



THE Nigerian STOCK EXCHANGE

&

Crubin Futures

Introduction To Exchange Traded Derivative

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www.growyourstockexchange.com

Outline



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An Overview



Derivatives are contracts that *derive* their value from the performance of an underlying asset, event, or outcome—hence their name. Underlying assets can be :



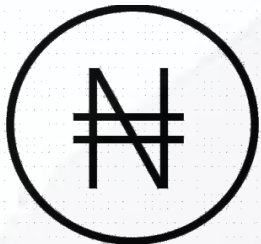
Stocks



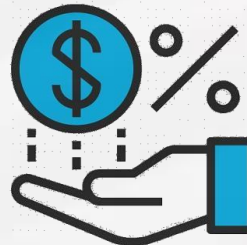
Bonds



Commodities



Currency



Interest Rates



Market Indices

But derivatives can be dependent on almost any variable, from the price of a zero coupon bond to the volume of corn harvested.

Classification Of Derivatives



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Forward Contracts

A forward contract is an agreement between two parties in which one party agrees to buy from the seller an underlying at a later date for a price established at the start of the contract.

Future Contracts

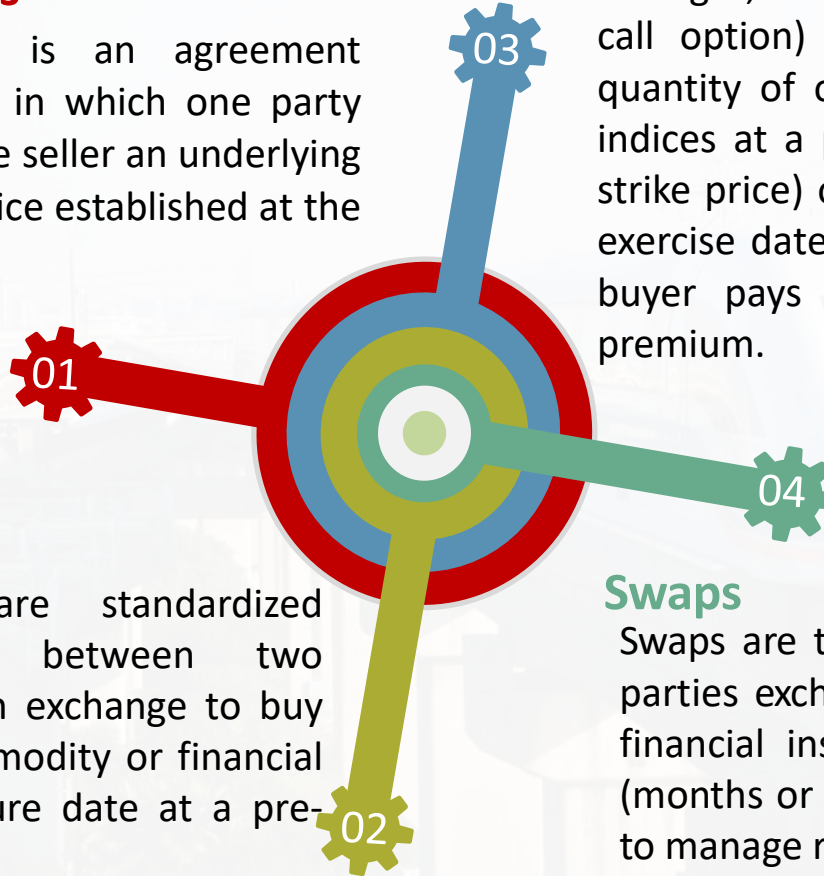
Future contracts are standardized agreements made between two counter-parties on an exchange to buy or sell an asset (commodity or financial instrument) at a future date at a pre-agreed price

Option Contracts

An option is an agreement that gives the buyer the right, but not the obligation, to purchase (a call option) or sell (a put option) a given quantity of one or more particular assets or indices at a predetermined price or rate (the strike price) on one or more future dates (the exercise date). In exchange for this right, the buyer pays the seller, or option writer, a premium.

Swaps

Swaps are typically derivatives in which two parties exchange (swap) cash flows or other financial instruments over multiple periods (months or years) for mutual benefit, usually to manage risk.



