JOHANNESBURG STOCK EXCHANGE
Equity Derivatives

Introduction to
Exchange Traded CFD's

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1. Introduction

An Exchange traded Contract for Difference (eCFD) is a new Exchange listed financial instrument introduced by the Johannesburg Stock Exchange (JSE) in 2013. The JSE's Equity Derivatives Market (EDM) will provide a trading platform, regulate, risk manage and clear eCFDs, which can be based on both local and foreign underlying stocks. eCFDs trade on the JSE's Equity Derivate Market (EDM) utilizing existing systems and processes currently used by Equity Derivative Futures and Options. Existing members and clients require no changes to their systems, memberships or mandates in order to participate in this product.

The aim of this document is to provide the reader with in depth detail with regards to eCFDs.

2. Product Description

An eCFD instrument is an agreement between a buyer and a seller to exchange the difference in value of a particular underlying instrument for the period between when the contract is opened and when it is closed. The difference to be exchanged is determined daily by the change in the closing reference price of the underlying instrument. Thus if the underlying instrument rises in price, the buyer receives cash from the seller and vice versa.

eCFDs are leveraged instruments that allow the buyer of the contract full exposure to price movements of the underlying instrument without having to pay the full price of that instrument. eCFDs therefore offer the potential to make a higher return/loss from a smaller initial cash outlay than investing directly in the underlying instrument. As a result of this leverage an overnight interest payment is made by the buyer to the seller on a daily basis. The full exposure amount is loaned to the buyer of a long position and the interest accrued is paid to the seller of the position on a daily basis. Interest payable on a long position is usually calculated at a floating rate + a fixed spread (e.g. SAFEY + 2%). Two of the key differences between eCFD's and SSF's are:

- eCFD's – Dividends are paid to holder of long position by the short position holder; SSF's - Dividends discounted into contract price.

- eCFD's - Interest paid daily on end-of-day exposure amount; SSF's - Interest on exposure from trade date to expiry date is included in contract price.

The simplified example below shows the difference between investing in a share versus an eCFD instrument (NB. this example excludes any trading or interest costs):

Trader A – Basic Equity Trading	Trader B – CFD Trading
- Trader A is confident that XYZ Limited shares are set to rise. - R50 000 cash is available. - The share price is R100 so 500 shares are bought. - Two months later, the price is R106.75, the trader sells and so makes R3 375 profit (R6.75 per share multiplied by 500 shares) - Trader A makes a return of 6.75%.	- Trader B takes the same view as Trader A but buys eCFDs rather than the shares. - The only cash required to enter into the trade, is the Initial Margin amount of R7 500 (Gearing Ratio = R50,000 / R7,500). - This trade also makes a profit of R3,375 over the same period. - Trader B makes return of 45% of the amount invested, seven times the profit made by Trader A.

Table1: Basic example of the leveraging that eCFD instruments offer

3. Reasons for using eCFDs

eCFDs are often used as a trading hedge to reduce market risk. Speculators also use the instrument to gain a leveraged exposure of a particular underlying equity. eCFDs are also often used as long term investment vehicle.

3.1 Hedge Risk - Example A

Assume a share portfolio includes 100 Anglo American Plc. shares, and the belief is that the share price of R250 is set to fall but should recover later. The hedger wants to reduce the costs of selling and re-buying the shares, but needs to protect the overall value of the portfolio. What needs to be done? Sell (short) 100 Anglo American Plc. eCFD contracts at R250. If the belief is correct and the price of Anglo American Plc. drops to R235. The short position is closed out by buying 100 Anglo American Plc. eCFD contracts at R235. The net gain is the R15 fall, which is R1 500 when the Anglo American Plc. shares in the portfolio have lost R1 500 in value. The profit on the eCFD contracts therefore offsets the loss on the shares meaning that the portfolio was effectively and efficiently hedged.

3.2 Speculate – Example B

Studies of the market may lead to the belief that Anglo American Plc. shares are set to rise sharply from their current R250. The trader decides to secure 100 Anglo American Plc. eCFD contracts. The total initial margin is R2 100. The exposure is now 100 shares or R25 000. Four weeks later, the share price is R270. The trader therefore closes out the position by selling the 100 Anglo American Plc. eCFD contracts. The trader has thus made R2 000 (100 shares x (R270 – R250)) in four weeks. The trader has turned R2 100 into R4 100, a return of 95%, while the underlying share price increased by 13%. This speculative success illustrates gearing. The example used in 'Hedge Risk' also illustrates the concept of selling short which can also be used for speculative purposes.

