

CFD ONLINE Training Tutorial Manual

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What you will learn:

After you have completed this tutorial you should:

- Understand the nature of CFDs;
- Appreciate the advantages of CFDs compared to physical share trading;
- Know how to go long and short on equity and index CFD trades;
- Have an appreciation of the opportunities and dangers represented by leverage;
- Be able to calculate the costs attached to CFD trading;
- Understand a few basic CFD trading strategies;
- Be familiar with the different CFD order types and their applications;
- Know how to use stop loss orders to limit CFD trading losses;

1. CFDS – An Introduction

Contracts for Difference (also known as Contract for Difference, Contracts for Differences, and Contract for Differences, but generally referred to as CFD or CFDs) are one of a number of new products to be introduced to individual investors in recent years. They have proven to be hugely popular, and the use of CFDs has grown exponentially since their introduction in London in the early 1990's.

A CFD is essentially an agreement between two parties to exchange, at the closing of the contract, the difference between the opening and closing prices of (say) an underlying share, multiplied by the number of shares detailed in the contract. Apart from shares, CFDs can also be traded on an index, on commodities, and on currencies (foreign exchange).

CFDs were initially used by hedge funds and institutional investors to hedge their exposure to stocks on the London Stock Exchange (LSE). However, in the late 1990's CFDs were introduced to retail investors as an Over the Counter (OTC) product (i.e. they were not listed or traded on an official stock exchange, but were established on a negotiated basis between individual buyers and sellers). The OTC market was facilitated by a number of UK companies. What made CFDs popular with individual

exempt from the stamp duty applicable to normal share trading, and also that they allowed investors to trade on leverage on a range of underlying instruments.

As the popularity of CFDs grew, CFD providers quickly expanded their offering from LSE shares to include most global stock exchanges, indexes, commodities, treasuries and currencies. Trading index CFDs, such as those based on major indexes such as the Dow Jones, NASDAQ, S&P 500 and the FTSE, soon became the most popular individual CFD traded.

As of November 2008, CFDs are available in the UK, The Netherlands, Germany, Switzerland, Italy, Singapore, South Africa, Australia, Canada, New Zealand, Sweden, France, Japan and Spain, while Hong Kong is planning to issue CFDs in the near future. CFDs are not currently permitted in the USA, due to restrictions by the US Securities and Exchange Commission on OTC financial instruments.

In November 2007 the Australian Stock Exchange became the first stock market to offer CFD trading, to be followed in the second half of 2008 by the London Stock Exchange. The LSE initially launched standardised equity CFD contracts based on FTSE 100 equities, but have announced that this offering will be expanded over time. The huge popularity of CFDs can be gauged from the fact that, by October of 2008, CFD volumes already made up more than 40% of the trade on the LSE.

CFDs allow investors to reap the benefits of trading financial assets, such as equities, without actually having to own the shares. However, because this is done on margin, there are inherent risks in CFD trading which must be weighed up against the potential benefits. In this module we will focus on equity and index CFDs. Currency (Forex) CFDs will be discussed in Module 24.

1.1 Equity CFDs

As mentioned previously, CFDs are an agreement between you and a broker to exchange, at the closing of the contract, the difference between the opening and closing prices of a share, multiplied by the number of shares in the contract.

Each CFD corresponds to an individual company share, such as Lloyds TSB. It is quoted in the same way as the share is quoted on a stock exchange, and the movement of the CFD mirrors that of the individual share. As with shares, you can

buy or sell a CFD whenever you like. It is entirely up to the individual investor as to how long he or she will hold the position, be it months, days or even a few hours. Unlike shares, you do not take delivery of a CFD. Instead, you settle the difference between the opening and closing prices, this difference representing your profit or loss.

