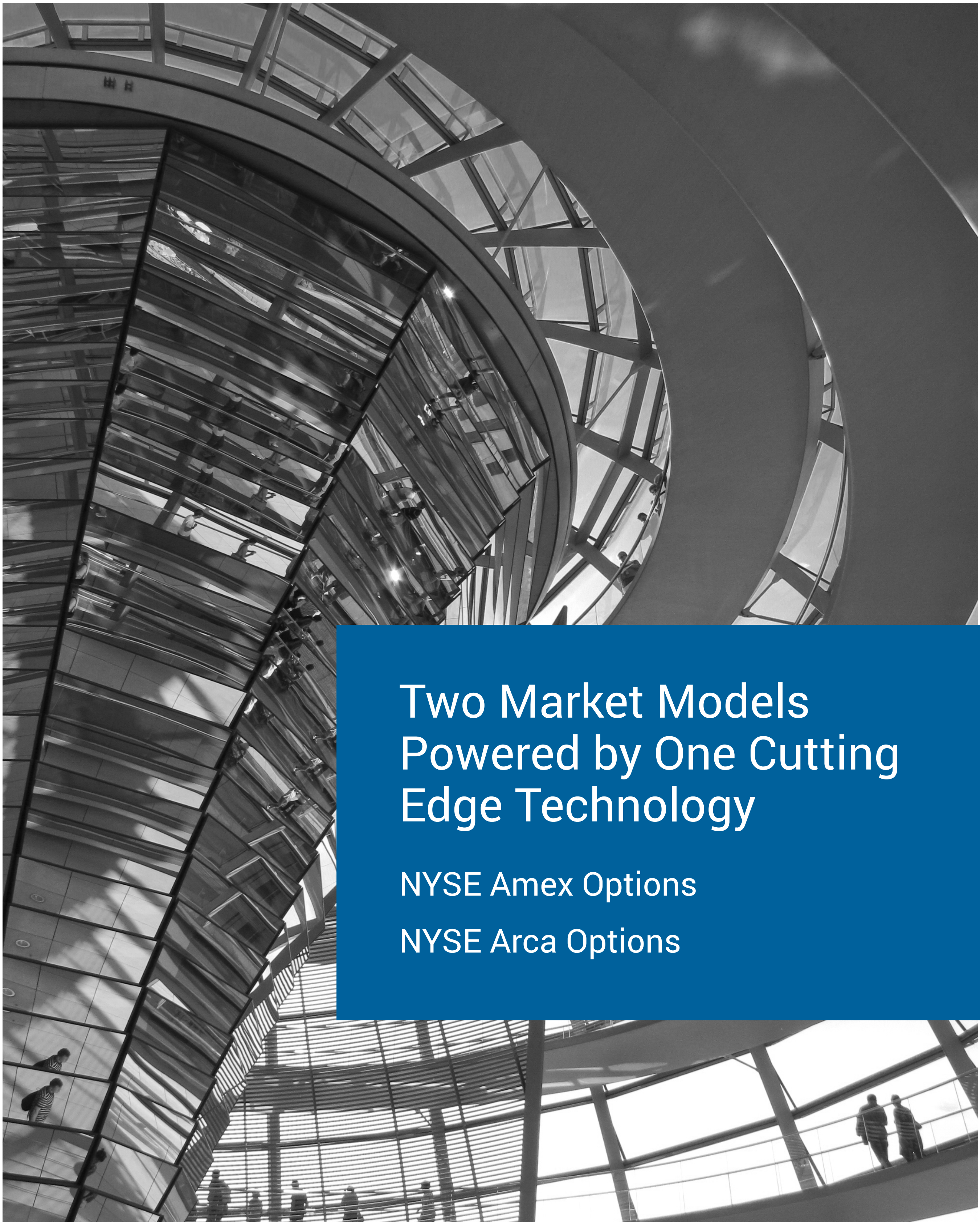
NYSE Amex Options | Arca Options



Two Market Models Powered by One Cutting Edge Technology

NYSE Amex Options

NYSE Arca Options

CONTENTS

US Options Market

The US Options market is one of the largest, most liquid and fastest growing derivatives markets in the world. It includes options on individual stocks, indices and structured products such as Exchange Traded Funds (ETFs). The US Options market therefore presents a tremendous opportunity for derivatives traders.