3.3 Investing

Unlike a speculator, an investor tends to have a longer time frame when undertaking a transaction. The advantages are that the investor can benefit from all the price movements of the share, but with a lower capital outlay and at lower trading costs. As in the case of general equity trading, the investor can choose to close out at any time.

4. Product Details

4.1 Listing requirements

The JSE EDM will list eCFDs on request from the market. Upon request the team will utilize the existing liquidity and concentration rules applicable to listing single stock futures (SSFs) on local and international (IDX) underlying shares. Any underlying that therefore already have a SSF or IDX on the JSE EMD market would automatically qualify for the listing of an eCFD.

4.2 Price discovery and execution

It is important to note that price discovery for exchange traded CFD's will be in the underlying Equity Spot Market. Exchange traded CFD's will only be reported to the Equity Derivative Market at the price agreed in the Equity Spot Market. There will therefore be no central order book for exchange traded CFD's.

4.3 Quoting Method

The new exchange traded CFD product will be traded off-market only. The following quote fields will need to be completed when reporting an exchange traded CFD trade:

- **Base Rate:** The Base Rate makes up part of the total Funding Interest Rate for the exchange traded CFD trade. To start, the JSE will only use the Safex Overnight (SAFEY) base rate, but the system is configurable to also make use of other base rates such as SABOR or even Prime. The Base Rate used for the eCFD will float in line with market consensus. The Interest Spread will either be added or subtracted to the Base Rate to calculate the total Funding Interest Rate. Users will have two options to select for the Base Rate (i.e. 'SAFEY +' or 'SAFEY –').

- **Interest Spread:** The Interest Spread will be added/subtracted to the 'Base Rate' to calculate the final total Funding Interest Rate for the exchange traded CFD trade. The Interest spread is limited to absolute values i.e. positive/negative values (e.g. 1.3%).

- **Reference Price:** The price at which the exchange traded CFD was traded. This price will be directly related to spot price of the underlying asset (e.g. R125.67).

  The matching criteria for an exchange traded CFD contract to be accepted by the counterparty:

  1. Reference Price
  2. Interest Spread
  3. Base Rate

4.4 Market Types

The exchange traded CFD instrument will only be traded Off-Market (i.e. Report Only). Trades will be reported via the JSE Nutron Trading Front-End and via the Nutron trading API.

The eCFD Reported Trade window on Nutron :

4.5 Market Transparency

The exchange traded CFD product will only be traded Off-Market with no live central order book on the Nutron trading system. Live bid and offer prices with complete market depth transparency will not be provided for exchange traded CFD trades.

4.6 Contract Code

The contract code for exchange traded CFD contracts will denoted as follows:

Local underlyings: [Underlying Equity Code] + [C]   (e.g. MTNC, AGLC, CLSC, MPCC, etc…)

Foreign underlyings: [First 3 letters of IDX Code] + [E]   (e.g. GOOE, APLE, BPPE, etc…)

4.7 Contract Size

The exchange traded CFD contracts have a 1:1 ratio with the underlying i.e. 1 CFD Contract = 1 Underlying.

4.8 Contract Expiry

The JSE Exchange Traded CFDs will have a yearly expiry, falling on the same day as March Futures Close out expiry i.e. the third Thursday of March or previous business day if a public holiday. Upon market request the JSE could list expiries further out to replicate the perpetual nature of OTC CFDs.

4.9 Trading fees

The trading fees charged on eCFDs are currently zero for the March 2014 expiry. For future expiries, the fees charged will be exactly the same as those levied on reported Single Stock Future trades:

Contract	Type	Off-Screen fees	Floor	Cap (Not applicable to IDX)
eCFD	CFD	1.75BP	0.01	120.00

The floor and cap values represent the value of the underlying stock used to calculate the fees. For example if an underlying stock has a value greater than R120.00 it will only be charged fees using a value of R120.00. This cap is only applicable to local underlyings and not where the underlying is a foreign instrument (IDX).

Similar to SSFs, there will be no fees on the near leg when rolling a contract to another expiry. The far leg will attract the same fees as explained above.

