



DERIVATIVES POCKET GUIDE

YOUR DEFINITIVE REFERENCE TO DERIVATIVES



DERIVATIVES



INTRODUCTION TO DERIVATIVES

A derivative is a financial instrument with a value that is reliant upon, or derived from, an underlying financial asset (equity, bond, commodity and currency) or group of assets (benchmark financial market indices). The derivative itself is a contract between two or more parties, and the derivative derives its price from fluctuations in the underlying financial asset.

Investors buy or sell derivatives to manage the risk associated with the underlying security, to protect against fluctuations in value, or to profit from market movements.

The basic types of derivatives are:

- Forwards
- Options
- Futures
- Swaps

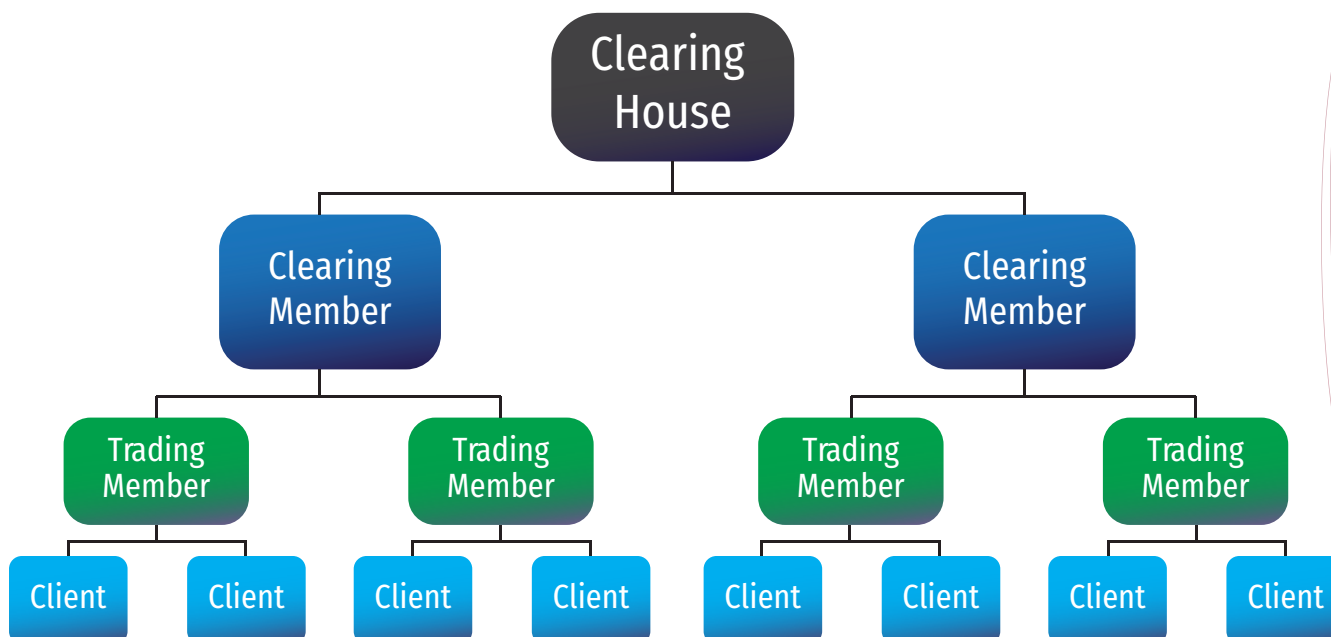
The NSE Derivatives Market (NEXT) will be trading in Futures.

Types of Derivatives Markets

- **Over-the-Counter (OTC):** In this market trades are privately negotiated off-exchange between two parties. In this way, contracts can be tailor-made to the two parties liking. Over-the-counter markets are generally less controlled and regulated.
- **Exchange Traded Derivatives (ETD):** Here, trades are executed via specialized derivatives exchanges or other exchanges. The Participants trade standardized contracts that have been defined by the exchange. There is a very visible and transparent market price for the derivatives contracts.

NEXT will be trading the single stock futures and the NSE 25 Share Index.

MARKET STRUCTURE



Market Players

- **Clearing House** – This is the NSE Clear and it is responsible for settling trading accounts, clearing trades, collecting and maintaining margin monies, regulating delivery and reporting trading data. They act as a buyer to every seller and as a seller to every buyer.
- **Clearing Members** – Co-operative Bank and Stanbic Bank. They are responsible for clearing, settlement and risk management of trades executed by the Trading Members. They share secondary responsibility for the liquidity of the clearing operation. Clearing Members are banks or financial institutions licensed by CBK.
- **Trading Members** – Genghis Capital is a trading member. This category in the market encompasses brokers and investment banks.
- **Clients** – These are investors who may be individuals or institutions. They include Speculators, Hedgers, Arbitrageurs.