Key features include :

- Twelve US Options exchanges
- Over 4.0 billion contracts traded on the exchanges in 2012
- Over 15 million contracts traded on average per day (ADV) in 2012
- Over 3,900 listed equity and index based options

The Penny Pilot Program was approved by the SEC in January 2007. The program, which includes over 360 issues, allows minimum quoting increments as low as $0.01 compared to all other issues outside the Penny Pilot which must be quoted in $0.05 and $0.10 increments.

US Options Market Structure

The US Options market is a fully horizontal model with one clearing organization – the Options Clearing Corporation (OCC). Many contracts are listed on multiple exchanges and all contracts trading on one exchange are fully fungible with contracts traded on any of the other exchanges, subject to licensing arrangements in the case of index options.

This structure has been one of the key contributing factors to the growth in trading activity of US Options andthe proliferation of competition within the market.

The twelve options exchanges:

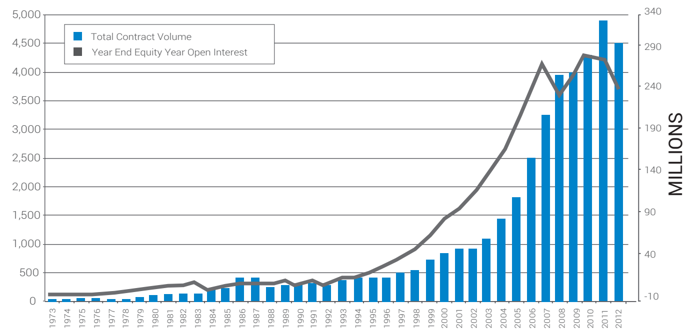
- NYSE Arca Options offers a price-time priority trading model and operates a hybrid trading platform that combines a state-of-the-art electronic trading system, together with a highly effective open-outcry trading floor in San Francisco, CA
- NYSE Amex Options offers a customer priority trading model and operates a hybrid trading platform that combines an electronic trading system, supported by NYSE Universal Trading Platform technology, along with a robust open-outcry trading floor at 11 Wall Street in New York, NY
- BATS Options offers a price-time priority trading model and operates a fully electronic trading platform
- The Boston Options Exchange (BOX) operates a fully electronic market
- The Chicago Board of Options Exchange (CBOE), launched in 1973, operates a hybrid trading platform
- C2 launched by CBOE in 2010, is an all electronic platform
- The International Securities Exchange (ISE) operates a fully electronic exchange
- ISE Gemini, launched in 2013, offers pro rata and customer priority market structure
- NASDAQ OMX PHLX offers a traditional allocation model and operates a hybrid trading platform, with both an electronic system and open-outcry trading floor
- NASDAQ OMX NASDAQ Options offers a price-time priority trading model and operates a fully electronic trading platform
- NASDAQ OMX BX Options, launched in 2012, is an all electronic platform
- MIAX Options launched, in 2012, is an all electronic platform

Traded Volume and Open Interest

With twelve exchanges competing for liquidity and order flow, the US Options market is one of the most competitive markets in the world – which helps to drive down exchange fees and tighten quoted prices.

This market represents a valuable opportunity for market participants, wherever they are based (subject to local regulatory restrictions). It offers affordable and speedy access to the world's largest equity market, as well as access to some of the most heavily traded and fastest growing derivatives contracts in the world.

TRADED VOLUME AND OPEN INTEREST

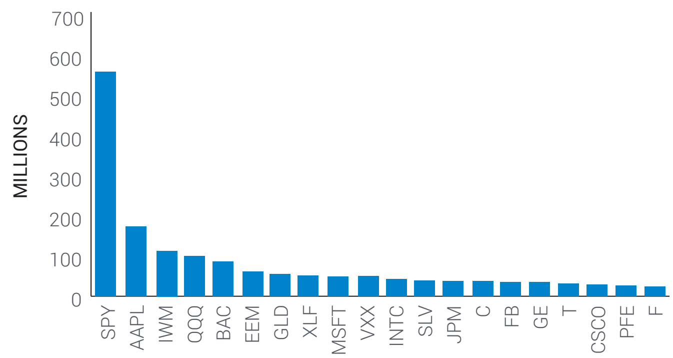


SOURCE: OCC

Most Actively Traded Equity & ETP Issues

The chart details the most actively traded US equity options issues. Eight of the top twenty of the most heavily traded equity options classes during 2012 were based on ETPs.

