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Topic 1: Features of ASX Listed Equity CFDs

Introduction

An ASX Equity CFD gives you leveraged exposure to movements in the value of a particular share listed on ASX.

A long CFD position allows you to profit if the share price rises, a short position allows you to profit if the share price falls.

One CFD gives you exposure to one share.

The price is quoted in cents. For example, if XYZ CFDs are trading at 1000, the value of one XYZ CFD is \$10.00.

Initial margin

You deposit an initial margin when you open your position.

The initial margin is expressed as a percentage. It varies according to the volatility of the underlying stock, but is typically between 5% and 10% of the value of the underlying share.

As the price of the underlying share changes, the initial margin in dollar terms will vary, and you will be debited or credited the difference on a daily basis.

Example

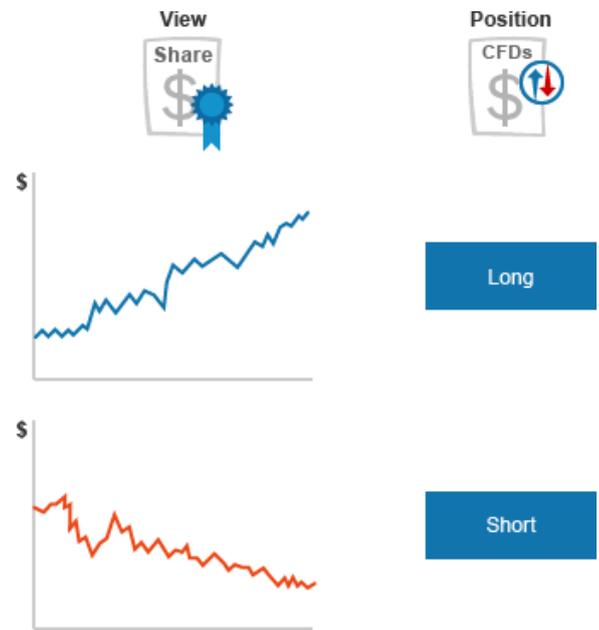
XYZ CFDs are trading at \$10.00. The initial margin is 8%. You take a short position of 5,000 CFDs.

The initial margin payable is $5,000 \times \$10.00 \times 8\% = \$4,000$.

Variation margins

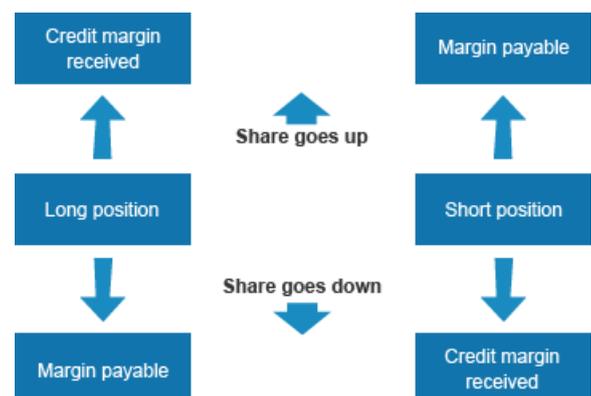
At the end of each trading day, your CFD position is revalued, or 'marked to market', by ASX Clear (Futures). The revaluation, called the Daily Settlement Price (DSP), is the same as the closing price of the underlying share.

If your position has moved unfavourably since the previous valuation, you will be required to pay a variation margin to cover the adverse movement.



You deposit the total initial margin on Day 1. On subsequent days, as the total initial margin varies, you are debited/credited the difference.

	Day 1	Day 2	Day 3	Day 4
Share price	\$10.00	\$10.20	\$10.30	\$10.10
Position value	\$50,000	\$51,000	\$51,500	\$50,500
Initial margin (total)	\$4,000	\$4,080	\$4,120	\$4,040
Initial margin DR/CR	\$4,000 DR	\$80 DR	\$40 DR	\$80 CR



If your position has moved favourably you will be credited an amount for the improvement in your position.

As long as your position remains open, the margining process will result in variation margins being debited from or credited to your account each day to reflect changes in the value of your position.

Cashflows

For each day your position remains open, there is a cashflow payable/receivable. The cashflow may include several components.

