Module 10: How options are traded

Version 3 – March 2023

Topic 1: How options are traded

Trading system

ASX options are traded on the same system used to trade shares.

Trades are executed on a price and time priority basis:

- The order with the best price (highest bid or lowest offer) has priority.
- If there is more than one order at the one price, the order entered first has priority.

When the highest bid price meets the lowest offer price, the trade is executed.

You place your order through your broker, just as you would to buy or sell shares. An operator, called a Designated Trading Representative (DTR) then enters your order into the trading system.

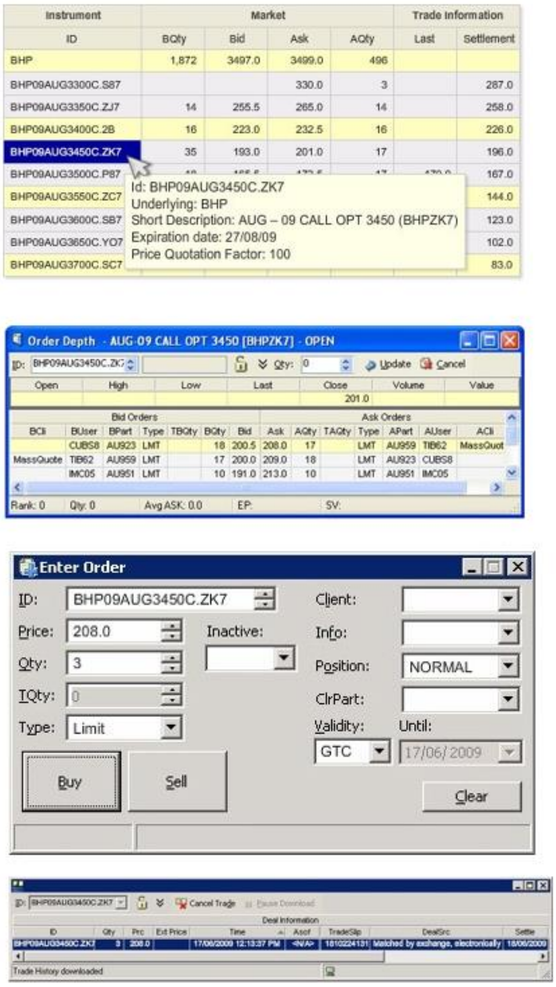
Order types

There is a range of order types that can be placed for options.

The most important ones to know are *market* and *limit* orders:

- A market order is an order to buy or sell at the best price currently available.
- A limit order is an order to buy or sell at a specified price or better.

An order is 'good for day'. If at the end of the day the order has not been filled, it is deleted from the system. If you still want to trade, you will need to place a new order the next day.



Sample options trading screen steps

Combinations

You can place a combination order when you want to trade more than one option series at the same time, or when you want to trade stock and options simultaneously.

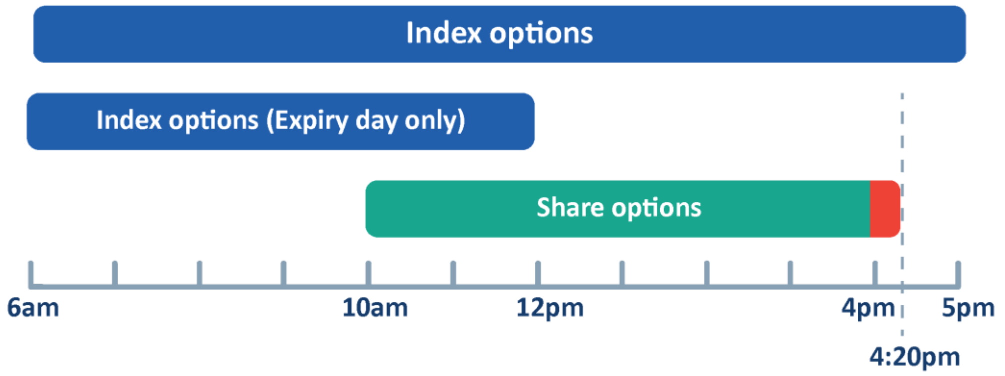
For example, rolling a position involves closing out an existing option position and opening a new position.