MOST ACTIVELY TRADED ISSUES



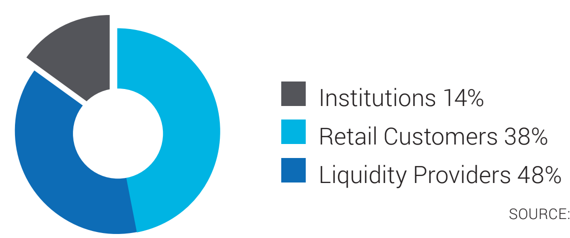
SOURCE: OCC

Market Participation

Retail Oriented

In 2012, approximately 38% of cleared, equity option volume was originated by retail customers; 48% by liquidity providers; and 14% by institutions.

MARKET PARTICIPATION



SOURCE: OCC

Attractive US Options Dual Market Structure

NYSE operates two of the twelve US equity options exchanges, NYSE Arca Options and NYSE Amex Options.

In 2005, Archipelago Holdings, Inc. (Archipelago) acquired the San Francisco based Pacific Exchange and began building a completely new electronic options platform based on Archipelago's highly successful equities trading platform. In 2006, the New York Stock Exchange LLC merged with Archipelago and the Exchange was re-branded as NYSE Arca Options.

In 2008, NYSE completed its acquisition of the American Stock Exchange (Amex). Since then, NYSE Amex Options trading floor operations were relocated to a new state-of-the-art trading floor located adjacent to the floor of the New York Stock Exchange and its electronic system was replaced with NYSE Universal Trading Platform technology.

NYSE Arca Options & NYSE Amex Options Private Routing

Both the NYSE Arca Options and NYSE Amex Options are parties to the Options Order Protection and Lock/Cross Market Plan. The Plan calls for customer orders to trade at the best available price for that particular option across any of the ten options exchanges – the National Best Bid and Offer (NBBO).

To facilitate this, all twelve options exchanges are linked together, on a real-time basis, through the use of private routing brokers. If a particular exchange cannot match the NBBO for a customer order, then that exchange may use a routing broker to send an order to an exchange at the NBBO price.

NYSE Arca Options and NYSE Amex Options use a smart, proprietary routing algorithm to ensure that all orders, regardless of account capacity (customer, firm or market maker) are routed as quickly as possible to the marketplace with the best price without unnecessary delay or exposure prior to routing.

NYSE Arca Options

NYSE Arca Options provides options traders with superior technology designed to deliver enhanced functionality, transparency, throughput and speed. NYSE Arca Options has developed systems and market structures designed to ensure that customers have the most effective means of trading on the US options market and achieving best execution in their trading activities. NYSE Arca Options offers technology and a market structure that provides customers the following benefits:

- Speed, reliability and transparency coupled with a price-time priority model
- Two ways of trading: a fully automated state-of-the-art electronic trading system and an open-outcry trading floor in San Francisco
- Maker/Taker pricing structure in all issues that rewards liquidity providers with rebates
- No cancellation fees
- Over 2,600 equity issues with more than 400,000 options series available for trading
- Access to the market via APIs or FIX protocol, whichever suits customers best, with no restrictions on quote or order entry
- A robust source of market data via ArcaBook, including Top of Book, Depth of Book, and pre-open auction information
- Co-location opportunities in NYSE 's purpose built Liquidity Centers

The trading floor in San Francisco provides a convenient venue for broker-negotiated trades, particularly for large retail and institutional trades and complex orders.

All products listed on NYSE Arca Options are available to trade electronically.