Outside of the market structure indicated above, we also find the below players to the derivatives market:

- Fidelity Funds
 - » SGF (Segregated Guarantee Fund): To settle any unspecified margin claims on default.
 - » IPF (Investor Protection Fund): Guard clients from any trading member malpractice.
- Industry Associations include KASIB, FMA, KBA etc.
- Regulators such as, CMA, CBK, RBA, and IRA.

DERIVATIVES (FUTURES) TRADED ON NEXT

1. SINGLE STOCK FUTURES

The currently available Single Stock Futures available for trading are as follows:

- Safaricom
- KCB
- Equity
- EABL
- BAT

The features of this futures are as indicated:

Single Stock Futures		
Underlying asset	Qualifying Stock (share) as stated above	
Contract size	For shares trading below KES 100: One contract equals 1,000 underlying shares. For shares trading above KES 100: One contract equals 100 underlying shares.	
Minimum price movement	Price Range	Tick Size
	Below 100.00	0.01
	$\geq 100.00 < 500.00$	0.05
	≥ 500.00	0.25
Contract months	Quarterly contracts	
Settlement	Cash settled in Kenyan Shillings	
Settlement price	VWAP for liquid contracts or theoretical price (spot + cost of carry) for illiquid contracts	
Expiry dates	Third Thursday of every expiry month	

2. NSE 25 INDEX FUTURES

Underlying asset	NSE 25 Share Index
Contract size	One index point equals one hundred Kenyan Shillings (KES 100.00)
Minimum price movement	One index point (KES 100.00)
iv. Contract months	Quarterly contracts
Settlement	Cash settled in Kenyan Shillings
Settlement	VWAP for liquid contracts or theoretical price (spot + cost of carry) for illiquid contracts
Expiry dates	Third Thursday of every expiry month



THE DIFFERENCE BETWEEN EQUITIES (SPOT) MARKET AND THE DERIVATIVES MARKET

An equity market is a market in which shares are issued and traded through exchanges or on over-the-counter markets. Also known as the stock market, it is one of the most vital areas of a market economy as it gives companies' access to capital and investors a slice of ownership in a company with the potential to realize gains based on its future performance.


In order to understand the differences between the equities market and derivatives market, we must begin with the 'Initial Margins' which are tabulated below.

Initial Margins are good faith deposits that are required in order for an investor to open a position. It is calculated by NEXT and takes into account the reasonable loss on a position.

Initial Margin Requirements - KES				
Company	Contract Expiry Date			
	19 Sep 19	19 Dec 19	19 Mar 20	18 Jun 20
British American Tobacco Kenya Plc (BATK)	7,401	7,486	7,570	7,655
KCB Group Plc (KCBG)	5,544	5,903	6,263	6,622
Equity Group Holdings Plc (EQTY)	5,599	5,957	6,316	6,675
Safaricom Plc (SCOM)	2,934	3,251	3,567	3,884
East African Breweries Ltd (EABL)	2,844	2,981	3,118	3,255
NSE 25 Share Index (NSE25I)	26,241	28,243	30,245	32,247

In addition to the above, it is important to note the following.

- There is also an additional margin that is collected by clearing members as an extra buffer and is a percentage of the initial margin.
- A House Margin that is collected by trading members as a buffer is an amount agreed between the trading member and the client.
- Lastly, a Variation Margin is the amount that may be due to or from a client as result of the daily mark-to-market activity.



Now, let us illustrate the difference between the equities markets and derivatives trading using the Safaricom (SCOM) counter as an example.

In order to take a position of 1,000 shares of SCOM at KES 27.00 in the equities market, you will need KES 27,000.00 (sans applicable fees).

In order to take the same 1,000 shares position in the derivatives market you will need to purchase at least one contract, say the 19th September 2019 contract from the previous table. And you will require an initial margin of KES 2,934.00 (also from the table). In addition, there will be the additional margin which is 10% of initial margin of KES 2,934.00 i.e. KES 293.40.

This means that the total amount required to open a KES 27,000.00 SCOM position in the derivatives market is KES 3,227.40.

Do note that this example does not take into account the free margin amount that is left in your account after the initial and the additional margins have been deducted. The funds that remain in your account are required to settle your position at the end of each day, if the trade goes against your position.

Hence; ***For the equity market you would need KES 27, 000.00 to take the illustrated position, while in the derivatives market to take a contract of a similar number of shares would require only KES 3,227.40***

Now say SCOM moves up by KES 1.00 in the equities market and also goes up in the derivatives market.