Placing the order as a combination, you specify the net price you want to do the roll at, but you do not specify a price for each leg. If the trade goes through, both 'legs' of the combination are executed at the same time.

This removes the risk of prices moving against you in the time between trading the two legs of the roll.

Trading hours

Trading hours are different for share options and index options.



For share options, normal trading is from 10am to 4pm and extended normal trading (without market maker obligations applying) is between 4pm and 4:20pm.

For index option options, normal trading is between 6am and 5pm. On the day of expiry, trading finishes at 12 noon.

For more detailed information, refer to Trading hours.

Options taxation is a complex area

It is unlikely that your broker will be licensed to provide taxation advice, so it is important that you consult your taxation adviser.

A detailed discussion of taxation is beyond the scope of this course, but we'll take a brief look at some of the issues that are relevant to the taxation treatment of your options trading.

The Australian Tax Office is a good place to begin when researching tax implications of your investments.

The ASX website endeavours to provide tax information on options.

The Holding Period Rule

The Holding Period Rule (or '45-day Rule') may be relevant if you use options to hedge a shareholding around the time the stock goes ex-dividend.

This rule applies when franking credit entitlements are above $5,000.

Net delta of position	Shares held 'at risk'	Entitled to franking credits
< 0.3 (30%)	✗	✗
≥ 0.3 (30%)	✓	✓

To be entitled to any franking credits attached to the dividend you must hold the shares 'at risk' for a period of at least 45 days during the dividend period.

'At risk' means that you are exposed to the economic benefits and risks of holding the shares.

It is calculated by the Australian Taxation Office (ATO) via the net delta of the position. You are only entitled to the franking credits if the net position has a positive delta of 0.3 or higher (or 30% at risk).

For full detail, refer to the ATO website.

Topic 2: ASX Clear Pty Limited

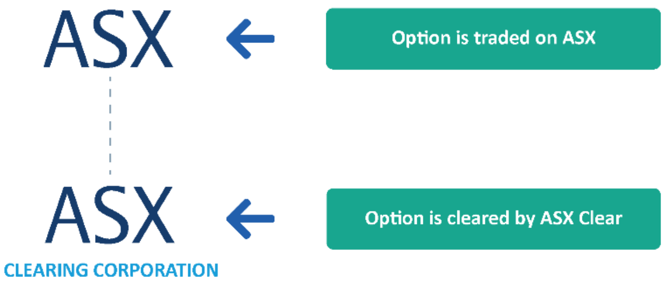
ASX Clear Pty Limited is a subsidiary of ASX.

Its main roles, in relation to ASX options, are to:

- clear all options traded on ASX, and
- ensure that contractual obligations are met.

As part of these roles, ASX Clear:

- operates the margining system
- administers the exercise and assignment of option contracts, and
- monitors the financial status of Clearing Participants.



Trading Participants and Clearing Participants

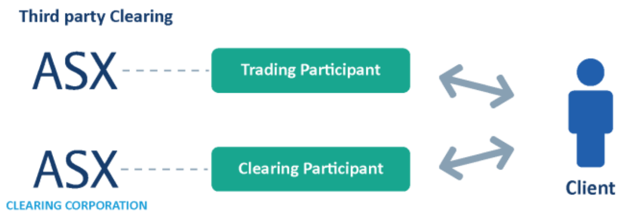
The broker you place your options orders with, and that handles the transaction, is your Trading Participant.

Following the trade, your Clearing Participant clears the transaction. The obligations and rights of the option contract are transferred to the Clearing Participant once ASX Clear registers the contract.

Many brokers are both Trading and Clearing Participant, so you deal with the one broker for both aspects of your trading.

If your Trading Participant is not a Clearing Participant, you will need to have a separate relationship with a Clearing Participant. This arrangement, known as 'third party clearing', is quite common, and will be set up by your Trading Participant.

For the purposes of our examples, we will assume that your broker is both a Trading and Clearing Participant.



Novation

The process of novation is central to ASX Clear's operations.

When you buy an option, a contract is created between you and the person you trade with, or more accurately between your broker and the other party's broker. This contract is known as the 'Market Contract'.

