELY POSITIONED TO MEET THIS DEMAND

- The Open Trading marketplace offers unique opportunities for liquidity discovery, cost saving, and price improvement
- Our pricing & liquidity data powers clients' automation solutions, providing confidence in execution
- Existing integration into client order management systems creates opportunities for frictionless, "no-touch" trading

## ACTIVE FIRMS AND USERS OF MARKETAXESS TRADING AUTOMATION SOLUTIONS



## AUTO RESPONDER RESPONSE COUNT





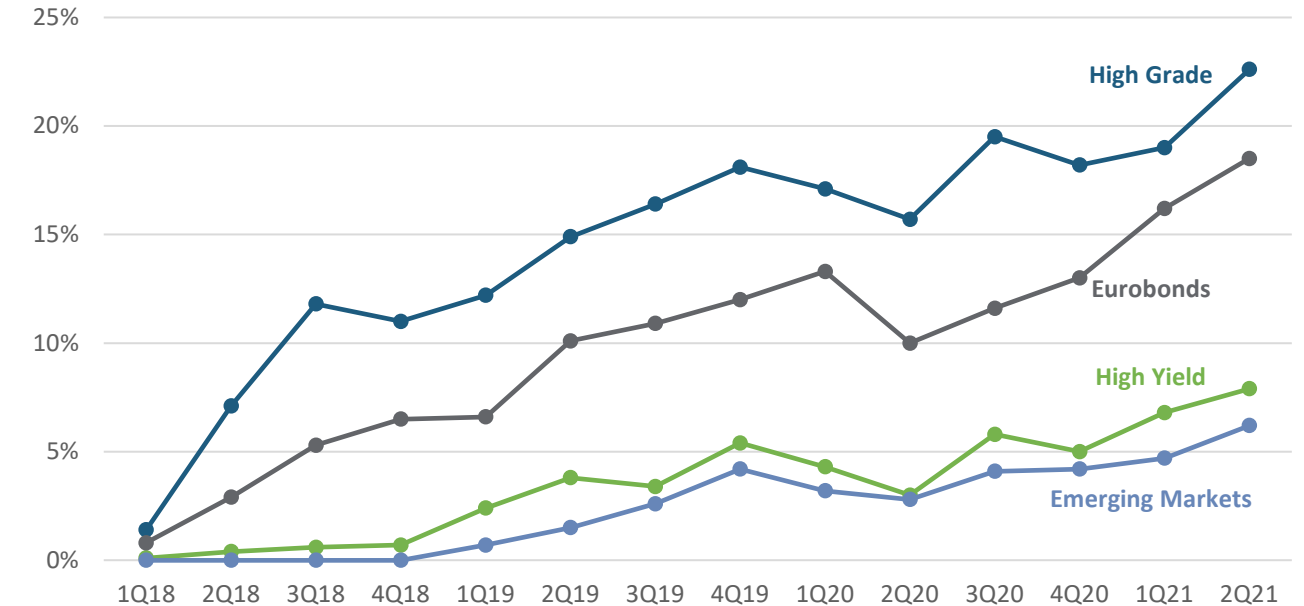
# Our automation solutions: Auto-X™ RFQ

## INCREASE OPERATIONAL EFFICIENCY AND REDUCE EXECUTION COST

Auto-X allows buy-side clients to automate the submission and execution of RFQ orders

- **Approximately 17% of all platform trades** were executed using Auto-X in 2Q21
- **1.7+ million trades and \$300+ billion in volume** since its introduction in 2018
- **Simple, rule-based control of criteria** powered by our award-winning Composite+™ and Relative Liquidity Score analytics
- **Covers all major credit markets**—with EGBs added earlier this year—and expanding to US Treasuries/Rates
- **Fully integrated into our Open Trading marketplace** ensuring clients maximize liquidity even with automating
- **Offers automated counterparty selection** based on indicative and historical data, including Trax® European data
- **Clients are supported with custom performance analysis** to help refine parameters and enhance future gains

## AUTO-X % OF TRADES BY PRODUCT



“*When the curtain comes up on the trading day, what matters is how much time a trader spends on a bond to validate the price—say 30 to 60 seconds. Auto-X RFQ brings that to zero, which is saving multiple weeks of people-hours.* - **Mike Nappi, Eaton Vance**

