LEVERAGE AND MARGIN

This module explains leverage and gearing and compares CFDs with non-geared investments. Additionally, there are a number of worked examples of how our margin requirements work and we explore how Stops can be used to reduce margin.



CONTENTS

- 3 LEVERAGE AND MARGIN
- 7 MARGIN
- 8 EXAMPLE 1: GOING LONG SOUTH AFRICA 40 WITH LIMITED RISK
- 10 INITIAL MARGIN
- 14 VARIATION MARGIN
- 15 MARGIN REQUIREMENTS WHEN USING NON-GUARANTEED STOPS

If you were to buy shares, through a stockbroker or any other traditional share dealing service, you would have to pay the full purchase price of the shares.

For example, let's say that you decided to purchase 500 shares of Sasol at a price of R478.90. Ignoring commission, you would have to pay $500 \times R478.90 = R239,450$ in order to make the purchase – in other words, the full value of the shares.

With CFDs this is not the case: you do not have to put up the full value of the underlying shares (or the underlying value of whichever instrument you are taking an exposure to; this doesn't only apply to trading with Share CFDs). Instead, you typically put up only a small portion of the underlying value. This is known as the initial margin (sometimes also referred to as margin).

In the case of Sasol, the margin required is just 5%. This is the initial margin for a selection of the more liquid stocks from around the world. Most JSE shares require a margin of 10%, while less liquid or more volatile shares may require higher margins.*

So for the same value of Sasol shares, if you were doing the deal as a CFD instead, you would only need to put up $5\% \times 239,450 = R11,972.50$ as a deposit.

TO REITERATE:

With the physical share deal you take ownership of 500 shares and pay R239,450.

Using CFD trading you take a position of equivalent size and deposit R11,972.50.

Both deals offer you exactly the same exposure: if Sasol goes up by 100p, both deals make you R500 (the 500 shares are worth 100p more: **500 x 100p = R500**).

*Subject to the total size of your trades on a given share being below a certain (substantial) size. We margin higher rates once the total size of your position for a given share exceeds a certain threshold. Sasol is margined at 5% provided your total size is smaller than 6000 shares. In other words, this tiered system of margining tends to affect those dealing in very large sizes only. More details can be found on our website.

CFD trading is geared: it offers a greater exposure for the amount of money that you invest. To put it another way: gearing allows you to control, for a low outlay, a much more expensive asset.

Gearing has the effect of magnifying profits and losses. This is better illustrated by continuing with the example to see how the profit or loss of the position, relative to the initial outlay, is affected by movements in the share price. Throughout the example, commission and spread will be ignored for simplicity's sake.

SCENARIO 1: SASOL GOES UP

Let's say that Sasol rises in price, as you had hoped, and you decide to take your profit, selling at R483.90, after a net rise of 500p. With the physical holding, you dispose of your 500 shares, receiving R483.90 for each share that you sell. The proceeds from the sale are therefore 500 x R483.90= R241,950.

The shares cost you R239,450 in the first place, so you have realised a profit of R241,950 - R239,450 = R2500.

Expressed as a percentage of your initial investment this is: R2500/R239,450 x 100 = 1.05%. While this is a solid return, it's not particularly spectacular.

Let's compare this with CFD trading. A 500p gain for a trade equivalent to 500 shares equals a profit of R5.00 x 500 = R2500, the same amount of profit in absolute terms as the physical purchase. When we consider this as a percentage of the amount of money that was required to place the CFD trade, however, the difference is marked.

The margin required was R11,972.50. R2500/R11,972.50 x 100 = 20.88%.

When the profits are considered as a percentage of the outlay, the CFD trade offers returns that are vastly greater than the ungeared physical investment.

SCENARIO 2: SASOL FALLS IN PRICE

Let's say that you don't grab your profit as in the first scenario, but instead decide to hold your position. The share price gives back its gains little by little, until eventually the position moves into the red. After it has gone 200 against you, you decide that you have had enough and cut your losses. You sell out to close your position.

The amount of loss for both types of trade is R1000 (500 shares x R2.00/share).

This represents a loss of 0.42% on your investment placed through the stockbroker (R1000/239,450) but a much larger 8.35% loss of the margin placed for the CFD trade.

This effect, whereby losses and gains are effectively magnified relative to the amount of money that you have outlaid, is also known as leverage.

So, is CFD trading more risky than buying and selling shares in the conventional manner?