Contract interest

If you hold a long CFD position, you will pay Contract Interest (CI). If you hold a short position, you will receive CI.

The benchmark rate used to calculate CI is the overnight cash rate as published daily by the Reserve Bank of Australia (RBA).

$$CI \text{ (for one day)} = \text{value of position} \times CI \text{ rate} / \text{no. of days in year}$$

Assume:

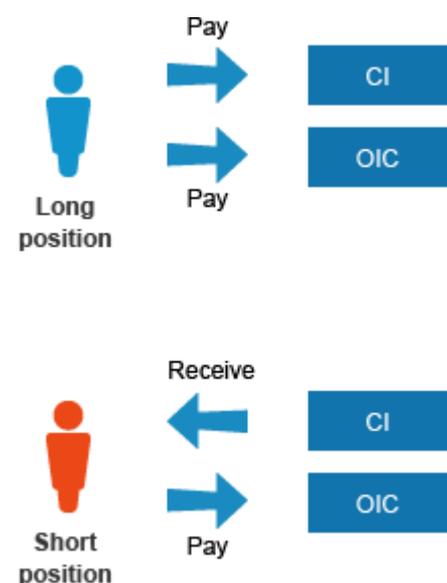
- Position of 10,000 CFDs
- DSP = \$10.00
- CI rate = 3.5%

$$CI = 10,000 \times \$10.00 \times 3.5\% / 365 = \$9.59$$

Open Interest Charge

The Open Interest Charge (OIC) is an amount charged by ASX for holding an open position in an ASX Listed CFD. Both long and short positions pay the OIC.

$$OIC \text{ (for one day)} = \text{value of position} \times OIC \text{ rate} / \text{no. of days in year}$$



Assume:

- Position of 10,000 CFDs
- DSP = \$10.00
- OIC rate = 1.5%

$$\text{OIC} = 10,000 \times \$10.00 \times 1.5\% / 365 = \$4.11$$

Both CI and the OIC are based on the number of calendar days since the charge was last paid. So three days' interest applies to a position held over the weekend.

Please refer to the ASX website for the current [OIC rate](#).

Dividends

If the underlying share goes ex-dividend, a dividend cashflow applies to holders of CFD positions.

If you hold a long position at the close of trade on the last cum-dividend day, you will receive the dividend cashflow. If you hold a short position you will pay the cashflow.

The cashflow is credited to, or debited from, your account on the ex-dividend date.

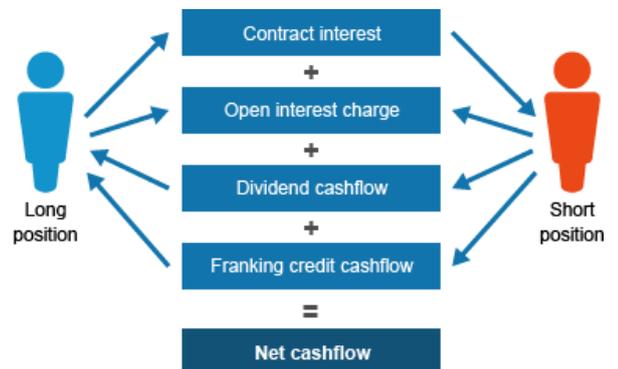
This differs from the timing of dividend payments to shareholders, where the payment date is usually several weeks after the shares go ex-dividend.

Franking Credit Cashflow (FCC)

If a dividend paid on the underlying shares is franked, there will be a Franking Credit Cashflow (FCC).

If you hold a short position, you will pay the FCC.

If you hold a long position, you will receive the FCC. However, you may not receive the full FCC. The FCC will be discounted if the Designated Price Makers for that CFD hold a net short position. The adjustment to FCC is covered in Module 2.



Topic 2: Case study

In Topic 1 we looked at the margins and daily cashflows that apply to a position in an ASX Listed Equity CFD.

In this topic we will work through an example of a CFD trade, from opening the position on Day 1, to closing it on Day 4, itemising all these payments, and showing your cumulative profit/loss position at the close of trade each day.