In the novation process, the Market Contract is replaced by two separate and unrelated contracts:

- one between your broker and ASX Clear, and
- one between the other broker and ASX Clear.

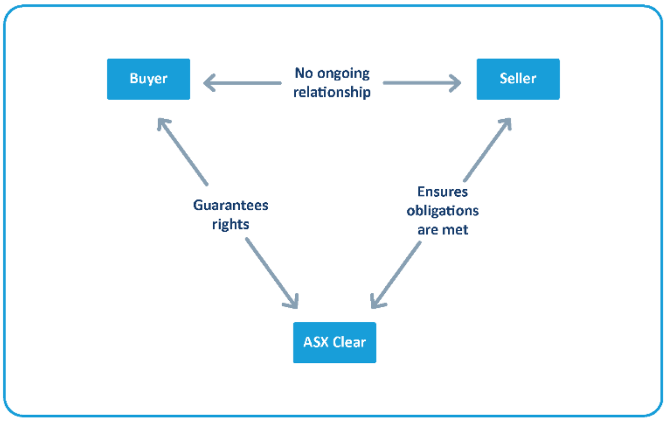
These contracts are called 'Open Contracts'.

As a result, when you want to close out or exercise an option position, you do not need to return to the person you originally traded with.

You are not exposed to the credit risk of your original counterparty, as ASX Clear guarantees your rights as an option taker will be met.

The option writer's obligation now is to ASX Clear, not to you.

ASX Clear's involvement means you don't have to assess the creditworthiness of the counterparty every time you want to trade.



Transfer of title (shares) vs. creation of contract (options)

There is an important difference between trading a share and trading an option.

When a share is traded on ASX, there is a transfer of title between the parties to the trade.

On settlement, ownership of the share is transferred from the seller to the buyer. Title to the share is recorded on the share register.

An option trade, on the other hand, involves the creation of a contract between the buyer and seller. There is no transfer of title, instead the contract is registered with ASX Clear.

Rights and obligations

Following the transfer of title, the seller of the share no longer has an interest, while the buyer holds title to the share.

Both parties to an option trade, however, have ongoing rights or obligations, which continue until the option contract is closed out, exercised, or expires.

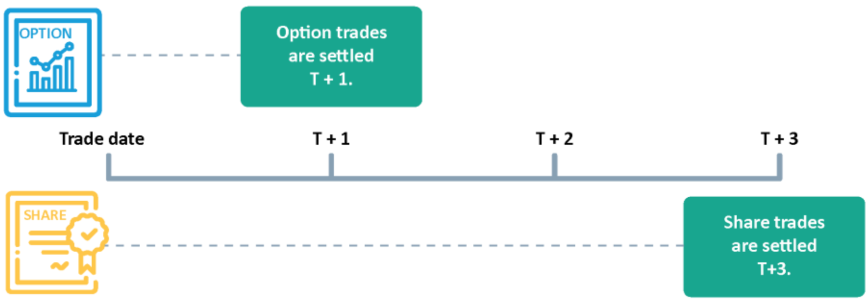
The buyer has the rights conveyed by the option, which they may exercise at any time.

The writer has the obligations imposed by the option contract. One of the main functions of ASX Clear is to ensure that the writer meets those obligations.

Topic 3: Settlement and exercise

Settlement of option trades

Option trades are settled one business day after the trade date (T+1). Share trades, in comparison, are settled T+2.



This means that one day after you buy an option, you must pay for it, while one day after you write an option, you will receive the premium.

Because of the short period between trade and settlement, most brokers will require you to have an account they can access for funds to settle your option trades promptly.

Settlement following exercise

The transaction that results from exercise of a share option is settled three business days after the date of exercise (T+3).