From a certain perspective, the answer is yes.

In scenario 2 above, had you been gearing up beyond your means, using all your disposable income as the margin, you would undoubtedly have been taking a significant risk.

It should be pointed out, however, that both trades in the examples above – the physical investment and the trade placed through our CFD service – had exactly the same exposure. The ultimate downside for both was R239,450. Neither trade could lose more than that amount. The CFD trade simply required a smaller outlay in order to achieve that exposure. From this point of view, you could argue that the trade using our CFD service was no more risky than the conventional share trade.

If you were to compare the exposure that you could take through our investment service for a R11,972.5 deposit (this would give you a trade equivalent to 500 shares) with buying R11,972.5's-worth of shares, however, the CFD trade would be more risky. In this setting there is no comparison. Using our CFD service in this incidence gives you a trade much times larger, owing to the leverage bestowed by the 5% margin requirement.

For this reason you should always make sure that you are fully aware of how much your total underlying exposure is. With most CFD trades your potential losses are not restricted to the margin you have put down.

MARGIN

Because it is possible to accrue losses that exceed the amount you have deposited with us, when a position moves against you we may often have to ask you to send us more money. This is more properly known as variation margin, but is often simply referred to as margin.

Before we move further into discussing such issues as when and how much money needs to be sent as margin, let's first consider the case of trades that sidestep this issue.

You can only be asked for margin on positions for which your deposit does not cover the total risk. That is to say, there are certain types of trade for which there is a set limit on your risk; as long as you have deposited enough to cover that risk, it follows that you cannot be margined any further. Specifically, these are trades for which a Limited Risk premium has been paid or any long contract on an option (an option is a type of derivative. We offer CFDs on a wide range of options and you can find more information on our website **IG.com**).

So, if you are only ever placing Limited Risk trades or 'buying' options, life is simple: whenever you place a trade it will require a certain deposit, which is equal to the maximum loss possible on that trade. As long as you have that amount on your account, you will never be asked to send further funds to cover the risk on the position, even in the worst case scenario (it should be pointed out that dividend payments for short positions and any funding costs will incur debits to your balance; these may require you to further fund your account if you have deposited only enough to just cover the trading risk of the positions).

Let's look at a quick example of a trade with Limited Risk protection, in order to illustrate this point.

EXAMPLE 1 LONG SOUTH AFRICA 40 WITH LIMITED RISK

The SA 40 is near recent lows at 47620 and you think the index looks like a good buy from a technical point of view. You make up your mind to take a long position, but are wary of the fact that the trend has generally been in the other direction of late, and therefore don't want to commit yourself too heavily. A trade with Limited Risk protection seems like a good way to profit from the value in the market that you see without facing too much risk if you've got it all wrong.

Our South Africa 40 is a stock index CFD that allows you to speculate on the performance of the leading stocks in South Africa (and can be nominated to expire at the end of the day at the closing level of the SA 40). Our quote for South Africa 40 is 47610/47631 and you decide to buy one contract. One contract of South Africa 40 has the value of R50 per point movement in the level of the market.

The premium charged for taking a Limited Risk position with the South Africa 40 is 6 points. This is the extra value you pay in order to receive the added benefit of a Guaranteed Stop (we do not charge commission for stock index contracts: all the charge is in our dealing spread).

You open your trade at 47637 (the offer of 47631 plus the Limited Risk premium of 6), placing your Guaranteed Stop 40 points away at 47597. Your maximum risk is R2000 – that's guaranteed – but there is no ceiling on your profit. This way, if the market drops 200 points you'll only lose your R2000, but if it moves 200 points the other way you stand to make several times that.

The margin required for the trade is equal to the risk: R2000. You have previously transferred over R2000 into your account so that now – unless you move your Stop further away – you cannot be margined further, as your R2000 covers everything (ignoring any dividend adjustments, which would cause debits to be made to the balance of your account).

LONG SOUTH AFRICA 40 WITH LIMITED RISK

Over the next few weeks, the downward trend of the markets in general – including the SA 40 – continues. Eventually our SA 40 price sails through your Stop, quickly establishing new lows at 47500. Your position is closed at your Stop level and you lose the R2000 that you deposited.