Assumptions:

- Contract interest rate: 4%
- Open interest charge rate: 1.5%
- Initial margin rate: 7%
- Underlying shares do not go ex-dividend during this period
- Brokerage not included

Case study - Day 1

On Day 1 you open your position, buying 10,000 CFDs @ \$10.00 for a total position value of \$100,000.

The underlying shares at the close of trade have risen to \$10.20, so the Daily Settlement Price (DSP) for the CFDs is \$10.20. As a result, your position value has increased to \$102,000.

Your initial margin payable is 7% of \$102,000 = \$7,140.

You have benefited from an increase in the share price between opening your position and the close of trade, so you are owed a variation margin of \$2,000.

Contract Interest (CI) and Open Interest Charge (OIC) are payable.

The total amount you are debited is \$5,155.37.

Opening trade: Buy 10,000 CFDs @ \$10.00		
	Day 1	Explanation
Traded price	\$10.00	Price position opened at
DSP	\$10.20	Daily Settlement Price
Position value	\$102,000	= DSP x number of CFDs
Initial margin (total)	\$7,140	= position value x initial margin rate
Initial margin DR/CR	-\$7,140	Initial margin payable
Variation margin	\$2,000	= difference between position value when position opened and at close of trade
Contract interest	-\$11.18	= position value x CI rate/365
OIC	-\$4.19	= position value x OIC rate/365
Net DR/CR	-\$5,155.37	Sum of Day 1 margin payments and interest cashflows
Cumulative P/L	\$1,984.63	Sum of variation margins and interest cashflows since opening trade

Case study - Day 2

On Day 2 the stock falls to \$9.90, so you must pay a variation margin to cover the adverse movement.

Your initial margin falls to \$6,930, so you receive a small credit for the difference from the previous day's initial margin.

CI and OIC are payable.

The total amount you are debited is \$2,804.92.

You are showing a cumulative loss of \$1,030.29.

Opening trade: Buy 10,000 CFDs @ \$10.00			
	Day 1	Day 2	Explanation
Traded price	\$10.00	–	–
DSP	\$10.20	\$9.90	Daily Settlement Price
Position value	\$102,000	\$99,000	= DSP x number of CFDs
Initial margin (total)	\$7,140	\$6,930	= position value x initial margin rate
Initial margin DR/CR	-\$7,140	\$210	= difference between Day 2 initial margin and Day 1 initial margin
Variation margin	\$2,000	-\$3,000	Change in value of position since Day 1 close
Contract interest	-\$11.18	-\$10.85	= position value x CI rate/365
OIC	-\$4.19	-\$4.07	= position value x OIC rate/365
Net DR/CR	-\$5,155.37	-\$2,804.92	Sum of Day 2 margin payments and interest cashflows
Cumulative P/L	\$1,984.63	-\$1,030.29	Sum of variation margins and interest cashflows since opening trade

Case study - Day 3

On Day 3, your position improves as the stock price rises to \$10.10, so you are credited a variation margin.

Your initial margin rises to \$7,070, and you are debited the difference from the previous day's initial margin.

CI and OIC are payable.

The total amount you are credited is \$1,844.78.

Your position is showing a profit of \$954.49.

Opening trade: Buy 10,000 CFDs @ \$10.00			
	Day 1	Day 2	Day 3
Traded price	\$10.00	–	–
DSP	\$10.20	\$9.90	\$10.10
Position value	\$102,000	\$99,000	\$101,000
Initial margin (total)	\$7,140	\$6,930	\$7,070
Initial margin DR/CR	-\$7,140	\$210	-\$140
Variation margin	\$2,000	-\$3,000	\$2,000
Contract interest	-\$11.18	-\$10.85	-\$11.07
OIC	-\$4.19	-\$4.07	-\$4.15
Net DR/CR	-\$5,155.37	-\$2,804.92	\$1,844.78
Cumulative P/L	\$1,984.63	-\$1,030.29	\$954.49

Case study - Day 4

On Day 4 you close your position by selling your CFDs for \$10.50.

As the price at which you close your position is higher than the previous day's DSP, you are credited a variation margin.

The initial margin from day 3 is also repaid.

You are credited an amount of \$11,070.00.

Your total profit from the trade is \$4,954.49.