		Exercise date	Settlement date
		T	T+3
Call option	Taker		Pay for shares
			Take delivery of shares
	Writer		Receive payment for shares
			Deliver shares
Put option	Taker		Receive payment for shares
			Deliver shares
	Writer		Pay for shares
			Take delivery of shares

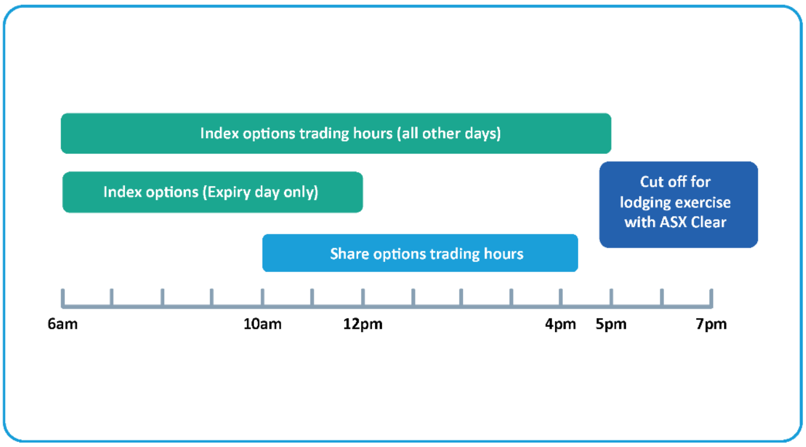
If you exercise a call, you pay for and take delivery of the underlying shares T+3. If you have written a call and are exercised, you must deliver the shares (and any rights or dividends associated with those shares), and receive the exercise price.

If you exercise a put, you deliver the shares T+3, and receive the exercise price. If you have written a put and are exercised, you must pay for, and take delivery of the share.

People often get the settlement timetable confused. Make sure you and your broker are clear on key dates in this process.

How to exercise an option

Once you decide to exercise your option, you instruct your broker accordingly.



Your broker submits an Exercise Notice by 7pm Sydney time for exercise to go through that day.

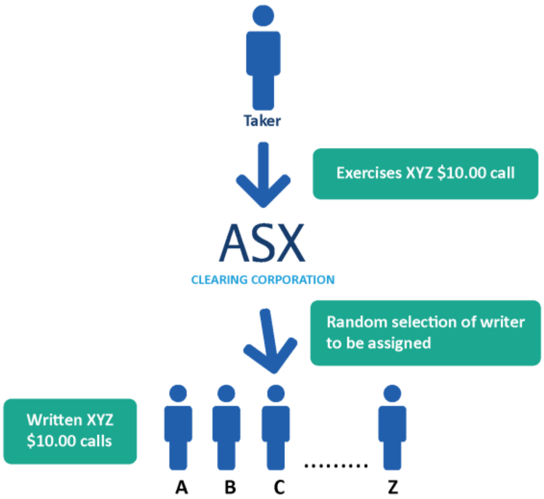
Your broker may specify an earlier cut off time for telling them that you wish to exercise an option.

Assigning the exercise notice

After accepting the exercise notice, ASX Clear assigns the exercise to a written position.

ASX Clear randomly selects a writer in that option series, and the next business day, notifies their assigned Clearing Participant.

The Participant then notifies that client that they have been exercised. Once exercised it is too late for the writer to close out the option position!



Auto-exercise

If you fail to sell or exercise an option that is in-the-money at expiry, it will expire worthless - no matter how much intrinsic value it has. This applies even in the case of index options, which are cash-settled.

Option in the money at expiry?	Auto-exercise set	Consequences if no action taken
✓	✓	ASX Clear exercises option for you
✓	✗	Option expires worthless

It is essential to monitor your positions so that you take the necessary action before the option expires.

If your account is set up for auto-exercise, ASX Clear will automatically exercise any in- the-money options at expiry, without you having to lodge an exercise notice.

Topic 4: Starting trading

Finding a broker

The first thing to think about when choosing a broker is whether you want advice, or an execution-only service.

The services of an adviser can be invaluable. A good adviser can help with your strategies, and advise on the most effective way to implement them.

If you already have a broker you are happy with for your share trading, a good starting point is to check whether you can trade options through them. Not all brokers offer option trading services.

Sufficiently experienced and confident investors may find an execution-only service may be sufficient. Brokerage costs may be lower than for an advisory broker.

For help in looking for a broker, refer to Find a broker.

Accredited advisers

To advise on ASX options, an adviser must be an Accredited Derivatives Adviser (ADA).