As we saw in Module 3, as well as Limited Risk trades which have Guaranteed Stops, we also offer trading with Stops which are not guaranteed. The situation is a little bit more complicated for a position which has a non-guaranteed Stop. The basic information is that the margin required is larger than the margin that would be required if you were using a Guaranteed Stop. The maximum possible loss is not restricted to the initial margin, although you will not be asked for variation margin whilst the trade is open (provided the Stop is close enough to reduce the margin requirement below the amount that would be required if the position had no Stop). How we calculate the margin required for deals placed with non-guaranteed Stops is looked at in more detail after the next section in this module.

We have looked at trades where you won't be asked for funds beyond your initial margin. Let's now focus on all the other types of deal, for which you put up an initial deposit representing only a portion of your total risk.

We have touched on the margin requirements for trading shares, which are a set percentage (dependent on which share you are dealing) of the underlying value. Usually this margin percentage varies from 5% to 50%, but for very illiquid shares, or special cases such as unusually large deals, the percentage may be higher (such incidences are extremely rare).

FX, Spot Gold and Spot Silver also work in this way: the normal Margin Percentage for an FX transaction is 2% of the position value, with 3% the percentage for Gold and 5% for Silver (some of our more popular FX pairs are margined at just 1%*).

Other types of trade generally work in a slightly different manner in which we specify a margin requirement per contract.

Margin requirements are determined by the volatility of the market in question, as well as by the amounts that exchanges demand for contracts of a similar kind in the underlying markets.

Lists of the margin requirements for our contracts can be found in the Contract Details section of **IG.com**.

*For Trader Accounts.

MARGIN EXAMPLES

- You 'buy' two contracts of South Africa 40. The margin requirement for our South Africa 40 is R35,723.25 per contract. You therefore need to deposit 2 x R35,723.25 = R71,446.5.*
- You 'buy' two mini contracts of South Africa 40. The margin requirement for mini contracts is 1/5th of the standard contract, which is therefore R7144.65 per mini contract. You therefore need R14,289.3 (2 x R7144.65) free on your account.*
- You go long 750 shares of Vodacom with our CFD trading service, at a price of R16740. Vodacom is margined at 10%. The underlying value of your trade is R16740 x 750 = R125,550. The margin requirement is 10% of R125,550, which is R12,555.
- You go short one contract of EUR/USD at 1.2910 using our CFD trading service. One standard contract for an FX currency pair is always 100,000 units of the base currency (the first named currency) with us. Therefore, one contract of EUR/USD is EUR100,000. Your transaction is therefore equivalent to selling EUR100,000 at 1.2910 (and therefore buying USD129,100). Your exposure on a currency trade is always in the second named currency (also known as the quote currency. The margin percentage for this FX trade is 1%. Your trade therefore requires 1% of USD129,100 which is USD1291.*

Because the initial margin represents only a portion of your total risk, it is important for you to provide additional funds swiftly in the event of your positions moving against you (if you do not have surplus funds on your account that cover the adverse movement).

*the margin factors shown in these examples apply to Trader Account holders.

EXAMPLE:

You open a position 'buying' a contract of Spot Gold through our CFD trading service at a price of US\$1700 per troy ounce. One contract of Spot Gold is equivalent to a position of 100 troy ounces, so the underlying value of your position is 100 troy oz/contract x US\$1700/troy oz = US\$170,000.

The margin percentage for Spot Gold CFDs is 1%.

The margin required is therefore 1% of US\$170,000 which is US\$1700. You have US\$2100 deposited on your account already. This covers the margin requirement and leaves you with a surplus of US\$400.

Gold drops to a price of 1699. This is one point lower than your opening level, meaning you have a running loss of US\$100. The surplus on your account covers this, so that no extra funds are required at this point.

Overnight, the price of Gold drops further and in the morning is standing at 1694.5. The running loss on the position is calculated as follows: US\$(1700 – 1694.5)/troy oz 100 troy oz/contract = US\$550

As the underlying value of your position has decreased slightly, your margin requirement has also decreased. The underlying value is now 100 troy oz/ contract x US\$1694.5/troy oz = US\$169,450.

CONTINUED -

The margin required is therefore 1% of US\$169,450, which is US\$1694.50. This means your account stands as follows:

BALANCE	US\$2100
margin -US requirement:	\$1694.50
RUNNING LOSS:	-US\$550
DEFICIT U	S\$144.50

12

Your account is US\$144.50 in deficit and we require that amount as variation margin. You instruct us to take the money from your debit card and we transfer over the US\$144.50.