*The insights and reliability of the data are what make Auto-X so valuable. It's right on the screws.* - **Steve Chylinski, Eagle Asset Management**

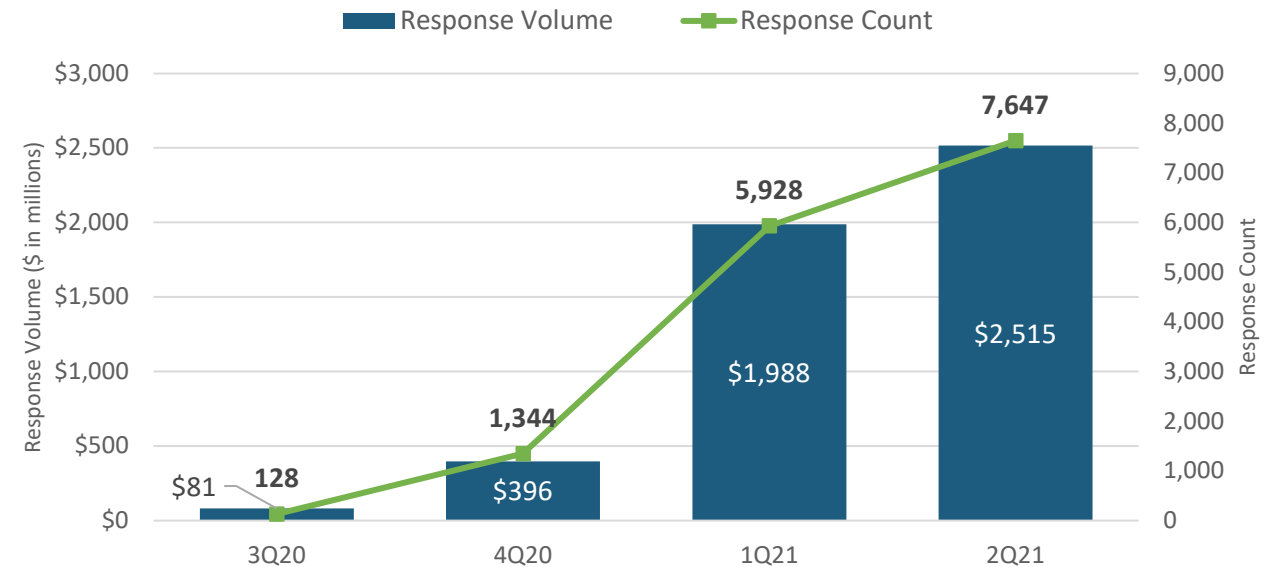
# Our automation solutions: Open Trading® Auto-Responder

## NEVER MISS AN OPPORTUNITY TO CREATE ALPHA AND CAPTURE BID-ASK SPREAD

Auto-Responder allows buy-side clients to respond to inbound Open Trading RFQ opportunities automatically

- **Generated 8,000+ responses and over \$5 billion in response volume** since 2020
- **Minimizes information leakage** whilst ensuring that cost-saving opportunities to capture bid-ask spread are never missed
- **Reduces execution costs** by allowing buy-side firms to avoid crossing spread and provide liquidity
- **Clients have options** to respond using their own levels or by utilizing Composite+ pricing to ensure they remain competitive
- **Offers easy configuration** via the MarketAxess workstation or seamless integration via client Order Management Systems