A Level 1 ADA may advise on:

- buying options, and
- writing fully covered calls.

An adviser must be accredited at Level 2 to advise on:

- writing options (other than covered calls), and
- multi-legged strategies.

Check that any adviser you are considering has the appropriate accreditation.

	Level 1 ADA	Level 2 ADA
Buying options	✓	✓
Selling to close a position	✓	✓
Writing covered calls	✓	✓
Rolling bought options or covered calls	✓	✓
Writing uncovered calls	✗	✓
Writing puts	✗	✓
Spreads	✗	✓
Combinations	✗	✓

Brokerage

Brokerage (commission) is typically charged as a percentage of premium traded, with a specified minimum. The contract value (exercise value) does not affect the brokerage charged.

Rates vary widely.

Advisory brokers typically charge between 1 and 2% of premium, with a minimum of around $100.

Execution-only brokers tend to offer lower rates as there is no advice given with their service. Rates for orders placed on the internet are typically around 0.4 - 0.6% of premium, with a minimum of $35.00 - $55.00. Charges for placing orders by phone are usually higher.

If you are a 'high volume' trader, your broker may offer discounted brokerage rates.

Before committing to a broker, ask for information on their rates.

Margins

Brokers may require you to pay a margin over and above the ASX Clear margin requirements. You can read this brochure to learn more about margins (PDF 137 KB)

Opening an account

Once you decide on a broker, there are a few steps to take before you can trade:

- You will need to sign an Options Client Agreement with your broker - even if you already use them to trade shares.
- Your broker will give you access to the ASX booklet 'Understanding Options Trading' (PDF 724KB) which you must read before signing the client agreement.
- If you intend to lodge shares as cover for written positions, you will need to sign a Collateral Agreement giving permission to lodge the shares as collateral with ASX Clear.

If your Trading Participant is not a Clearing Participant, you will need to sign a separate client agreement with the broker you use to clear your trades. The broker you trade through will normally organise the paperwork for you.

If you trade options through a number of different brokers you will need separate client agreements with each of them.

Your broker will also get you to complete a document as part of their process of assessing whether options are an appropriate investment for you.

You may be asked for details of your:

- investing experience
- financial position
- tolerance for risk
- knowledge of options
- financial objectives in trading options.

Take time to consider these questions carefully. It is in your interests to give a complete and accurate picture of your financial situation, objectives and understanding. Your broker is entitled to rely on the information you provide.

Depending on the information you provide, your broker may restrict the strategies you are able to implement.

Ongoing reporting from your broker

Once you start trading, you will receive certain reports from your broker, either by email or by post.

Any time you trade, you will receive a confirmation, containing details such as:

- trade date
- option series traded
- price you traded at
- brokerage and ASX Clear fees.

You will receive a monthly statement if you:

- traded an option in that month, or
- had an open position at the end of the month.

The monthly statement shows details of:

- any transactions during the month (including trades, exercise and assignment)
- opening and closing account balance, and
- collateral held.

Topic 5: Market making

The role of market makers

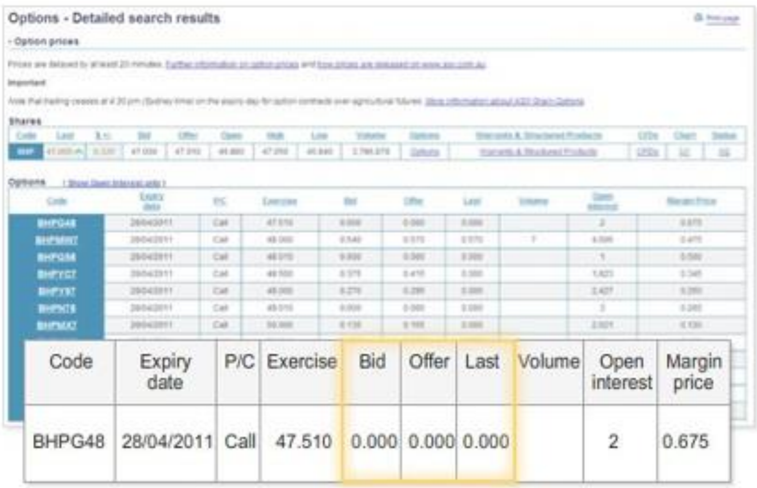
In the options market there are many individual series of options available for trading.