You can monitor the state of your account, (including your cash balance, margin requirement and running losses) in real time using our dealing platform. If you do not fund your account sufficiently, we reserve the right to scale back or close your positions as appropriate to market circumstances (the above is a general guide aimed at giving you a feel for our margining process. For a definitive, legal account of our margining process, please see our Customer Agreement).

VARIATION MARGIN

We may contact you by email to request margin, but responsibility for ensuring your account is adequately funded ultimately lies with you.

It is in your interest as it keeps you aware that a position is moving against you and that you are trading on a geared basis – in short, you are less likely to let a position become a runaway loss if you are being asked to hand over the funds for it.

It is also in your interest for us to behave in a responsible manner in obtaining margin using the same approach for our other clients. You could be dealing with the most reliable counterparty in the world, but if markets have trended strongly in one direction and your counterparty is not collecting margin from clients who have losing positions, you should be worried: somewhere along the line something will have to give. This is why all exchanges – and all good CFD providers – operate with reasonably tight, sensible margining policies.

It is in our interest to make sure that clients are trading within their means – the last thing we want if for someone to get themselves into a losing position that they cannot afford, and hence the need for ongoing margin if a position moves against you.

If you have paid us margin, and the position moves back in your favour, you are, of course, entitled to take back any surplus funds on the account.

14

MARGIN REQUIREMENTS WHEN USING NON-GUARANTEED STOPS

We have established that when using Guaranteed Stops (ie Limited Risk), the margin requirement is the total risk – your exposure per unit movement multiplied by how many points the Stop has been placed from the opening level of the trade.

Exposure per unit movement multiplied by Stop distance is also a component of the margin requirement for positions with non-guaranteed Stops. Let's call this component the 'risk margin'.

We also found that if you take a position without a Stop, there is an initial margin required (calculated either as a product of the margin requirement per contract and the number of contracts, or by taking a set percentage of the underlying value of the contract).

Because non-guaranteed Stops may be subject to slippage, the margin requirement for a position with such a Stop requires more margin than just the risk margin. The extra amount is a percentage of the initial margin that the position would have required if it did not have any Stop at all. Let's call this component the 'slippage margin'.

So, for positions with non-guaranteed Stops:

Margin requirement	= risk margin + slippage margin where:
Risk margin	= exposure per unit movement x Stop distance
Slippage margin	= slippage factor x normal initial margin

The slippage factor is a percentage and is set at 20%, except for shares where it varies according to which share you are trading. For most shares it is 30% (the slippage factor can be looked up in our dealing platform by opening the dropdown menu next to a market and selecting 'Get Info').

MARGIN REQUIREMENTS WHEN USING NON-GUARANTEED STOPS

EXAMPLE

Let's look at dealing on Kumba Iron Ore Ltd and how placing a nonguaranteed Stop on the position can reduce the margin requirement.

You go long 1000 shares at R78.90. Citigroup is margined at 10% so the initial margin requirement is therefore 10% of 1000 x R78.90 which is R7890.

You then place a non-guaranteed Stop 64 cents away at R78.26.

With 1000 shares, the exposure per unit movement is R10, as a one cent movement in the share price means a change in profit/loss of 1000 cents (which is R10).

The risk margin	= exposure per unit movement x Stop distance = R10 x 64 = R640	
The slippage factor for Citigroup is 30%		
Slippage margin	= slippage factor x normal initial margin = 30/100 x R7890 = R2367	
Margin requirement	= risk margin + slippage margin = R640 + R2367 = R3007	

So by placing the non-guaranteed Stop 64 points away you have reduced the margin requirement from R7890 to R3007.

SUMMARY

By now you should:

- Know what is meant by gearing and leverage
- Be familiar with the term margin
- Understand how our margin requirements are calculated
- Have an understanding of our margining process
- Have a feel for how Stops can be used to reduce margin requirements

CFDs are leveraged products. CFD trading may not be suitable for everyone and can result in losses that exceed your initial deposit, so please ensure that you fully understand the risks involved.

Please note that although the material contained within our introduction programme is updated regularly to ensure accuracy, the information given is subject to change, often without notice, and therefore may not reflect our most current offering. Our examples are for illustrative purposes only and do not reflect events in the markets. The information is for guidance only and we accept no liability for its accuracy or otherwise.

IG is a trading name of IG Markets South Africa Ltd. FSP41393

IG The Place, 1 Sandton Drive, Sandton, Gauteng, 2196 South Africa

010 344 0051 IG.com