CFDs are not traded on a stock exchange, but are transacted directly with a specialist market maker. CFDs give the investor all of the benefits of the underlying equity market, but allow them to avoid many of the costs and problems related to the purchase of physical shares. Specific advantages of CFDs include:

- Trading long or short. This enables you to take a positive or negative view of the underlying share's price movements, and therefore to be able to profit in both rising and falling markets. It also allows for hedging action to protect long-term share holdings.
- Cost effectiveness. Because no share certificates are issued, you do not have to pay safekeeping or custody fees.
- Via leverage, you can control larger positions at a fraction of the cost of actual share ownership. Instead of having to pay the full value of the underlying contract up front, you need only deposit an initial margin – usually about 10% of the contract value.
- Profiting from corporate actions. CFDs allow you to benefit from dividends, stock splits, and movements in and out of specific Index groups.
- Deal immediately at the market price. There is no extra spread to pay when trading CFDs (as is the case with financial spread betting – see Section 2.0). This means that deals can be negotiated immediately, without any wait for a spread to be established.
- Trade world markets. CFDs are offered on stocks on all the major world stock markets. These include stocks making up the FTSE 350, the S&P 500, the NASDAQ 100, and those underlying all of the major European indices. CFDs may also be available on stocks outside of the above-mentioned.

- Tax planning. Equity CFDs can be sold to lock in profit on an equity holding without incurring a tax liability.

Examples of Equity CFD Trading:

We will now consider two examples of equity CFD trading, so as to illustrate the basic principles involved. However, before we look at the practicalities of equity CFDs we need first to discuss the issue of “the spread.”

The Spread

To understand the term “the spread,” we need to take a brief look at some of the essential operations of stock exchanges.

We need to consider in the first instance that the world’s large stock exchanges have a number of different types of members. The largest numbers of NYSE members, for example, are registered as **commission brokers**. Commission brokers execute customer orders to buy and sell stocks. Their primary responsibility to customers is to get the best possible price for their orders.

NYSE commission brokers are typically employees of **brokerage companies** that are **NYSE member firms**. Member firms, operating as brokerage companies, accept customer orders to buy and sell securities, then pass these orders on to their commission brokers for execution. In short, member firm activity allows the exchange to perform its primary function. It is also important to note that, while brokers bring buyers and sellers together, they do not hold an inventory of shares.

The second-largest numbers of members of the NYSE are called **specialists**, because each one acts as an assigned dealer for a small set of securities. With a few exceptions, each security listed for trading on the NYSE is assigned to a single specialist. Specialists are also called *market makers*, because they are required to maintain a fair and orderly market for the securities assigned to them.

As market makers, specialists are required to post **bid prices** and **ask prices** for the securities assigned to them. The bid price is the price at which a specialist must buy a security from a seller, and the ask price is the price at which the specialist must

sell a security to a buyer. So, for instance, if a share has recently traded at \$100, the market maker might set the bid price at \$99.75 and the ask price at \$100.25. The difference between the bid price and the ask price (in this case \$0.50), is called the bid-ask spread, or simply **the spread**.

Specialists ensure that there is always a market for a particular share, and will hold an inventory of the shares for which they are responsible. So, for instance, if a buyer wishes to buy a particular share and there are insufficient shares on offer in the market at that time, the specialist can step in and sell the share to the buyer out of his own inventory. In doing this they provide liquidity to the market, and thereby facilitate the work of the commission brokers.

1.1.1 A Long Equity CFD Trade

Trading an equity CFD is very similar to normal share dealing. The CFD is essentially an “artificial” equity position, with the price of the CFD exactly mirroring the price of the underlying equity. Unlike the physical purchase of shares, you do not have to pay the full value of the underlying shares. Instead, you put up a deposit (margin), the size of which is determined by the market capitalization and the volatility of the share. The initial margin required is normally between 5% and 10% of the full contract value, but may be more or less depending on the characteristics of the particular underlying share.

The contract is revalued at the end of each business day, and any resulting margin calls are made. (See Section 1.2.2 below for an explanation of margin calls). Alternatively, any profit arising from the revaluation is credited to your margin account. While your position remains open your account will be debited or credited to reflect interest and dividend adjustments. If you hold a long position, you receive dividends and pay interest. If you hold a short position, you pay dividends and receive interest. (Margin trading and the effect of dividends and interest will be explained in more detail later).