NYSE Arca Options blends price-time priority with the benefit of Lead Market Maker (LMM) participation designed to offer our customers competitive, liquid markets across all of our listed option contracts.

Clients can enter both traditional and more sophisticated order types. Market makers can enter quotes and orders into the system.

NYSE Arca Options leads all exchanges in quoting the greatest percentage of the time on the National Best Bid or Offer (NBBO) for names in the Penny Pilot program.[1] Penny Pilot names trade in price / time priority which incentivizes participants to post quality markets.

For a full list of issues available on NYSE Arca Options, see http://nysearca.com/data_feeds/EligibleOptions.xls.txt

[1] As reported by s3 for the period of January 1 – December 31 2012

NYSE Arca Options Market Structure

NYSE Arca Options offers a price-time priority trading model and operates a hybrid trading platform that combines a state-of-the-art electronic trading system together with a traditional open-outcry trading floor. NYSE Arca Options provides an anonymous, flat, and open market structure with equal access for all market participants and limited participation rights for LMMs (after all eligible customer orders are filled) in certain classes. As a result, pursuant to its price-time model, NYSE Arca Options offers opportunities to both market makers and non-market makers to trade on either side of the market and to take or post liquidity.

Market participants may trade in two ways:

- Electronically, through the all-electronic trading platform
- Open-outcry, at the NYSE Arca Options trading floor in San Francisco, CA

Trading

In order to ensure tight, liquid prices across all issues, NYSE Arca Options supports two different kinds of market makers and incentivizes firms to act as market makers. The NYSE Arca Options traders can choose to become Lead Market Makers (LMMs) or Market Makers (MMs). They can also choose the issues in which they want to make markets. NYSE Arca Options may appoint one LMM per options class and may appoint an unlimited number of MMs per class. The number of issues a LMM or MM can trade is determined by the number of Options Trading Permits (OTPs) held.

Both types of market makers have access to the NYSE Arca Options Market Making API in order to meet their quoting obligations. Each type of market maker has specific obligations and rewards:

Lead Market Makers:

- Must provide continuous legal-width quotes 90% of the time the Exchange is open for trading in each appointed issue. Compliance is measured collectively across all appointed issues and is calculated on a monthly basis
- Receive a guaranteed 40% participation right if quoting at the NBBO, subject to prior customer order priority
- Are rebated a rate of $.40 (rather than the $.30 MM rate) for posting liquidity in non-Penny Pilot issues
- Are rebated a base rate of $0.32 for posting liquidity (rather than the $0.10 firm rate) per contract in Penny Pilot issues

Please visit our website for the most recent fee schedule: https://globalderivatives.nyx.com/nyse-arca-options/fees-charges

LMM Participation Rights:

- If an option is assigned to a Lead Market Maker, and that LMM is quoting at the NBBO, and no customer interest is ahead of the LMM, then the LMM is allocated 40% of the incoming order. (If Customer interest is ahead, allocation is strictly on price- time priority.)
- If an option is not assigned to an LMM, it trades in strict price-time order
- All inbound executable orders will:
  - Check the NYSE Arca Options Best Bid and
  - Offer (BBO) against the NBBO
  - Trade on NYSE Arca Options if it either establishes or matches the NBBO
  - Route to an external exchange if routable and if there is a better price on another exchange

Quotes

Executable inbound quotes interacting with resting quotes or orders will immediately trade. Quotes will not be routed outbound.

NYSE Arca Complex Order Book

NYSE Arca Options also provides the capability to execute certain strategy trades in the Complex Order Book. The Complex Order Book functions as follows:

- Upon receipt of a Complex Order, NYSE Arca Options will first check the electronic Complex Order Book for an execution opportunity
- If contra side orders are executable against either individual legs in the consolidated book or a resting complex order, an immediate execution will occur

Opening Auction

NYSE Arca Options opens each day through an Opening Auction. At 3:30 a.m. ET, the system begins accepting quotes and orders for inclusion in the opening auction process. Contingency Orders do not participate in the auction process. Any eligible open orders residing in the book from the previous trading session (GTCs) will be included in the Opening Auction. For additional information concerning the opening auction process, please visit page 12 of http://www.nyse.com/pdfs/Arca_Options_Market_Maker_Orientation_Manual.pdf