## AUTO-RESPONDER: RESPONSE VOLUME AND COUNT



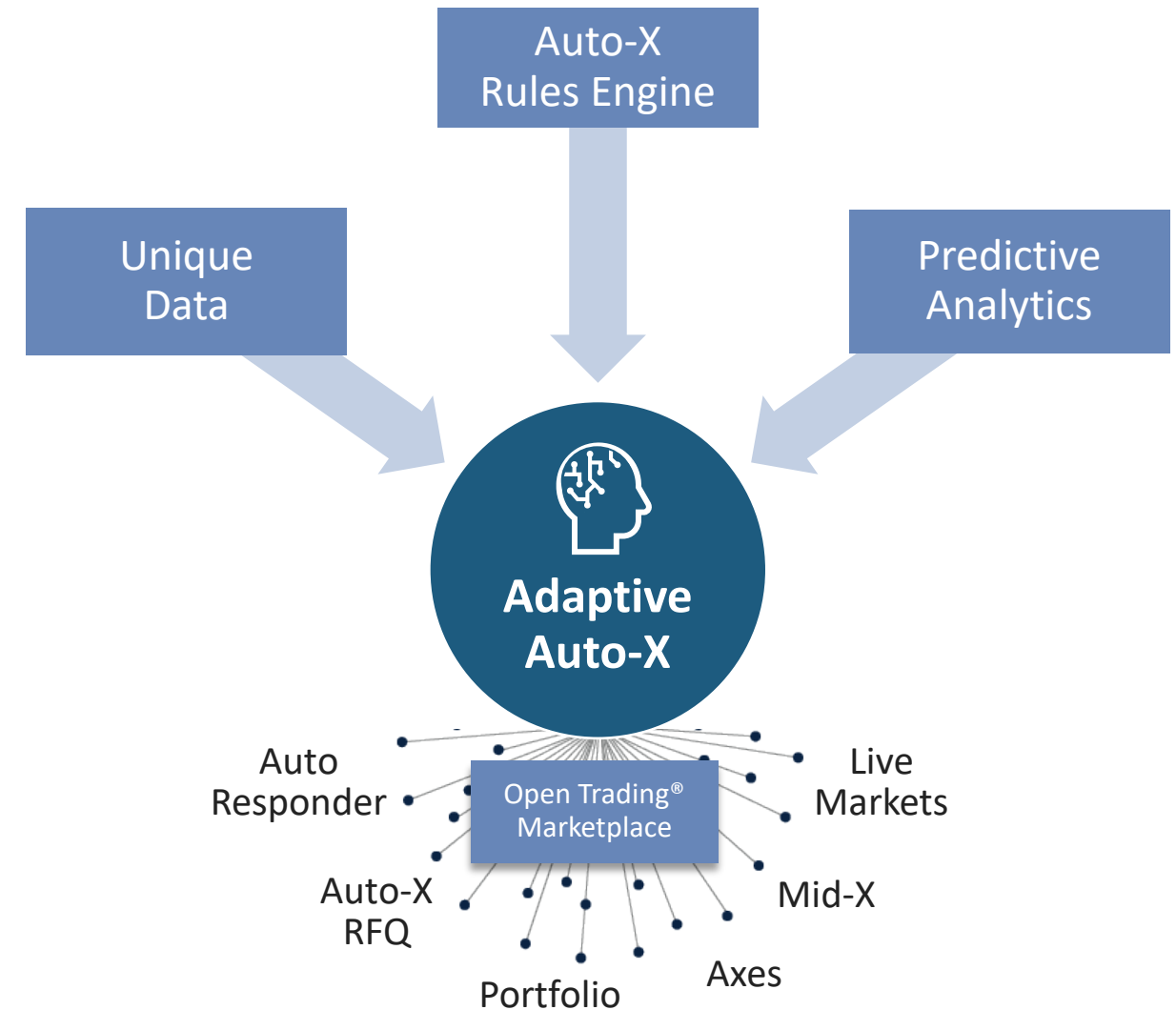
“ ... we’re all seeking ways to maximize liquidity opportunities and minimize transaction costs and this new frontier of automation will be a critical tool. - **Spencer Lee, Agilon Capital** ”

We’re now providing liquidity to the market, rather than just taking it. Auto-Responder allows us to capture spreads through a mechanism that has never been offered to the market. - **Steve Chylinski, Eagle Asset Mgmt**

# The future of MarketAxess trading automation: Adaptive Auto-X

**Adaptive Auto-X will connect our sophisticated rules engine with multiple trading protocols** available via the Open Trading marketplace—allowing clients to move seamlessly throughout the MarketAxess ecosystem