Equity CFDs have no settlement period, and you can keep your position open indefinitely, as long as there is sufficient margin in your account to support the position. Because CFDs are leveraged they can be very high

risk instruments, and are therefore only available to investors who have the experience and resources to trade in these types of investments.

Let us assume that you believe that the price of ABC shares is about to rise. You contact your CFD broker, who quotes you a price of £99.50 - £100.50. (In other words, you can buy at £100.50 and sell at £99.50). You enter into a long equity CFD at the price of £100.50 per share for (say) 1,000 shares (also referred to as "**buying** 1,000 ABC CFDs at £100.50"). The value of your position is therefore £100,500 (£100.50 x 1,000 shares). You are advised that an initial margin of 5% is required, and you therefore deposit £5,025 with your broker.

Ten days later the ABC share price has risen and is now quoted at £102 / £103 and you decide to close your position. You sell at £102, and the value of your position is now £102,000, representing a profit before commission and interest of £1,500 (£102,000 - £100,500). The return on your initial investment of £5,025 is therefore just under 30% (before costs).

If the share price had fallen, for instance, to £98 / £99 then your position would have been worth £98,000 and you would have incurred a loss of £2,500 (before costs) had you decided to close out your position at that point (£100,500 - £98,000). This would represent a loss of almost 50% on your initial investment of £5,025. It is therefore apparent that both profits and losses on CFDs are magnified by the effects of leverage.

1.1.2 A Short Equity CFD Trade

Let us assume that you have an interest in the same ABC share as in the previous example, but in this case your belief is that the share is over-valued and likely to fall in price in the nearby future. You would then enter into a short CFD position at the price of £99.50 per share for 1,000 shares (also referred to as "**selling** 1,000 ABC CFDs at £99.50"). Your position would therefore be worth £99,500.

If you prove to be right and the share price falls to, say, £96.50 / £97.50 after ten days or so, you would make a profit of £2 per share, or £2,000 in total (£99,500 - £97,500) should you close out your position by buying at £97.50.

(This calculation excludes the positive effect of interest and the cost of commission). Should the unexpected occur, and the share price was to rise by £2, (to £101.50 / £102.50) then you would have sold at £99.50 and would close out your position by buying at £102.50, thereby incurring a loss of £3,000.

2. Margin Trading: Initial Margin

One of the attractions of CFDs is that you can trade an entire portfolio without having to invest large sums of capital. Depending on the size of the company and the volatility of the shares, an initial margin of 5% or 10%+ will be required. (CFDs in FTSE 350 shares normally require a margin of 5%. Smaller companies (with lower market capitalization and lower liquidity levels), and companies with more volatile shares, are likely to require a margin of 10% or more).

Having only to deposit a fraction of the CFD contract value gives rise to a leverage effect, which magnifies both profits and losses. For instance, if you enter into an Equity

Long CFD position on 100 shares of Company Z at £10 per share, and have only to deposit 5% of the contract value of £1,000, your initial margin will be just £50.

If you close out your position a few days later at a share price of £10.50, your position will be worth £1,050 and you will have made a profit of £50 (before costs). This represents a return of 100% on your initial investment of £50.

Had you actually purchased the shares instead of buying CFDs, you would have made a profit of £50 on an investment of £1,000, or a return of 5%. By way of the leverage effect of the CFDs, you have leveraged your return by a factor of 20... ($20 \times 5\% = 100\%$). An initial margin of 10% produces a leverage effect of 10 times, while a 20% initial margin will produce leverage of 5 times. While this is very good news if you are making profits, it is less encouraging if you incur losses. Leverage is therefore a two-edged sword, as it magnifies the effect of both profits and losses.

2.1 Variation Margin

Once you have opened a position and the share price begins to move, you will either make profits or incur losses on your position. This is when the concept of variation margin comes into play.