The preceding case study works through a profitable trade.

Closing trade: Sell 10,000 CFDs @ \$10.50				
	Day 1	Day 2	Day 3	Day 4
Traded price	\$10.00	–	–	\$10.50
DSP	\$10.20	\$9.90	\$10.10	–
Position value	\$102,000	\$99,000	\$101,000	\$105,000
Initial margin (total)	\$7,140	\$6,930	\$7,070	–
Initial margin DR/CR	-\$7,140	\$210	-\$140	\$7,070
Variation margin	\$2,000	-\$3,000	\$2,000	\$4,000
Contract interest	-\$11.18	-\$10.85	-\$11.07	–
OIC	-\$4.19	-\$4.07	-\$4.15	–
Net DR/CR	-\$5,155.37	-\$2,804.92	\$1,844.78	\$11,070.00
Cumulative P/L	\$1,984.63	-\$1,030.29	\$954.49	\$4,954.49

We will now give an example of a losing trade, from opening the position on Day 1 to closing it on Day 4, itemising all margins and cashflows, and showing your cumulative profit/loss position at the close of trade each day.

Case study - losing trade

Having opened your long position at \$10.00, the stock price rises on Day 1, but falls over the next three days until you close your position at \$9.30.

Consequently, you make a loss of \$7,044.27 on the trade. You pay out a total of \$7,000 in variation margins over the period, and contract interest and OIC of \$44.27.

While the share price has fallen 7%, you have made a loss of 99.6% of your initial outlay on opening the position.

	Opening trade: Buy 10,000 CFDs @ \$10.00			Closing trade: Sell 10,000 CFDs @ \$9.30
	Day 1	Day 2	Day 3	Day 4
Traded price	\$10.00	–	–	\$9.30
DSP	\$10.10	\$9.80	\$9.48	–
Position value	\$101,000	\$98,000	\$94,800	\$93,000
Initial margin (total)	\$7,070	\$6,860	\$6,636	\$0
Initial margin DR/CR	-\$7,070	\$210	\$224	\$6,636
Variation margin	\$1,000	-\$3,000	-\$3,200	-\$1,800
Contract interest	-\$11.07	-\$10.74	-\$10.39	–
OIC	-\$4.15	-\$4.03	-\$3.90	–
Net DR/CR	-\$6,085.22	-\$2,804.77	-\$2,990.28	\$4,836.00
Cumulative P/L	\$984.78	-\$2,029.99	\$954.49	-\$7,044.27

Topic 3: Leveraged exposure

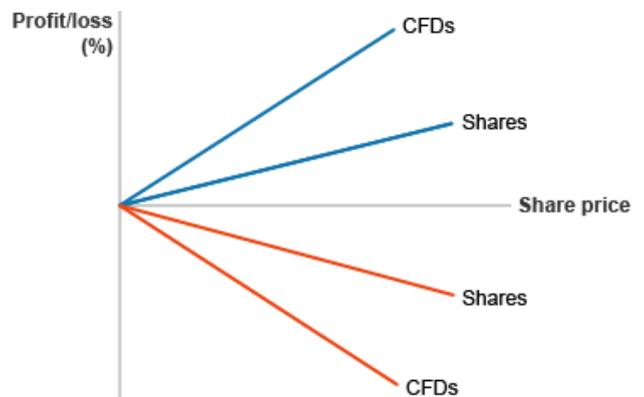
Magnified gains and losses

One of the main attractions of CFDs to traders is the large percentage returns that can be made if the price of the underlying shares moves favourably.

When you enter an ASX Equity CFD position, your initial margin is a fraction of the value of the underlying shares. However you are fully exposed to price movements in those shares.

As the examples in the previous screen illustrate, if the share price moves in your favour, your returns from a CFD are usually much greater than the movement in the price of the underlying shares (in percentage terms).

However, if the price of the underlying shares moves in the wrong direction, your losses will be much greater too.



Equity CFD long position

A long position allows you to profit if the price of the underlying shares rises.

Example

XYZ shares are trading at \$10.00.

You are bullish on the stock and take a long position, buying 10,000 XYZ CFDs @ \$10.00.