- Clients will be able to automate sophisticated, multi-step, multi-protocol workflows that mirror a traders decision making process today and maximize opportunities for cost saving
- Adaptive Auto-X will provide growth opportunities for MarketAxess and support clients evolving automation needs:
  - **Lowering barriers** to adoption of new Open Trading protocols
  - **Accelerating growth of new product segments** by creating a single, low friction entry point for clients
  - **Facilitating trading of large blocks** and reducing market impact
  - Encouraging clients to **leave the parent order with MarketAxess**
  - **Deeply embedding MarketAxess data and trading solutions** into client and third-party technology infrastructure



# Technology

Nick Themelis, *Chief Information Officer*

Madhu Chalamani, *Chief Technology Officer*

Christine Nolan, *Head of Trading Technologies*

## Our vision

Use a highly efficient and adaptable workforce to deliver products supporting diverse **trading protocols** combined with highly customizable and **automated workflows** augmented with rich **analytics** and **content** delivered through best-in-class **user experience** with impenetrable **security**.

Trading Protocols  
& Workflows

Analytics &  
Automation

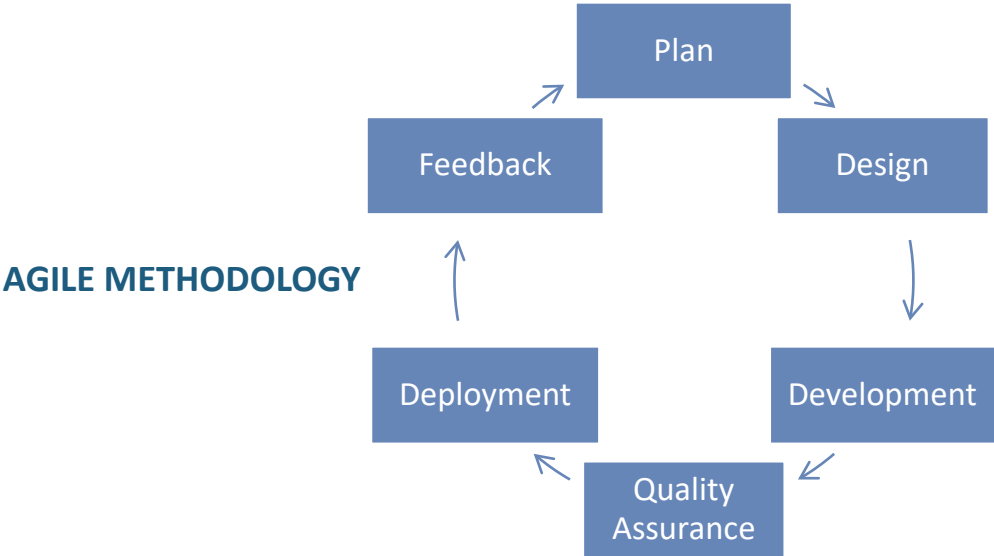
Best in Class  
Trading Experience

Trading  
Content

Digital Workforce

# Driving innovation: The transformation process

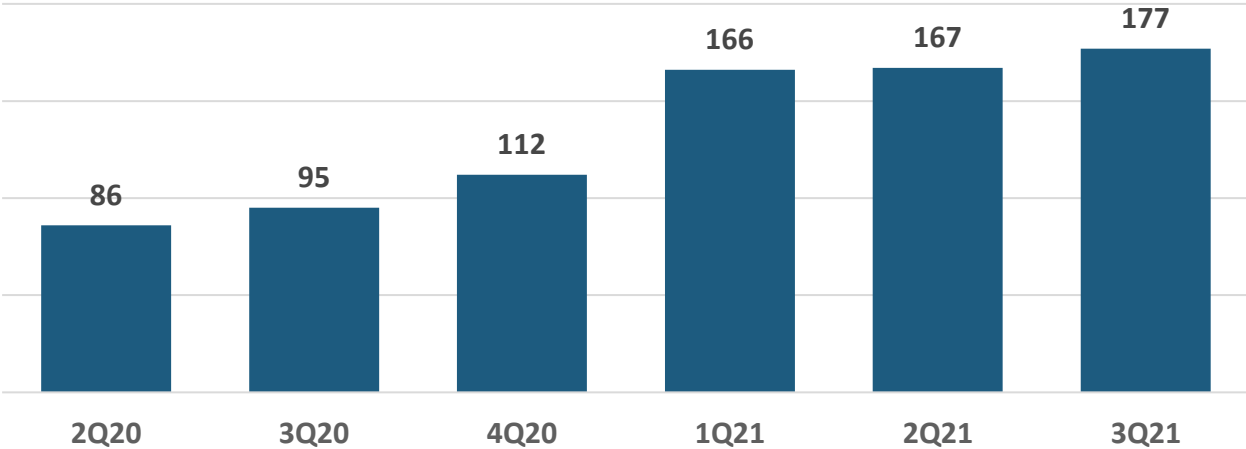
- Transitioned to Agile Methodology in 4Q19
- Monthly releases to production
- More features delivered in every release
- More automated delivery, enabling faster & more reliable releases