Let us assume that you buy 1,000 Company Z CFDs at £10 per share. The value of your position is therefore £10,000. If an initial margin of 5% is assumed, you will be required to deposit £500 into your margin account. Because you have bought CFDs, you will profit if the price of Z increases and incur losses if the price was to fall.

Let us now assume that things do not go your way, and that the price of Z falls to £9.75. This represents a loss of £0.25 per share, or a total loss of £250 (1,000 shares x £0.25) which will be debited to your margin account (i.e. it will reduce your initial margin of £500 to £250). This loss is known as **variation margin**.

As you still believe that Z has considerable upside potential, you do not close out your position. You now hold 1,000 Company Z CFDs at £9.75, for a position value of £9,750. A 5% margin on £9,750 equals £487.50, whereas you only have £250 left in your margin account. You will now have to deposit a further £237.50 to bring your margin up to the required 5% of your position. This deficit margin is known as **shortage in equity**.

If you choose not to make up this shortage in equity by depositing additional funds, you can instead reduce your open position when the shortage arises.

In other words, if the balance left in your margin account is £250 after the variation margin is taken into account, you can reduce your open position to £5,000 (£250 divided by 0.05). As this would amount to 512.8 shares of Z, you may decide to maintain an open position on 512 shares. This represents a value of £4,992 (512 shares x £9.75). A 5% margin on this amount would be £249.60, which is covered by the £250 left in your margin account

2.2 Margin Calls

If the market moves against you and your equity balance falls below your initial margin requirement, your broker may make a **margin call**. This means that you will immediately have to deposit additional funds, so as to meet your initial margin requirement on your open positions. Alternatively, as described above, you will have to close some of your open positions so that the funds in your margin account cover the initial margin requirements of your open positions.

If you fail to deposit the required funds or close some of your open positions when necessary, your broker may close your open positions. Alternatively, your broker may place "stop loss" orders for your open positions at the level at which your total equity balance falls below the minimum initial margin requirement (this level is known as the "stop-out level", below which your open positions may be automatically closed out or "liquidated"). All liquidations will be undertaken at a fair valuation, and you will be responsible for any loss arising on your account as a result of such liquidation.

2.3 Trading Profits and Losses

Any profits arising from your trading activities are credited to your margin account, whereas any losses incurred are debited to your account. Profits therefore increase the equity balance on your margin account, whereas losses decrease your equity balance. Profits also have the effect of increasing the margin available for trading (i.e. holding positions), whereas losses reduce the available trading margin.

3. Dividends

If you buy Equity CFDs you are entitled to receive any dividends paid by the company during the time that you maintain your open position. Although you do not own the underlying shares, you are entitled to receive a cash sum equal to any dividend declared on those shares, less any tax and/or administration charges payable.

If, on the other hand, you are the holder of a short Equity CFD position and a dividend is declared on the underlying shares, you are required to pay a sum equal to the gross dividend.

The applicable date for the entitlement to a dividend is the same as the ex-dividend date declared by the underlying company. Because of the potential impact of dividends on your trading returns, it is advisable to check the dates of any impending dividends before entering into Equity CFD positions.

4. Financing and Commission Costs

Financing (interest) applies to positions that are held open overnight. On long CFD positions your account will be debited (charged) interest in respect of each day that your position is held open, whereas your account will be credited with daily interest (i.e. you will receive interest) on open short CFD positions.

The rate of interest charged will depend on the notional value of the position, and the currency in which the trade is held. In the UK LIBOR is used, SharenetCFDs base their rate on the South African REPO and a premium of 2% calculated from this base depending on whether you are long or short. (The premium is added to the base rate to calculate interest charges on long positions, and subtracted from the base rate to calculate the rate of interest paid on short positions).

Commission charges vary, and are typically between 0.35% and 1% of the position value, depending on the level of service provided by the broker.

5. CFD vs. Physical Trading

We will now revisit one of our earlier examples as set out in Section 1.1.1, and compare the effect of physical share trading to CFD trading, taking all relevant costs into account.