The initial margin rate for XYZ CFDs is 7%.

Favourable outcome: share price rises

Ten days later the XYZ share price has risen to \$11.00.

You close out your position for a profit of \$10,000. The return on your initial outlay is 143%.

		Shares	CFDs
Open position	No. purchased	–	10,000
	Opening price	\$10.00	\$10.00
	Position value	–	\$100,000
	Initial outlay	–	\$7,000
Closed position	Closing price	\$11.00	\$11.00
	Position value	–	\$110,000
	Profit/loss	\$1.00	\$10,000
	Percentage return	10%	143%

Note: daily cashflows and brokerage are not included in the example

Example: Equity CFD long position

Unfavourable outcome - share price falls

Two weeks after opening your position the XYZ share price has fallen to \$8.70.

Equity CFD short position

A short position allows you to profit if the price of the underlying shares falls.

Example

ABC shares are trading at \$20.00.

You think the stock price will fall, and take a short position, selling 3,000 XYZ CFDs @ \$20.00.

The initial margin rate for ABC CFDs is 8%.

Favourable outcome: share price falls

A week after your opening trade, the ABC share price has fallen to \$18.20.

Example: Equity CFD short position

Unfavourable outcome - share price rises

Two weeks after opening your position the ABC share price has risen to \$21.60.

Outcome of price fall on long position

		Shares	CFDs
Open position	No. purchased	–	10,000
	Opening price	\$10.00	\$10.00
	Position value	–	\$100,000
	Initial outlay	–	\$7,000
Closed position	Closing price	\$8.70	\$8.70
	Position value	–	\$87,000
	Profit/loss	-\$1.30	-\$13,000
	Percentage return	-13%	-186%

Note: daily cashflows and brokerage are not included in the example

Outcome of price fall on short position

		Shares	CFDs
Open position	No. sold	–	3,000
	Opening price	\$20.00	\$20.00
	Position value	–	\$60,000
	Initial outlay	–	\$4,800
Closed position	Closing price	\$18.20	\$18.20
	Position value	–	\$54,600
	Profit/loss	-\$1.80	\$5,400
	Percentage return	-9%	113%

Note: daily cashflows and brokerage are not included in the example

Outcome of price rise on short position

		Shares	CFDs
Open position	No. sold	–	3,000
	Opening price	\$20.00	\$20.00
	Position value	–	\$60,000
	Initial outlay	–	\$4,800
Closed position	Closing price	\$21.60	\$21.60
	Position value	–	\$64,800
	Profit/loss	\$1.60	-\$4,800
	Percentage return	8%	-100%

Note: daily cashflows and brokerage are not included in the example

Topic 4: Protect physical position

In Topic 3, we looked at how you can use Equity CFDs to profit from your view on the underlying shares.

You can also use Equity CFDs to protect a holding of the underlying shares from a fall in value.

In this strategy you take a short CFD position over the shares you want to protect.

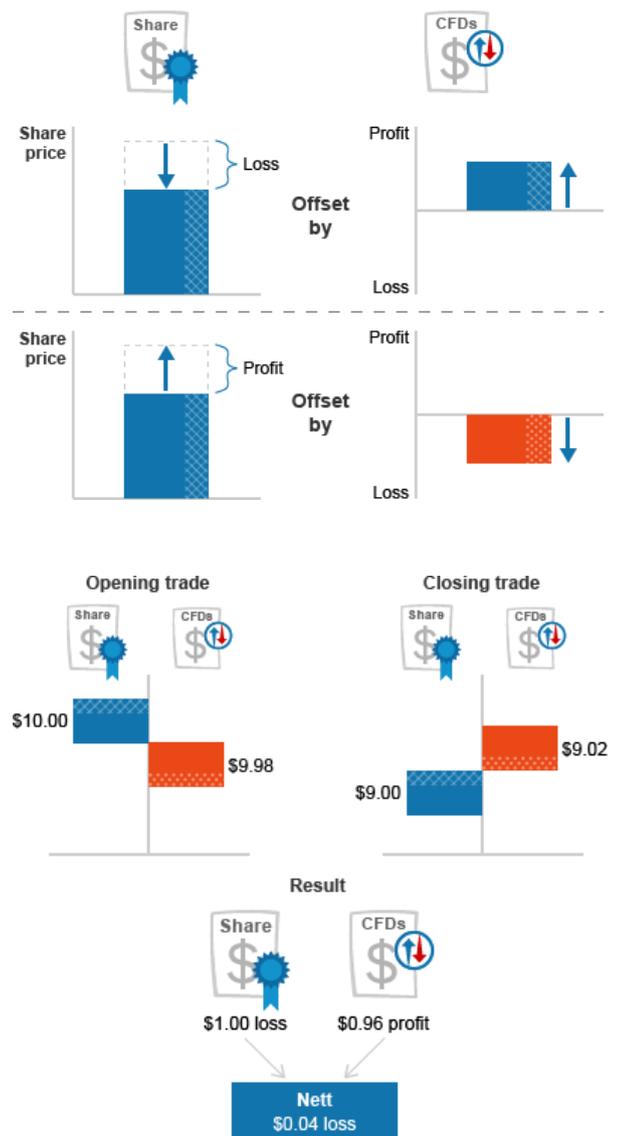
If the share price falls, the decrease in the value of your shares will be offset by a profit on your CFD position.