Natural buyers and sellers are not always available for each series.

Market makers can provide bids and offers so that investors can buy and sell in these less liquid series.

Having these quotes available also makes it easier to price and value an options position.

It should be noted that there may be circumstances when market maker bids and offers are not available (see screen 7 of this topic on circumstances).



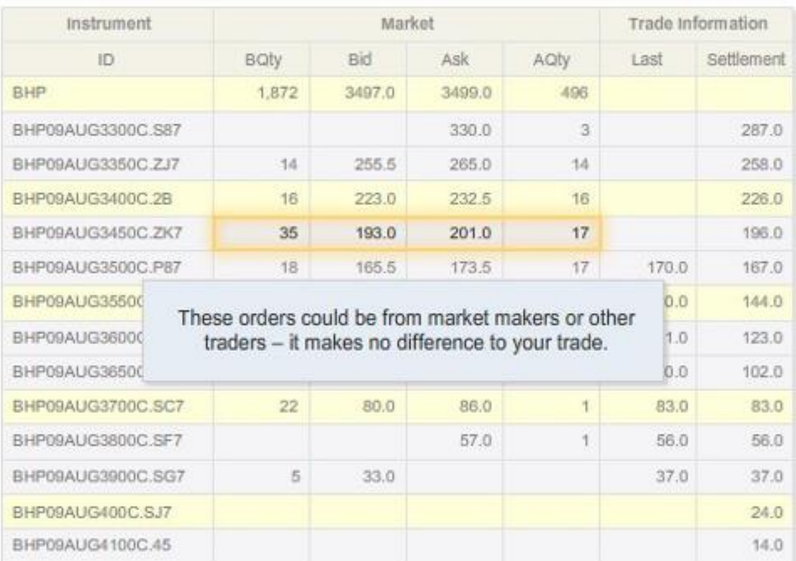
No natural buyers and sellers in this series

Who are market makers?

Market makers are professional traders who often trade a wide range of financial instruments.

ASX offers market makers fee incentives for meeting certain benchmark quoting requirements.

When you trade with a market maker, it is no different to trading with any other investor.



Instrument	Market				Trade Information	
ID	BQty	Bid	Ask	AQty	Last	Settlement
BHP	1,872	3497.0	3499.0	496		
BHP09AUG3300C.S87			330.0	3		287.0
BHP09AUG3350C.ZJ7	14	255.5	265.0	14		258.0
BHP09AUG3400C.2B	16	223.0	232.5	16		226.0
BHP09AUG3450C.ZK7	35	193.0	201.0	17		196.0
BHP09AUG3500C.P87	18	165.5	173.5	17	170.0	167.0
BHP09AUG3550C					0.0	144.0
BHP09AUG3600C					1.0	123.0
BHP09AUG3650C					0.0	102.0
BHP09AUG3700C.SC7	22	80.0	86.0	1	83.0	83.0
BHP09AUG3800C.SF7			57.0	1	56.0	56.0
BHP09AUG3900C.SG7	5	33.0			37.0	37.0
BHP09AUG400C.SJ7						24.0
BHP09AUG4100C.45						14.0

Market makers quoting requirements - number of contracts and spread

Market makers make markets

- in particular options series
- within nominated option Classes

Classes are options with the same underlying e.g. all the options series for BHP make up a Class.

To receive a fee incentive market makers must meet ASX's requirements on

- the number of contracts offered,
- the bid offer spreads, and
- the period for which they meet these requirements.

The 'spread' is the difference between the price at which market makers are willing to buy (the bid) and the price they are prepared to sell at (the offer). The tighter the bid offer spread the better for investors.

Market maker requirements are based on a combination of:

- The number of contracts offered
- The bid offer spread
- The length of time the orders are present in the market.