Equity Long CFD Trade:

Let us assume that you have approximately £5,000 available for investment (plus another £1,000 or so to cover costs), and you believe that the price of ABC shares is about to rise. You contact your CFD broker, who quotes you a price of £99.50 - £100.50. (In other words, you can buy at £100.50 and sell at £99.50). You enter into a long equity CFD at the price of £100.50 per share for (say) 1,000 shares. The value of your position is therefore £100,500 (£100.50 x 1,000 shares). You are advised that an initial margin of 5% is required, and you therefore deposit £5,025 with your broker.

In contrast, we will compare your situation to that of a friend of yours, who also has about £5,000 available for investment. He believes in physical share ownership, however, so he uses his funds to buy ABC shares.

[CFD Financing assumption: LIBOR is currently 3%, and interest is charged at LIBOR +3%.]

Opening the Positions	Your Friend	You
Buying price of ABC shares	£100.50	£100.50
Number of shares	50	1,000
Value of position	£5,025	£100,500
Stamp duty	£25.13	Nil
Commission (1.0% YF and 0.5% Y)	£50.25	£502.50
Initial margin on CFD (5%)	Nil	£5,025
Total funds required to open position	£5,100.38	£5,527.50

Ten days later ABC is trading at £103.00 / £104 and you both decide to close your positions.

Closing the Positions	Your Friend	You
Selling price of ABC shares	£103.00	£103.00
Number of shares	50	1,000
Value of position	£5,150	£103,000
Gross profit before costs	£125	£2,500
Stamp duty	Nil	Nil
Commission (1.0% and 0.5%)	£51.50	£515.00
Financing cost (10 days)	Nil	£165.21
Total costs	£126.88	£1,182.71
Total funds required to complete trade	£5,151.88	£6,207.71
Total net profit on trade	(£1.88)	£1,317.29
Net profit %	(Negative)	26.2%

Although more funds were required in this instance to complete the CFD trade, the effect of leverage has allowed a position value twenty times that of the physical trade, and has produced a healthy profit in just 10 days. The physical share trading exercise, by contrast, has not quite broken even. Had the share price

moved in the opposite direction, however, the effects of leverage would have magnified the CFD losses.

6. Equity CFD Trading Strategies

It should be obvious from the above examples that CFDs are ideal instruments for short-term speculation. They can be used for both long and short positions, and require a relatively low initial investment to control a much larger total exposure. Most CFDs are closed within a month or two, with the average CFD being kept open for about six weeks.

CFDs can also be applied for hedging purposes. If you are concerned that certain of the shares in your investment portfolio are likely to fall in price in the short term, you can sell CFDs in these shares as a hedging strategy. If the shares do fall in price, the losses incurred on the physical shares will be offset by profits on the Equity short CFD positions. This is a less costly exercise than selling the shares in anticipation of a price fall, then buying them back at a later stage.

Other CFD trading strategies include:

- a) A fundamental pairs trade: If you believe that two shares in the same sector are undervalued and overvalued, respectively, (e.g. RyanAir and EasyJet), you could buy the undervalued share while simultaneously selling the overvalued share;
- b) A merger pairs trade. In merger/acquisition situations, shares in the target company often rise in the pre-acquisition phase, while the acquiring company's shares often fall in value. In this case the target company's shares would be bought while the acquiring company's shares would be sold;
- c) Share class arbitrage. Where a company has preference and ordinary shares in issue, if company results are expected to be poor then the ordinary shares could fall in price even as the preference shares increased in price. The preference shares could then be bought, and the ordinary shares sold to take advantage of the expected price movements;

- d) Other capital structure trades, e.g. rights issues. In the event of a rights issue, share prices could fall if a dilution effect is expected, or rise if the new funds are to be invested in promising projects. Buying or selling CFDs in these circumstances could allow an investor to profit from resulting share price movements

7. CFD Order Types

There are many different ways in which CFD orders can be placed (i.e. orders which give rise to open CFD positions, or that close existing positions). Conditional orders allow investors to manage their risk, so that potential profits and losses on open CFD positions can be controlled. Some of the different order types are:

7.1 Good 'Till Date Orders

A date order will either be executed or cancelled at the end of the specified trading day. Should you wish to maintain the order in the market the following day, you will have to resubmit the order accordingly.