If the share price rises you will incur a loss on your CFD position, which will negate the increase in the value of your shares.

We'll now work through a couple of examples of taking a short CFD position to protect a shareholding.

These examples assume that the price you open and close your CFD position at is the same as the market price of the underlying shares.

In practice there may be a small difference between the price of the CFD and that of the underlying shares, in which case the profit/loss on your CFD position would not exactly match the loss/profit on your shareholding.



Protect physical position - example

You hold 5,000 XYZ shares, trading at \$10.00. You think the share price may fall in the short term, and want to protect your shares from a loss in value.

You enter a short CFD position, selling 5,000 XYZ CFDs @ \$10.00.

Outcome 1: share price falls

Two weeks later the XYZ share price has fallen to \$8.50.

		Shares	CFDs
Open position	Number	5,000	5,000
	Opening price	\$10.00	\$10.00
	Value	\$50,000	\$50,000
Close position	Closing price	\$8.50	\$8.50
	Value	\$42,500	\$42,500
	Profit/loss	-\$7,500	\$7,500
	Net profit/loss	\$0	

Note: daily cashflows and brokerage are not included in the example

You close out your CFD position. The loss of value on the shares is offset by the profit from the CFD trade.

Protect physical position - example

Outcome 2: share price rises

Two weeks later, the expected fall in the XYZ share price has not eventuated. The XYZ share price has risen to \$11.00.

You close out your CFD position. Although your shares have increased in value, this is offset by a loss on the CFD position.

Short-term protection

Protecting a shareholding with CFDs means you remove the possibility of significant loss, but you are also unable to benefit from a rise in the share price.

For this reason, the strategy is generally regarded as a short-term strategy, when you are concerned about a temporary fall in the share price, but do not want to sell your shares.

If your long-term view of the stock is negative, you could consider selling your shares.

		Shares	CFDs
Open position	Number	5,000	5,000
	Opening price	\$10.00	\$10.00
	Value	\$50,000	\$50,000
Close position	Closing price	\$11.00	\$11.00
	Value	\$55,000	\$55,000
	Profit/loss	\$5,000	-\$5,000
	Net profit/loss	\$0	

Note: daily cashflows and brokerage are not included in the example

Topic 5: Pairs trading

Pairs trading

Pairs trading (also called 'spread trading') is a strategy that involves taking a view on the relative performance of two stocks, rather than a directional view on one stock.

You are not trying to pick whether the two stocks will rise or fall. You are taking a view that one stock will outperform the other.

The success of the strategy does not depend on which direction the stocks move in. It depends only on the relative performance of the two stocks.

To implement the strategy, you take a long CFD position in the stock you think will outperform, and a short CFD position in the stock you think will underperform.

You are not usually attempting to make a profit on both legs of the spread (although this may sometimes happen).

Your aim is that the profit on one leg will be larger than the loss on the other, giving you a profit overall.