Market Making

The NYSE Arca Options Market Maker Direct API allows users to make markets on the Exchange in assigned classes through quote messaging. For market makers that require mass quote functionality and market maker protections, the NYSE Arca Options Market Maker Direct
API provides:

- Speed: 400 microseconds mean acknowledgement time
- Throughput: Mass quotes up to 300 per packet; NYSE Arca Options can process over 5 million quotes per second, 320,000 orders per second and over 800 million orders per day

The API provides receipt of execution reports against quotes and receipt of market-maker-only administrative messages. The API provides execution reports for all electronic trades and also supports delivery of drop copy duplicate execution reports to parties designated by market maker firms.

For further details on market making, please see the online Options Market Maker Orientation Manual at https://globalderivatives.nyx.com/en/nyse-arca-options/market-making

Risk Mitigation

NYSE Arca Options offers functionality that allows market makers to quickly pull their quotes from the market. Market Makers can either utilize the "quote takedown" feature or the Market Maker Risk Limitation (MMRL). The "quote takedown" message can remove all quotes for one series, all series for an underlying symbol, or all quotes for a market maker's session. The MMRL cancels all quotes or orders posted by a market maker once a specific number of trades, percentage of quote or number of contracts have occurred in a symbol. MMRL is fully configurable and applies to trades against market maker quotes or orders.

NYSE Arca Options Trading Permits (OTPs)

There is no need to buy "bins" or "seats" on the Exchange in order to make markets or access NYSE Arca Options. Market makers only need to acquire the relevant number of Option Trading Permits ("OTPs") depending on how many issues in which they intend to make markets. OTPs cost $4,000 each per month. Floor Broker OTPs cost $1,000 each per month. Order sending firm OTPs are also $1,000 each month.

NYSE Arca Options Fee Schedule

Please visit https://globalderivatives.nyx.com/nyse-arca-options/fees-charges for an updated fee schedule.

NUMBER OF ISSUES	OTPS REQUIRED
UP TO 100	1
UP TO 250	2
UP TO 750	3
OVER 750	4

NYSE Amex Options

The NYSE Amex Options platform offers cutting edge technology built on NYSE 's Univeral Trading Platform architecture. Broker booth and Floor Broker hand held technology along with robust application interfaces provide NYSE Amex Options participants with increased speed, transparency and reliability.

- Customer priority model, coupled with size pro-rata trade allocations for non-customers
- Payment for order flow program
- Directed order program
- Open outcry solicitation and facilitation
- Over 2,100 issues with more than 380,000 series available for trading
- Simple membership application process; no bins or seats
- Cutting edge technology provides speed, reliability and unrestricted bandwidth for quoting
- A full of complement of industry standard and unique order types providing functionality to fit almost any trading strategy
- Co-location opportunities in NYSE ' purpose built Liquidity Centers

NYSE Amex Options Market Structure

The NYSE Amex Options market is a hybrid market, featuring an electronic trading system as well as an open-outcry trading floor. Market participants may trade in two ways:

- Electronically through the all-electronic trading platform
- Open outcry on the NYSE Amex Options floor at NYSE's 11 Wall Street, New York, NY location

The floor facility at NYSE Amex Options provides a venue for broker-negotiated trades, particularly for large institutional orders, firm facilitation orders and complex orders.

NYSE Amex Options blends customer priority and size pro-rata with the benefit of a Specialist to offer customers competitive, liquid markets across all of our listed option contracts. Clients can enter both traditional and more sophisticated order types. Market Makers can enter quotes and orders into the system.

For a full list of the issues available at NYSE Amex Options, see http://nysearca.com/data_feeds/EligibleOptionsAmex.xls.txt

Trading

A Market Maker Authorized Trader (MMAT) is designated under a specific ATP as an individual authorized and responsible for trading under that permit. The MMAT is affiliated with a Market Maker streaming off floor quotes. MMATs are responsible for providing continuous legal width quotes on behalf of the market maker with whom they are associated, for 60% of the time the Exchange is open for trading. MMATs must be registered with the Exchange and pass the appropriate Market Maker exam.