It is important to note that even though prices in both markets go up, they may not necessarily be identical. This is as a result of the derivatives market prices being the sum of the spot price and the cost of carry.

The Cost of Carry (CoC) of a futures contract is the cost incurred on holding positions in the underlying security until the expiry of the futures. The cost includes the risk-free interest rate and excludes any dividend pay-outs from the underlying. It is commonly used to interpret market sentiment for the stock or index, as higher values of CoC indicate traders are willing to pay more for holding futures.

Back to the Safaricom counter:

In the equity market

Opening Price - KES 27.00

Closing Price - KES 28.00

Number of shares = 1,000

You earn KES 1,000.00 on your KES 27,000.00 investment on this position

In the derivatives market

Opening Price - KES 28.02

Closing Price - KES 29.02

Contract size = 1 contract of 1,000

You will have earned KES 1,000.00 on your KES 3,227.40 investment on this position.

The converse is also true.

In the equity market

Opening Price - KES 27.00

Closing Price - KES 26.00

Number of shares = 1,000

You will have lost KES 1,000.00 on your KES 27,000.00 investment on this position.

In the derivatives Market

Opening Price - KES 28.02

Closing Price - KES 27.02

Contract size = 1 contract of 1,000

You will have lost KES 1,000.00 on your KES 3,227.40 investment on this position.

In conclusion, the main difference between the two markets is that a client is able to take positions in the derivatives market with less money upfront compared to the equities market. The fees are also considerably lower.

In addition, you can enter and exit your position on the same day in the derivatives market.

In addition, profits or losses in the equities market are only realized when you sell the stock, while in the derivatives market your losses or profits are realized everyday through a process called Mark-to-Market i.e. the account is settled on a daily basis.



THE RISKS

While trading in derivatives has benefits for the sophisticated investors, it does come with some risks that you must be aware of:

Market Risk: When markets begin trending (either bear or bull), if your position is opposite to the trend you may be caught facing the wrong direction. The limit on share price changes still applies at 10% (i.e. the circuit breaker), but you may still need to consider exiting your position as soon as possible. Unless it is part of your trading strategy.

Liquidity Risk: This mainly occurs when you need to exit a position but do not get a counterparty to take the opposite of your position.

Leverage Risk: This arises as derivatives are leveraged and a small move in a contract will result in large profits or losses. The main way to reduce this form of risk is to figure out how much each move in a contract will mean to your portfolio.

PURPOSE OF DERIVATIVES TRADING

Hedging

- Investors can protect their portfolios against adverse price movements by trading futures that reflect their stock portfolios.

Wider variety of trading strategies

- Access to strategies such as shorting securities, replication of index performance, arbitrage etc.

Enhanced returns due to leverage

- Since only a small margin is required upfront, the investor stands to gain significantly more than they put in.

ADVANTAGES OF DERIVATIVES TRADING

Lower transaction costs

- The trading fees for single stock futures are 0.17% while fees for index futures are 0.14% (fees are based on the value traded)
- Trading fees on shares can range between 1% and 2%

Less counterparty credit risk

- By acting as the central counterparty for every trade, NSE Clear ensures that settlement is completed each day.
- The investor therefore does not need to worry about credit risk.

GETTING READY TO TRADE ON NEXT

Derivatives trading is for sophisticated investors. They are defined as investors who have sufficient prerequisite knowledge and experience in market matters to effectively evaluate the risks and merits of an investment, and who are capable of trading on their own.

The first step after ascertaining that an investor matches the above criteria is to provide and fill in a derivatives account opening form. This form indicates all the supporting documents required in the case of an individual or an institutional client.

An integral part of the application process is the reading, understanding, and signing-off of the Risk Disclosure document. This document states that the investor is aware of the innate risks of the product and is knowingly and willingly taking on the risks.

The client's application is then processed, and once approved the client's trading account is created and linked in the Avvento system.

An email is then sent to the client with the respective account details and the collection account that needs pre-funding. The derivatives market is a pre-funded market meaning no trade can be executed without money in one's trading account.

Once the client's collection account is funded, the money will be sent to the trust account and subsequently, reflect on the trading account.

You are ready to go now.

The client will be given access to the Avvento Trading system to trade for themselves.

FEES

As previously indicated, fees are lower in the derivatives market in comparison to the spot market. Percentages indicated in below table are of the value of the contract.

Fee	Single Stock Futures	Index Futures
NSE	0.025%	0.02%
Clearing Member	0.025%	0.02%
Trading Member	0.10%	0.08%
Investor Protection Fund	0.01%	0.01%
Capital Markets Authority	0.01%	0.01%
Total	0.17%	0.14%