For example, if you expect Stock A to outperform Stock B, you would take a long position in Stock A and a short position in Stock B.

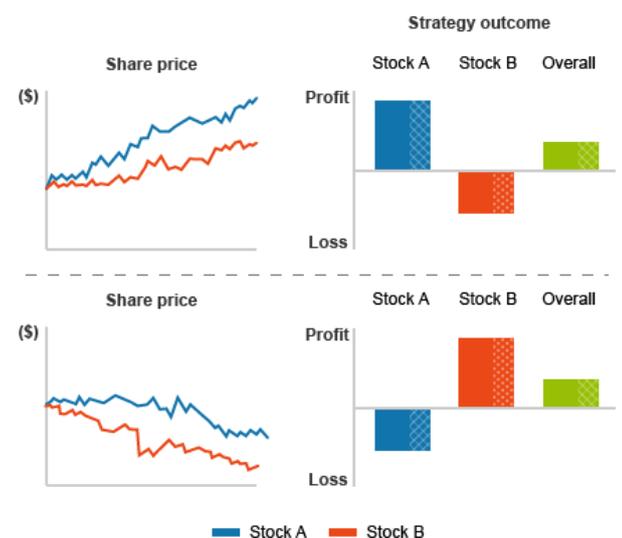
You will make a profit if:

- both stocks rise in value, but Stock A rises more than Stock B (in percentage terms), or
- both stocks fall in value, but Stock A falls less than Stock B (in percentage terms).

You will make a loss if:

- stock A rises less than stock B, or
- stock A falls more than stock B.

You take a long position on the stock you think will outperform and a short position on the stock you think will underperform.



Pairs trading: example

Assume:

- XYZ shares are trading at \$10.00
- ABC shares are trading at \$20.00

You think XYZ will outperform ABC over the short term, so you decide to take a long position in XYZ CFDs, and a short position in ABC CFDs.

In a pairs trade, the initial value of the two positions should be the same. You will need to take into account the different prices of the two shares in calculating how many CFDs to buy or sell.

If you want to establish a position of \$100,000 in each stock, you will:

- buy 10,000 XYZ CFDs ($= \$100,000/\10.00), and
- sell 5,000 ABC CFDs ($= \$100,000/\20.00).

Outcome 1: both share prices rise

If both share prices rise:

- you will make a profit when you close out your long XYZ CFD position, and
- you will make a loss when you close out your short ABC CFD position.

If XYZ outperforms ABC as expected, the profit on your XYZ position will be more than the loss on the ABC position, giving you a net profit.

If XYZ underperforms ABC, the profit on your XYZ position will be less than the loss on the ABC position, giving you a net loss.

Outcome 2: both share prices fall

If both share prices fall:

- you will make a loss when you close out your long XYZ CFD position, and
- you will make a profit when you close out your short ABC CFD position.



If XYZ outperforms ABC as expected (i.e. the XYZ share price falls less than the ABC share price, in percentage terms), the profit on your ABC position will be more than the loss on the XYZ position, giving you a net profit.

If XYZ underperforms ABC, the loss on your XYZ position will be greater than the profit on the ABC position, giving you a net loss.



Summary

- An ASX Equity CFD gives you leveraged exposure to movements in the value of a particular share listed on ASX.
- A long CFD position allows you to profit if the share price rises, a short position allows you to profit if the share price falls.
- You deposit an initial margin when you open your position, and variation margins for as long as your position remains open.
- Equity CFDs involve a daily cashflow, which may include:
 - contract interest
 - open interest charge
 - dividend cash-flow, and
 - franking credit cashflow.
- One of the main attractions of CFDs to traders is the leverage they offer. Compared to the movement in the underlying shares, both gains and losses are magnified in percentage terms.
- You can sell Equity CFDs to protect a holding of the underlying shares from a fall in value.
- If the share price falls, the decrease in the value of your shares will be offset by a profit on your CFD position.
- Pairs trading is a strategy that involves taking a view on the relative performance of two different stocks. You are not trying to pick whether the two stocks will rise or fall. You are taking a view that one stock will outperform the other.
- To implement the strategy, you take a long CFD position in the stock you think will outperform, and a short position in the stock you think will underperform.