7.2 Good 'Till Cancelled (GTC) Orders

A GTC order means that your order will remain in the market until it is executed, or until you cancel it.

7.3 Limit Orders

A limit order can be used to either open a new position or close an existing open position (partially, or to stop and reverse the position), at a predetermined price set by you. The predetermined price specified in the limit order may be more favorable than the current price for the underlying instrument. Limit orders are executed at the price that you specify.

7.3.1 *Limit Order to Close an Open Position - Example*

To close an open position, you need to enter into an opposite trade to the open position. Limit orders allow you to do this, and to specify the level at which you exit your open position.

Let us assume that you have an existing open position of long 1,000 ABC CFDs. (I.e. you have bought ABC CFDs, and will benefit if the share price rises). ABC is currently trading in the market at £99.50 / £100.50, and you believe that it will strengthen further to £105. You would then place a limit order to **sell** 1,000 ABC CFDs at £105. This limit order will remain in the market until ABC reaches the price of £105 (at which point your open position is closed and you realise the profit on your long CFD position), or until the limit order is cancelled.

7.3.2 Limit Order to Open a New Position – Example

ABC is currently trading in the market at £99.50 / £100.50. You believe that the price may fall briefly to £96, where after it will rise again. You therefore place a day limit order to **buy** 1,000 (say) ABC CFDs at £96. If your hunch is correct, and the ABC share price does fall briefly to £96, you will have bought in at this level and stand to gain from any upward movement in price. This limit order will remain in the market until it is executed at the £96 level, or until it is cancelled at the end of the trading day.

7.4 Stop Orders

A stop order (sometimes known as a “stop loss” order) is an order to buy or sell a security once the price of the security reaches a specified price, known as the stop price. When the specified price is reached, the stop order is entered as a market order. Stop orders are usually used to close out long positions (via a sell stop order), and short positions (via a buy stop order), at a specified price so as to limit possible losses. A buy stop order can also be used to enter a position at a specific (inferior) price (i.e. a price above the current market price).

A **sell stop order** is an instruction to sell at the stop price (or at the best available market price after the stop price has been reached), and is always **below** the current market price.

A **buy stop order** is an instruction to buy at the stop price, or at the closest available price to the stop price. It can be used to limit a loss (or protect an existing profit) on a short sale, or to enter a position. A buy stop price is always **above** the current market price.

7.4.1 A Stop Order to Close an Open Position – Example

Let us assume that you have an existing open position of short 1,000 ABC CFDs, and that ABC is currently trading at £99.50 / £100.50 in the market. (In other words, you will benefit if the ABC share price falls below the level at which you established your CFD contract – let us say this was £99.50).

While you believe that the ABC share price is likely to fall in the short term, you are concerned that it could also spike upwards as ABC is a rather volatile share. In this case you would incur losses, and so you decide to limit any losses should an upward spike occur. You therefore place a Good „Til Cancelled (GTC) stop order to **buy** 1,000 ABC CFDs at £104. This stop order will remain in place until it is cancelled, or until the ABC share price reaches £104, in which case it will be executed and will close out your existing short position. In this way, should the price of ABC rise above the level of £104, you will have limited your loss per share to £4.50 (Being £104.00 - £99.50).

7.4.2 A Stop Order to Open a New Position – Example

ABC has been trading for a while in the £99.50 / £100.50 range, but you feel that it is ready to break out of this range and spike strongly upwards to a level around £106. You therefore place a day stop order to buy 1,000 (say) ABC CFDs at £102. This stop order will remain in place until it is executed at £102, or until the end of the trading day, when it will be cancelled. (You could also of course have placed a GTC order to buy at £102, if you felt that the breakout was imminent, but might not occur on that specific day).