## BUSINESS BENEFITS

- **Provides transparency and predictability:** business stakeholders know what to expect and when
- **Increases flexibility:** ability to pivot to market change and/or business priorities
- **Allows greater prioritization:** focus on business value and the customer
- **Shortens time to market:** quicker decisions and product development

## UNIQUE FEATURES DELIVERED



# Defining the trading experience: Modern tech foundation for a sustainable competitive advantage

## DATA

- Data is one of our best strategic assets. Combining trading and post-trade, we have a substantial data footprint
- Our modern data platform allows us to source and use data to bring innovative products to market more quickly and efficiently

## MACHINE LEARNING

- Deeply integrating analytics driven decision support in every aspect of trading workflows
- Our award-winning pricing product – Composite+™ – is fully built using Machine Learning Technologies
- We have built a deep pool of talent dedicated to building and operating machine learning models at scale

## CLOUD

- Fully adopted the cloud
- Many applications including our newest trading protocols, Live Markets and Mid-X, use cloud
- Fully redesigned trading experience being rolled out starting 1Q22

## AUTOMATION

- End-to-end automated software development processes
- Using modern tools like Datadog and Slack, fully automated the monitoring and operations of our systems
- Allowing us to deploy our human capital more efficiently

# Live Markets: A streamlined fixed income central limit order book

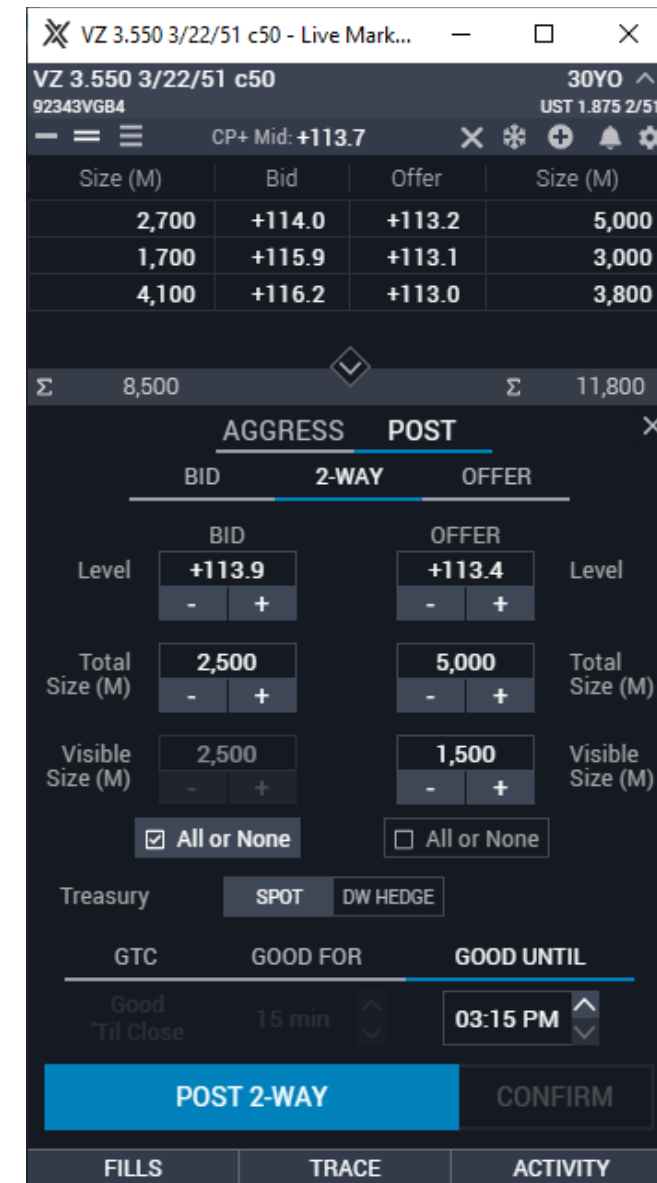
## BENEFITS

**Trade new issues** as either a liquidity provider or liquidity taker

**Access live, executable levels** without last look, providing speed and efficiency

**Access high-quality, execution-ready price discovery**, with integrated benchmarks, from our award-winning Composite+™ pricing engine

**Trade discreetly in larger size** while limiting information leakage





# Mid-X: A powerful liquidity opportunity

- Access network of buy- and sell-side participants to maximize matching opportunities
- Match at more accurate, unbiased mid-price, derived from real, tradeable levels
- Part of a suite of Open Trading<sup>®</sup> protocols, offering a range of trading opportunities