Instrument	Market				Trade Information	
ID	BQty	Bid	Ask	AQty	Last	Settlement
BHP	1,872	3497.0	3499.0	496		
BHP09AUG3300C.S87			330.0	3		287.0
BHP09AUG3350C.ZJ7	14	255.5	265.0	14		258.0
BHP09AUG3400C.2B	16	223.0	232.5	16		226.0
BHP09AUG3450C.ZK7	35	193.0	201.0	17		196.0
BHP09AUG3500C.P87	18	165.5	173.5	17	170.0	167.0
BHP09AUG3550C.ZC7	20	140.5	148.0	37	150.0	144.0
BHP09AUG3600C.SB7	20	117.5	125.0	37	121.0	123.0
BHP09AUG3650C.YO7	20	97.5	104.5	17	100.0	102.0
BHP09AUG3700C.SC7	22	80.0	86.0	1	83.0	83.0

Market making quoting requirements - benchmarks for presence in the market

Market makers are judged on their performance in making markets in certain series on a Continuous Basis and on making markets in response to Quote Requests in certain series.

Continuous markets means the market maker has prices on the screen constantly for the nominated period of time. It doesn't mean they will provide bid and offers all day every day.

Quote request markets means the market maker responds with a bid and offer when asked to do so. If there is no market for a series you are interested in, your broker can request a market.

The bid and offers are available for everyone not just your broker and the market makers won't provide a market in all series at all times.

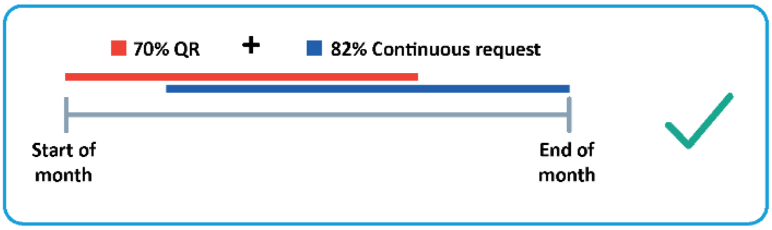
Market maker benchmarks

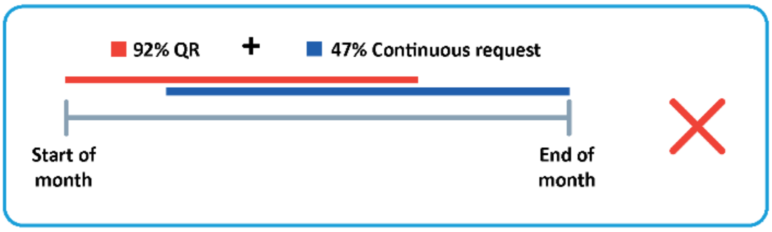
There are 3 benchmarks market makers must meet to get their fee incentive. These benchmarks are measured during the ASX options market trading hours over a calendar month.

1. Minimum of 50% of the required Continuous Quoting benchmark.
2. Minimum of 50% of the required Quote Request Quoting benchmark.
3. A combined minimum average of 70% on Continuous Quoting and Quote Request Quoting.

In practical terms this means that if a market maker meets the Quote Request benchmark 61% and the Continuous Quoting benchmark 83% of the time that the options market is trading (calculated over a calendar month) that is a pass.

But if a market maker meets the Quote Request benchmark 49% of the time and the Continuous Quote benchmark 99% of the time, this would be a fail.





For which individual option contracts (series) is a market maker incentivised?

In this example - stock XYZ is trading at $37.45.

Share price: $37.45 | Month: April

Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Dec 11	Mar 12	Jun 12
3600	3600	3600	3600	3600	3600	3600	3600	3600
3650	3650	3650	3650	3650	3650	3650	3650	3650
3700	3700	3700	3700	3700	3700	3700	3700	3700
3750	3750	3750	3750	3750	3750	3750	3750	3750
3800	3800	3800	3800	3800	3800	3800	3800	3800
3850	3850	3850	3850	3850	3850	3850	3850	3850
3900	3900	3900	3900	3900	3900	3900	3900	3900