A Floor Market Maker (FMM) also has certain requirements that must be met. The Market Maker community can choose the number of issues they want to trade, restricted only by the number of ATPs they activate. NYSE Amex appoints one Specialist per option class and an unlimited number of RMMs and FMMs in each class. FMMs are also required to provide continuous legal width quotes 60% of the time the Exchange is open for trading in issues included in their electronic appointment. FMMs must be registered with the Exchange and pass the appropriate Market Maker exam.

An Agency Floor Broker (AFB) is entitled to represent orders on the trading floor. The AFB is obligated to report all orders to the tape within the guidelines established by the Exchange. AFBs must be registered with the Exchange and pass the appropriate exam.

A Specialist is an assigned floor-based Market Maker responsible for providing two-sided quotes on the Exchange for a participation right. Specialists receive a guaranteed participation right if quoting at the NBBO, subject to customer order priority. Specialists are also required to provide continuous legal width quotes 90% of the time the Exchange is open for trading. One Specialist may be identified for each underlying product.

An e-Specialist is an assigned off floor Market Maker responsible for providing two-sided quotes on the Exchange for a participation right. e-Specialists receive a guaranteed participation right if quoting at the NBBO, subject to customer order priority. e-Specialists are also required to provide continuous legal width quotes 90% of the time the Exchange is open for trading. One e-Specialist may be identified for each underlying product.

Specialists, e-Specialists and Market Makers are not required to quote all series nor are they required to quote on the Opening Auction, although they must meet their continuous two-sided quote obligation. These obligations apply to all appointed issues collectively, rather than on an issue-by-issue basis and compliance is determined on a monthly basis. At least 75% of the trading activity of a Specialist or Market Maker (measured in terms of contract volume per quarter) must be in issues within the Market Maker's primary appointment.

Market Making

The NYSE Amex Options Market Maker Direct API allows users to make markets on the Exchange in assigned classes through quote messaging. For market makers that require mass quote functionality and market maker protections, the NYSE Amex Options Market Maker Direct API provides:

- Speed: 400 microseconds mean acknowledgement time
- Throughput: Mass quotes up to 300 per packet; NYSE Amex Options can process over 5 million quotes per second, 320,000 orders per second and over 800 million orders per day
- Risk mitigation functionality

The API provides receipt of execution reports against quotes and receipt of market-maker-only administrative messages. The API provides execution reports for all electronic trades and also supports drop copy duplicate execution reports to parties assigned by market maker firms.

Risk Mitigation

NYSE Amex Options offers functionality that allows market makers to quickly pull their quotes from the market. Market Makers can either utilize the “quote takedown” feature or the Market Maker Risk Limitation (MMRL). The “quote takedown” message can remove all quotes for one series, all series for an underlying symbol, or all quotes for a market maker’s session. The MMRL cancels all quotes or orders posted by a market maker once a specific number of trades, percentage of quote or number of contracts have occurred in a symbol. MMRL is fully configurable and applies to trades against market maker quotes or orders.

NYSE Amex Options Trading Permits (ATPs)

Many options traders and firms can choose to do more than simply send orders to NYSE Amex Options. All direct exchange participants are required to be Amex Trading Permit (ATP) Holders and all ATP Holders must apply and meet qualification standards prior to initiation of business with the Exchange. Several classes of ATP Holders are supported by the Exchange and each class has different rights, obligations, and fee structures. The classes of ATP Holders are Remote Market Maker, Floor Market Maker, Specialist, Floor Broker, and Order Sending ATP.