- Periodic sessions to concentrate liquidity

**MID-X** **EUROPEAN PRODUCT**

IOI Phase Order Phase Trade Summary

---

**Trade Summary** Summary of matched trades

Trade Summary	MI FID II			TRADED	BUY	SELL	TOTAL
Ccy	Sz(000s)	Min Sz(000s)	Traded Level	Trade Sz(000s)	Match		
USD	300	300	104.7304	300	Done		
USD	200		106.5912	200	Done		
USD	100		116.8903	100	Done		
USD	100		100.3209	100	Done		
USD	100		106.1412	100	Done		
USD	100		100.268	100	Done		
USD	300		99.817	300	Done		
USD	200	200	96.944	200	Done		
EUR	200		96.5589	200	Done		
GBP	200		103.7241	200	Done		
EUR	400		113.6488	400	Done		
USD	400		147.1058	200	Done - partial fill		
USD	1800		103.4879	200	Done - partial fill		
USD	600		105.3685	80	Done - partial fill		
USD	2200		113.6186	400	Done - partial fill		

**Trade Summary**

	BUY	SELL	TOTAL
TRADED	10,103 (39)	12,856 (33)	22,959 (72)
DNT	35,455 (56)	56,658 (67)	92,113 (123)
ORDERS	57,155 (95)	89,944 (100)	147,099 (195)
PRE-MATCHED	57,755 (97)	89,944 (100)	147,699 (197)
IOI	137,500 (228)	152,480 (226)	289,980 (454)

EU MTF Match with All EXPORT

# Retaining and attracting talent



How do we retain talent in a highly competitive environment?

## INVESTMENT IN OUR EMPLOYEES

### INNOVATION

- Expansion and adoption of new technologies not only advances our platform and offerings but enables us to successfully recruit and develop top talent

### OWNERSHIP

- Our Agile model provides constant feedback from our clients giving our developers more ownership and accountability

### TRAINING & RECOGNITION

- Upskilling our employees, creating space for R&D, and recognizing their accomplishments through competitive compensation and career advancement boosts retention

### FLEXIBILITY

- Work from home has been a big incentive for developers, allowing us to remain competitive



How do we attract new talent?

## INVESTMENT IN OUR RECRUITING AND BRANDING

### OUTREACH

- Broadening and diversifying our recruiting options: expanded college recruiting, LinkedIn, Women in Tech forums, etc.
- Employing online resources where today's technology talent learn about opportunities: Before You Apply, Built In NYC, The Muse
- Developing and marketing our innovation and advantages over big bank finance and tech mega-companies