4.10 Dividends and Corporate Actions

Ordinary dividends that are declared on the underlying equity will be paid by the Seller to the Buyer of the Exchange traded CFD contract. The JSE will do a journal transaction to move the cash on ex-date from short to long holder. The amount will be the present value of the dividend from pay-date to ex-date. The collecting agent of the buyer will be responsible for paying the necessary taxes at the prevailing rates on the amount of the dividend.

Other cash corporate events such as share premium returns and capital reductions will be reflected in cash directly on the party's trading account. Due the 1:1 contract size ratio, non-cash corporate events simply adjust the position of the exchange traded CFD to reflect the same economic effect as the underlying instrument on which the exchange traded CFD is based. This means that whenever there is a corporate action – such as a share split, consolidation, bonus issue, takeover, unbundling etc. – the same impact will be reflected in the exchange traded CFD position.

4.11 Margining & Settlement

All cash transactions for exchange traded CFD contracts will be cleared between the JSE clearing house SAFCOM and the relative clearing members.

By clearing through SAFCOM counterparty default risk is mitigated and guarantees trade performance. Once the trade has been matched and confirmed, SAFCOM acts as an intermediary between the trading parties ensuring that the correct settlement amounts are transferred. To protect against non-performance, SAFCOM employs a process known as margining which includes initial margin and variation margin. This process essentially eliminates bilateral counterparty credit risk prevalent in most over the counter transactions.

4.11.1 Margin Offset between different Instruments

Offset will happen across the 3 instruments (SSF, SSO, CFD) grouped as per Underlying.

4.12 Closing of Open Positions

An open exchange traded CFD position can be reduced or closed out by entering into another equal exchange traded CFD trade in the opposite direction. It is important that the opposite trade has the same Interest spread as the original trade; else a new exchange traded CFD trade will be created in the opposite direction. Thus a long position can be closed out by selling an equivalent contract with the same Funding Rate as the original. The difference between the purchase and sale price represents the total profit or loss of the position.

5. Example of Contract Specification

Contract Code:	Local underlyings: [Underlying Equity Code] + [C] (e.g. MTNC, AGLC, CLSC, MPCC, etc…) Foreign underlyings: [First 3 letters of IDX Code] + [E] (e.g. GOOE, APLE, BPPE, etc…)
Contract Underlying:	Underlying Equity Name and Code
Contract Size / Nominal:	1 exchange traded CFD Contract = 1 Underlying share
Trading Mechanisms:	There will be no Central Order Book for the CFD and trades will only be reported to the Exchange via the Reported Trade functionality.
Quotation Style:	One ZAR cent (R0.01)
Minimum Price Movement:	One ZAR cent (R0.01)
Initial Margin	Initial margin is to be paid upfront to JSE by both the buyer and seller upon opening of a new deal position. The initial margin amount per contract is determined by the JSE based on the volatility and liquidity of the underlying share equities. Interest on the initial margin will be earned at the JSE investment rate and paid to the buyer and seller. The original initial margin amount will be paid back to the buyer and seller upon closing of their positions.

Variation Margin (Mark-to-Market):	Buyers and sellers are required to pay/receive a daily variation margin cash flow which is determined by the JSE based on the move in the price of the underlying equity. The variation margin is determined based on the opening and closing exposures held by the parties.
Margin Offset	Currently within the Equity Derivatives system there are multiple instrument categories. Exchange traded CFDs will be included and offset will happen across the 3 instruments groups as per underlying share: This will be implemented by JSE Operations Team.
Interest:	Funding Interest: Funding Interest is paid daily by the buyer to the seller based on a percentage of the total exposure of the exchange traded CFD at the end of the business day. The rate of interest applied will be based on a base rate plus a certain spread agreed upon by the buyer and seller (e.g. SAFEY + 0.5). The closing positions would be used for the paying or receiving of funding on eCFDs. As a result funding, interest on positions held over the weekend (i.e. Saturday and Sunday) and positions held over public holidays will be included in the funding interest payment amount on the business day before the weekend/public holiday. As an example, this would entail that on a Friday night, a participant with a closing position would be called for Funding which includes the Friday, Saturday and the Sunday. Payment on margin calls from the Exchange would however remain on T+1 and as a result the funding called on the Friday night would only be paid on the Monday. Interest on Initial Margin: All initial margins held by JSE are invested at the best prevailing market rate. The interest is calculated daily using Simple Interest method. Interest earned is paid directly to the relative clearing members. This process is standard for all Equity Derivative instruments that require initial margins.
JSE Trading Fees:	Booking Fees: once-off fee upon opening or closing an exchange traded CFD contract position. Fee is payable upfront by both the buyer and seller to the JSE. The fee amount is calculated as a 1.75 bps per leg of the transaction exposure. The following cap and floor will be applied when evaluating the transaction exposure: Cap of R120.00 on the underlying spot price. This cap is only applicable to local underlyings and not where the underlying is a foreign instrument (IDX). Floor of R0.01 per contract
Settlement:	Cash Settled in ZAR
Trading Times:	Reported trades are allowed between 8h30 and 18h15 on South African business days.