There is no need to buy bins or seats on the Exchange to make markets. Market Makers only need to acquire the relevant number of ATPs depending on how many issues they wish to make markets in. The monthly ATP fees for NYSE Amex Options Market Makers are as follows:

# OF ATPS	ATP FEES
1	$8,000
3	$8,000
4	$8,000
5	$8,000
6 or more ATP’s	#2,000

A Floor Market Maker will be permitted to purchase up to 2 ATPs at a discounted rate of $5,000 each per month provided they fulfill certain criteria. In order to be eligible, a Floor Market Maker must execute at least 75% of their monthly volume as a result of manual or public outcry trading. Strategy Trades (as defined in endnote 8 of the Fee Schedule) and QCC volumes will not count towards the 75% public outcry trading requirement. Floor Market Makers with more than two ATPs will not be eligible for this discounted pricing. Visit our website for the most recent fee schedule: https://globalderivatives.nyx.com/nyse-Amex-options/fees-charges

# OF ATPS	NUMBER OF OPTIONS ISSUES
1	60 plus the bottom 45% of all options issues
2	150 plus the bottom 45% of all options issues
3	500 plus the bottom 45% of all options issues
4	1100 plus the bottom 45% of all options issues
5	All option issues traded on the Exchange

The bottom 45% of all option issues will be calculated quarterly, with a one month lag, based on the industry volume rank for all options traded on the Exchange. As of June 30, the Exchange traded 2,196 option issues. Beginning August 1, the bottom 45% would consist of the least active 988 options on the Exchange based on industry volume for April, May, and June. Any newly listed options would automatically become part of the bottom 45% until the next quarterly evaluation period, at which time they may or may not remain part of the bottom 45% depending upon their rank based on industry volume.

As a reminder, a minimum of one ATP is needed to participate on the Exchange as a Market Maker. Those Market Makers who are physically present on the trading floor, Floor Market Makers, are permitted to make transactions as a dealer-specialist while on the Floor of the Exchange and provide quotations (A) manually, by public outcry, and (B) electronically through an auto-quoting device. For those participants acting as Floor Market Makers, please be aware that the Exchange has designated the trading floor as a single trading zone and as such you are permitted to participate in public outcry trading in all option issues traded on the Exchange.

The Exchange is also introducing a list of Premium Products: SPY, AAPL, IWM, QQQ, BAC, EEM, GLD, JPM, XLF, and VXX. NYSE Amex Options Market Makers who transact in any of these symbols will incur a monthly charge of $1,000 per product, subject to a monthly cap of $7,000. The only exception to this will be those NYSE Amex Options Market Makers, acting as Floor Market Makers, who qualify for the discounted ATP of $5,000 per month. Qualifying Floor Market Makers will not be liable for the Premium Product monthly charge of $1,000 per product unless they fail to execute 75% or more of their monthly volumes as a result of public outcry trading, excluding QCC and Strategy Trade volumes.

NYSE Amex Options Fee Schedule

NYSE Amex Options provides Market Maker fee cap incentives in order to continue attracting and growing liquidity provider participation in its markets. Likewise, fees for Firm Proprietary manual trades will be aggregated and capped at $100,000 per month for member firms.

Firm Facilitation Trades executed in open outcry with their customer on the contra side and with the same clearing firm symbol on both sides are free on NYSE Amex Options. As always, customers orders trade with priority and for free on NYSE Amex Options.

Please visit: https://globalderivatives.nyx.com/nyse-Amex-options/fees-charges for an updated fee schedule.

Marketing Charge

$0.65 per contract side on transactions in non Penny Pilot issues where market makers trade against electronic customer orders.

$0.25 per contract side on transactions in Penny Pilot issues where market makers trade against electronic customer orders.

Membership Forms

To obtain further information regarding membership at either NYSE Amex Options or NYSE Arca Options please visit: https://globalderivatives.nyx.com/membership/nyse-amex-options/forms or https://globalderivatives.nyx.com/membership/nyse-arca-options

If you need additional assistance please contact Client Relationship Services at:

Client Relationship Services (CRS):

+1 888 689 7739 (option 3)
crs@nyx.com

Contacts

If you would like to find out more about our platforms please contact your account manager or any of the following:

General Queries

NYSE Arca and NYSE Amex Options Trading Support:
arcaoptions@nyx.com or amexoptions@nyx.com
+1 877 729 7291

Technical/Connectivity Support:
connectivity@nyx.com or tam@nyx.com
+1 888 689 7739 (option 1)

Client Relationship Services:
crs@nyx.com
+1 888 689 7739 (option 3)

General Support:
support@nyx.com
+1 866 873 7422

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