Now you're in the market™

# Disclosures

©2021 MarketAxess Holdings Inc. (the "Company"). MarketAxess Corporation and LiquidityEdge LLC are members of FINRA and SIPC. MarketAxess Canada Company is a member of IIROC. MarketAxess Europe Limited (04017160), MarketAxess Capital Limited (09777893), and MarketAxess Post-Trade Limited (01917944) are incorporated in England and Wales, and each authorised and regulated by the Financial Conduct Authority. MarketAxess NL B.V. (69592888) and MarketAxess Post-Trade B.V. (69597774) are incorporated in the Netherlands, and each licensed by the Autoriteit Financiële Markten. MarketAxess Singapore Pte. Limited (201702319R) is incorporated in Singapore and recognised by the Monetary Authority of Singapore. Trademarks of the Company or its subsidiaries include: MarketAxess, the MarketAxess logo, "Now you're in the market", Auto-X, Axess All, Axess IQ, Bid-Ask Spread Index (BASI), BondTicker, Composite+, Open Trading, and Trax. Proprietary and confidential information of the Company—all forms of copying prohibited. Further information on MarketAxess can be found on our website at [marketaxess.com](http://marketaxess.com).

To the fullest extent permitted by applicable law, all warranties and representations are disclaimed. All information presented herein is considered to be accurate at the time of writing, provided "as is" with no express or implied representations or warranties—including without limitation in relation to fitness for purpose, accuracy, or completeness of contents—and is only intended to provide an overview of the subject matter and not an exhaustive treatment thereof. Whilst sources of information are believed to be reliable, MarketAxess does not independently verify information obtained from third party sources. Any information presented is not intended to represent an offer or solicitation of any financial instrument.

Proprietary and confidential information of the Company—all forms of copying prohibited. Further information on MarketAxess can be found on our website at [marketaxess.com](http://marketaxess.com).

## Cautionary Note Regarding Forward-Looking Statements

This presentation may contain forward-looking statements, including statements about the outlook and prospects for Company and industry growth, as well as statements about the Company's future financial and operating performance. These and other statements that relate to future results and events are based on MarketAxess' current expectations. The Company's actual results in future periods may differ materially from those currently expected or desired because of a number of risks and uncertainties, including: global economic, political and market factors; risks relating to the COVID-19 pandemic, including the possible effects of the economic conditions worldwide resulting from the COVID-19 pandemic; risks related to the U.K. exit from the European Union; the level of trading volume transacted on the MarketAxess platform; the rapidly evolving nature of the electronic financial services industry; the level and intensity of competition in the fixed-income electronic trading industry and the pricing pressures that may result; the variability of our growth rate; our ability to introduce new fee plans and our clients' response; our ability to attract clients or adapt our technology and marketing strategy to new markets; risks related to our growing international operations; our dependence on our broker-dealer clients; the loss of any of our significant institutional investor clients; our exposure to risks resulting from non-performance by counterparties to transactions executed between our clients in which we act as an intermediary in matched principal trades; risks related to self-clearing; the effect of rapid market or technological changes on us and the users of our technology; our dependence on third-party suppliers for key products and services; our ability to successfully maintain the integrity of our trading platform and our response to system failures, capacity constraints and business interruptions; the occurrence of design defects, errors, failures or delays with our platforms; our vulnerability to cyber security risks; our actual or perceived failure to comply with privacy and data protection laws; our ability to protect our intellectual property rights or technology and defend against intellectual property infringement or other claims; our ability to enter into strategic alliances and to acquire other businesses and successfully integrate them with our business; our dependence on our management team and our ability to attract and retain talent; limitations on our flexibility because we operate in a highly regulated industry; the increasing government regulation of us and our clients; our exposure to costs and penalties related to our extensive regulation; our risks of litigation and securities laws liability; our future capital needs and our ability to obtain capital when needed; limitations on our operating flexibility contained in our credit agreement; and other factors. The Company undertakes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise. More information about these and other factors affecting MarketAxess' business and prospects is contained in MarketAxess' periodic filings with the Securities and Exchange Commission and can be accessed at [www.marketaxess.com](http://www.marketaxess.com).

## Non-GAAP Financial Measures and Other Items

To supplement the Company's unaudited financial statements presented in accordance with generally accepted accounting principles ("GAAP"), the Company uses certain non-GAAP measures of financial performance, including earnings before interest, taxes, depreciation and amortization ("EBITDA") and free cash flow. The Company believes that these non-GAAP financial measures, when taken into consideration with the corresponding GAAP financial measures, are important in understanding the Company's operating results. See the investor relations website on <http://investor.marketaxess.com> for a reconciliation of GAAP net income to EBITDA and GAAP cash flow from operating activities to free cash flow.