7.5 One Cancels the Other (OCO)

This is a combination of both a Limit and a Stop order. It can be used to make a profit if the market moves favorably in respect of an open position, or to limit a loss if the market moves against the open position. The execution of one order will automatically cancel the other order.

If we consider the situation where you are long 1,000 ABC CFDs at £100.50, you might place an OCO with a limit sell order at £106, and a stop loss sell at £97. If the ABC share price rises to £106, the limit sell order would close out your long position and lock in the profit of £5.50 per share (£106 - £100.50). At the same time, your stop loss sell order would be cancelled.

If, on the other hand, the share price moved in the opposite direction, once it reached £97 this would trigger your stop loss sell order. Your long position would therefore be closed out, locking in a maximum loss of £3.50 per share (£100.50 - £97.00). Your limit sell order would be cancelled at the same time.

7.6 If Done

This is also a combination of a Limit and a Stop order, but one which allows you to enter a new position at a specified price while also protecting you on the downside, by specifying a stop limit should the price move against you. If ABC is trading at £99.50 / £100.50 and you wish to buy 1,000 ABC CFDs if the price reaches £96, you would place a limit order to buy at £96. (In this case, you would believe that ABC is likely to fall to around £96 in the nearby future, but that it will thereafter rise again to a price above this level).

At the same time, you would place an If Done stop loss to sell at (say) £93. If the ABC share price drops to £96, the limit order becomes effective and you buy 1,000 CFDs at this level. At the same time the stop loss will become an active pending order.

If the ABC share price does not rise above £96 to make you your hoped-for profits, and instead continues to fall, your stop loss sell order will be triggered when the ABC share price reaches £93. This will close out your open long position, and limit your losses to £3 per share (£96 - £93).

8. Index CFDs

An index CFD is linked to the performance of a particular stock index. Index CFDs allow investors to gain exposure to a large number of shares in a single transaction. Other advantages of index CFDs include:

- Margin rates can be as low as 1%, allowing for low initial funds requirements and significant leverage;
- Investors can go long or short, so that index CFDs can be traded in both bull and bear markets;
- A CFD position on a stock index remains open until the investor decides to close it. There are no automatic expiries or roll-overs to consider, as is the case with futures and spread bets;
- A short index CFD can also be used as a rough, low-cost hedge to protect a diversified share portfolio against market falls;
- Index CFDs give an investor the ability to take a position on any of the major global stock markets;
- Bid-offer spreads are generally much tighter than on equity CFDs.

8.1 Long Index Trade: FTSE Index - Example

Assume that the FTSE 100 index is quoted at 4450 – 4455. This represents the bid-ask spread, with 4455 being the price at which you can buy FTSE CFD contracts and 4450 being the price at which you can sell FTSE contracts.

Each FTSE CFD contract is worth either the bid or the ask price, expressed in pounds. So, if you wanted to open a long position with a total value of £44,550, you would buy 10 contracts. ($10 \times £4,455 = £44,550$).

Let us assume that you believe the FTSE is about to strengthen, and you decide to buy (or go long) 100 FTSE contracts at £4,455 each for a position value of £445,500. If the initial margin requirement was 1%, you would have to deposit £4,455 into your margin account.

Let us further assume that the FTSE rises so that the quote is now 4500 – 4505. You decide to close out your position by selling 100 FTSE contracts, at the selling price of 4500. The value of your selling position would then be $100 \times \pounds 4,500 = \pounds 450,000$.

If commission costs are assumed to be 0.1% of the position value, then total commission on the opening and closing trades would be $(0.1\% \times \pounds 445,500) + (0.1 \times \pounds 450,000) = (\pounds 445.50 + \pounds 450.00) = \pounds 895.50$.

The gross profit or loss on the trade would then be:

Size of trade x (Selling price – Buying price)	=	Profit / Loss
I.e. $100 \times (4500 - 4455)$	=	$\pounds 4,500.00$
Less commission costs	=	$(\pounds 895.50)$
Net profit	=	$\pounds 3,604.50$

This has produced a favorable outcome, earning a return of 81% on the initial investment of $\pounds 4,455$. If the index had moved the same amount in the opposite direction, however, a slightly larger loss would have been incurred. (Because of the effect of the spread. This is to allow for a profit to the CFD provider). As with equity CFDs, stop losses can also be employed to limit losses on index CFDs.