6. Cash flow Summary

Type	Description	Flow Direction
Initial Margin	Every trader of an exchange traded CFD contract is required to put up an Initial Margin (deposit) for each contract they trade. This applies to both buyers and sellers. This Initial Margin is returned when the contract is closed out. Initial Margins protect the parties against non-payment of losses by the other party.	Buyer & Seller → JSE (SAFCOM)
Variation Margin **(MTM)**	Mark-to-Market is a daily process whereby the value of the exchange traded CFD position is compared to the previous day's closing position and the profit or loss calculated and paid accordingly. The change in the MTM each day (either up or down) has a cash value and is referred to as variation margin. Variation margin profits are added to the party's trading balance and variation margin losses are deducted.	A. Increase in share price: Seller → JSE (SAFCOM) → Buyer B. Decrease in Share price: Buyer → JSE (SAFCOM) →Seller
Dividends	Ordinary dividends that are declared on the underlying equity are to be paid by the Seller to the Buyer of the exchange traded CFD contract. The JSE will do a journal transaction to move the cash on ex-date from short to long holder. The amount will be the present value of the dividend from pay-date to ex-date.	Seller → JSE (SAFCOM) →Buyer
Funding Interest	Funding Interest is paid daily by the buyer to the seller based on a percentage of the total exposure of the exchange traded CFD at the end of the business day. The rate of interest applied will be based on a base rate plus a certain spread agreed upon by the buyer and seller (e.g. SAFEY + 0.5). The closing positions would be used for paying or receiving funding on eCFD. As a result funding interest on positions held over the weekend (i.e. Saturday and Sunday) and positions held over public holidays will be included in the funding interest payment amount the business day before the weekend/public holiday. As an example this would entail that on a Friday night a participant with a closing position would be called for Funding which includes the Friday, Saturday and the Sunday.	Buyer → JSE (SAFCOM) →Seller
Interest on Initial	Interest is calculated daily by the JSE on the opening balance of Initial Margins deposited by the buyer and seller. The interest	A. JSE (SAFCOM) →Clearing

Margin	rate used by to perform this evaluation is based on the best investment rate of SAFCOM. This interest is paid directly to the clearing member of the buyer and seller.	Member (Buyer) B. JSE (SAFCOM) →Clearing Member (Seller)
Booking Fees	The trade booking fees that are charged once off by the JSE when opening or closing a position.	Seller → JSE (SAFCOM) Buyer → JSE (SAFCOM)

7. eCFD Market Makers

Market Maker Name	Contact Person	Contact Number	Email Address
Investec Bank Ltd	SSF Derivatives Desk	(011) 286 4672	ssfderivatives@investec.co.za
RMB Morgan Stanley	John Parent or Bryan MacCallum	(011) 269 9890	edcsdealers@rmb.co.za

8. eCFD Brokers

Market Maker Name	Contact Person	Contact Number	Email Address
CJS Securities (Pty) Ltd	Piet Faure	(011) 447 3531	piet@cjsagri.co.za
Afrifocus Securities (Pty) Ltd	Claude Gelle	(011) 290 7800	claudeg@afrifocus.co.za
Ridgecape Capital (Pty) Ltd	Brad Welch	(011) 701 8592	brad@ridgecape.co.za
Imara SP Reid (Pty) Ltd	Cameron Horsfall	(011) 550 6200	Cameron.horsfall@imara.co.za
Vunani Private Clients (Pty) Ltd	Mark Wietman	(011) 384 2920	tradingdesk@vunaniprivateclients.co.za

9. eCFD Software Providers

Market Maker Name	Contact Person	Contact Number	Email Address
Velocity Trade	Nicole Vos	(021) 200 8803	ops@za.velocitytrade.com
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