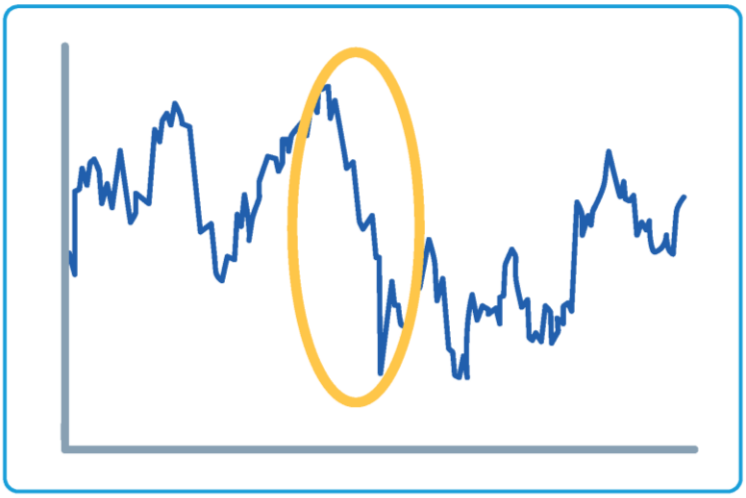
Continuous

Quote

The expiry months are represented along the top of the table (e.g. April 2011 & May 2011 etc.). The strike prices are represented down the table (e.g. $37 & $37.50 etc.).

Market makers are incentivised to provide continuous quotes in those options series that are closest series, at, in and out of the money and in the near expiry months. Quote requests can be made for a range of series in expiry months going out for a set period of time.

Market Makers are not required to provide quotes in all series, or at all times, and as such there can be no guarantee that all series will have prices displayed.



The ability of Market Makers to provide quotes can be impacted at times by a variety of factors including, company announcements, company corporate actions, liquidity in the underlying and its options, price volatility in the underlying and its options and trading system limitations.

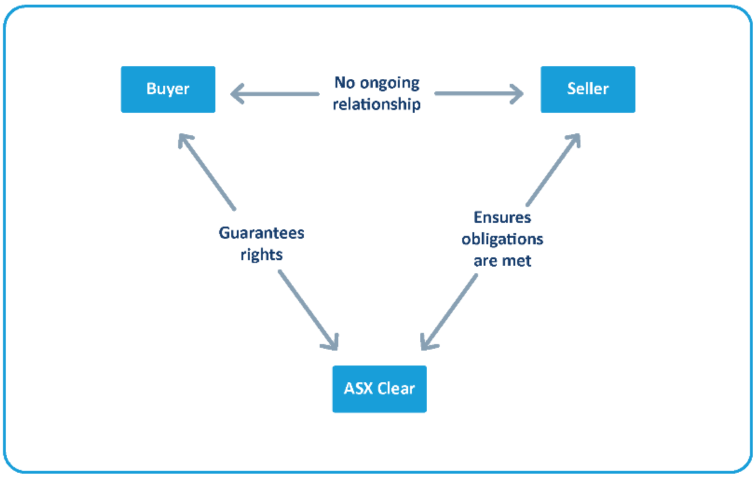
While these events may occur infrequently traders and investors should have a contingency plan to deal with an absence of quotes.

Full details of current ASX options market making requirements including benchmarks for incentives are also published on the ASX website (PDF).

Summary

Options are traded on the trading system on a price and time priority basis. Market makers are required to provide quotes to make it easier to trade into and out of option positions.

A *market* order is an order to buy or sell at the best price currently available. A limit order is an order to buy or sell at a specified price or better.



ASX Clear clears all options traded on ASX, and ensures that the contractual obligations of options traders are met. Via the process of novation, ASX Clear ensures you are not exposed to counterparty risk, and guarantees your rights as an option taker will be met.

Option trades are settled T+1, while the transaction that results from exercise of a share option is settled T+3.

When an option is exercised, ASX Clear selects a writer at random, to be assigned the exercise notice. Once you have been exercised, it is too late to close out your position.

Not all brokers offer option trading services, and not all advisers are accredited to advise in options. The Find a broker webpage may assist you in looking for a broker.

Brokerage rates vary, and are usually charged as a percentage of the premium traded.

Options taxation is a complex area - it is important that you consult your taxation adviser.