9. Summary

In this module we introduced you to Contracts for Difference (CFDs), and identified the advantages that equity CFD trading has over the trading of physical shares. The concept of “the spread” was explained, and used in a number of practical examples to illustrate the effect of long and short CFD trades on both indices and equities. We also explained how an equity CFD investor’s account is adjusted when dividends are paid on the underlying share, and we considered the benefits and dangers of leverage implicit in CFD transactions.

The costs attached to CFD trading were explained and their effect on profits examined by way of practical examples. Basic CFD trading strategies were set out, as were CFD order

types and their applications. We also looked at stop loss orders, and how they could be used to limit losses arising from CFD trading.

10. Self-Assessment

Test your knowledge of this module by completing the self-assessment questions which follow. When you answer the questions, do not refer to the suggested answers that we provide. Only look at the answers once you have completed the test, and be sure to clarify any differences between your answers and ours

10.1 Self-Assessment Questions

Please answer each of the following self-assessment questions:

1. Provide a brief definition of a Contract for Difference (CFD).
2. Explain the concept of "the spread."
3. Explain what is meant by the term "margin" as applied to the trading of equity CFDs.
4. If you enter into a long equity CFD trade, what assumption have you made?
5. If you enter into a short equity CFD trade, what are you hoping for?
6. You enter into two CFD trades, an equity long trade on Share A and an equity long trade on Share B. Your initial margin requirement is 5% of your position value on Share A, and 10% on Share B. By what factors will you be leveraging your profits and losses (before any costs) on these two shares, compared to if you had physically bought the shares? (Assume for purposes of comparison that the capital amounts invested in the CFD margins would have been invested in physical share purchases).
7. When can your CFD broker issue a margin call, and if he does so, what two options do you have if you want to continue trading?

10.2 Answers

1. A CFD is essentially an agreement between two parties to exchange, at the closing of the contract, the difference between the opening and closing prices of (say) an underlying share, multiplied by the number of shares detailed in the contract. Apart from shares, CFDs can also be traded on an index, on commodities, and on currencies (foreign exchange).
2. As market makers, specialists are required to post **bid prices** and **ask prices** for the securities assigned to them. The bid price is the price at which a specialist must buy a security from a seller, and the ask price is the price at which the specialist must sell a security to a buyer. So, for instance, if a share has recently traded at \$100, the market maker might set the bid price at \$99.75 and the ask price at \$100.25. The difference between the bid price and the ask price (in this case \$0.50), is called the bid-ask spread, or simply **the spread**.
3. Unlike the physical purchase of shares, with equity CFDs you do not have to pay the full value of the underlying shares. Instead, you put up a deposit (margin), the size of which is determined by the market capitalization and the volatility of the share. The initial margin required is normally between 5% and 10% of the full contract value, but may be more or less depending on the characteristics of the particular underlying share.
4. If you enter into a long equity CFD trade, your assumption is that the price of the underlying share is going to rise in the nearby future.
5. If you enter into a short equity CFD trade, you are hoping that the price of the underlying share will fall in the near future.
6. An initial margin requirement of 5% on Share A implies leverage of $(100 / 5) = 20$ times. An initial margin of 10% on Share B implies leverage of $(100 / 10) = 10$ times. In other words, compared to conventional share trading, profits and losses will be twenty times higher on Share A and 10 times higher on Share B, assuming the same capital amount was invested in both CFDs and physical shares in each case.
7. If the market moves against you and the balance on your trading account falls below your initial margin requirement, your broker may make a margin call. This means that you will immediately have to deposit additional funds, so as to meet your

initial margin requirement on your open positions. Alternatively, you will have to close some of your open positions so that the funds in your margin account cover the initial margin requirements of your open positions.