Futures and Forwards Contracts



Differences

	Futures	Forwards
1.	Traded on an exchange platform	Private contract (bi-lateral contract)
2.	Standardized, having an exchange-specified contract unit, expiration, tick size, and notional value	Customized to meet institutional needs
3.	Eliminates counterparty risk, since the exchange clearing house guarantees.	Credit default risk, since it is a privately contract, and fully dependent on the counterparty performance on obligation.
4.	Actively traded (liquid)	Non-transferrable
5.	Regulated	Not regulated



Traders can take futures positions by going long (buying) or short (selling). Whatever position taken by exposes the trader to changes in the value. Thereby leading to profit or losses as a result of price movement



When contract is held to expiry, traders are obliged to meet the delivery obligations. If the spot price of the asset is above the futures, buyer will make a profit. The buyer will take delivery at the lower price and be able to sell the asset in the cash market at the higher price and vice-versa



Margin

Margin Requirement – An initial margin is required for futures contract to be executed, and if the equity falls below the maintenance margin requirement, a margin call will happen meaning the trader or investor must deposit money to bring it back to the initial margin.

Why these Derivatives are beneficial (Futures and / or Options)



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Differences

How Futures Work

Allows all customers / investors (institutional and retail) to:



- **BUY** individual securities or **entire market** with high leverage AND:
 - NO interest payments
 - NO downside or adverse market risk



- **SELL** (go Short) individual securities or **entire market** with high leverage AND:
 - NO upside or adverse market risk
 - NO lending / borrowing individual securities
 - NO “short squeezes” nor forced “close outs”



- Generate interest income

Why these Derivatives are beneficial Cont'd



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Differences



- **Hedging**
- Allows asset managers and other investors to:
 - Hedge positions to reduce and/or eliminate:
 - Market price risk
 - Currency risk
- Hedge 20%, etc. of portfolio – Sell stock index futures contracts or Buy Put options contracts
 - 100% hedge – out perform or under perform market

How Futures Work

- **Producers and Users** of traditional commodities (e.g., oil, wheat, cotton, metals, etc.) - great **leverage** PLUS can reduce or eliminate **market price risks**:
 - Producers – Sell futures and/or Buy Call options
 - Users – Buy futures and/or Buy Put options (SW Airlines)
- Commodity Producers and Users represent additional Customers for Brokerages
- Same Trading and Settlement systems for all commodities – stocks, stock indexes, oil, cotton, sugar, wheat, metals, etc.



Energy Future (Crude oil)

Majority of derivatives trading are in products that are based on a financial underlining, such as FX rates, debt instrument and stocks. In contrast, trading in energy derivatives, and commodity derivatives in general, means that the underlying is a physical product. This physical product or underlying must be defined very exactly and price formation must be the result of a fairly active trading activity to make a derivatives product viable.

Crude Oil Futures

This is one of the most actively traded commodities in the world, and its price movements affects the price of many other commodities, including natural gas. However, the ripple effect of crude oil price movement also impacts the price of stocks, bonds, and currencies around the globe.

Oil prices fluctuate on the faintest whisper of news regarding pricing, and most of the crude oil reserves in the world are located in regions that have been prone to political upheaval or in regions that have had oil production disruptions because of political events. Hence the need for hedging arises.

Standard futures contracts on exchanges represent the price for 1,000 barrels of oil for delivery in a specific month, with a premium for timescales further out to cover the cost of storage and financing. Contracts are typically available for each month in the next few years. Oil traders include financial institutions such as banks, trading firms and hedge funds as well as oil producers and consumers. Like financial institutions, individual investors never take physical delivery of the oil they trade, instead rolling over their monthly contracts to the following month on expiry to keep their positions open.

The combination of the price war, demand destruction during the Covid-19 pandemic and limited storage availability prompted the negative turn in prices in spring 2020.

A portfolio manager can diversify by adding oil to the portfolio using a broker to trade Brent or WTI crude oil contracts on one of the exchanges, or you can choose to trade contracts for difference (CFDs)

A contract for difference is a financial instrument between a broker and a trader, in which one party agrees to pay the other the difference in the value of the security between the start and end of the trade. When you trade crude oil futures using CFDs, you speculate on the direction of the underlying asset without actually owning it.

Differences



Whole world of investors and traders are one or the other:

- **Hedgers** – avoid financial risk
- **Speculators** – take risks – to make profits
- Futures and Options accommodates both
- Can start with Hedgers, but need both: otherwise, no long term viable market
- Inter and Intra Spread trading – whether price difference narrows or widens

Maintain position - “roll out”



- At expiration of a Futures contract, the final futures price = cash price
 - That's why Futures contracts are such a good hedge
 - That's why Futures have **same volatility** as underlying Cash commodity
- Final delivery of underlying commodity (e.g., stock, oil, stock index, etc.) can be **Cash** or **Physical** (my preference is Cash for all commodities)
- All trades are cleared through a Clearing House, a Central Clearing Counterparty (CCP), or through your current Depository



Similarities:

➤ Hedging and Leverage opportunities

- Reduce or Eliminate market price risks

Trade in similar size contracts which have an expiration date

Position can be liquidated prior to contract expiration

➤ Open Interest (contracts Long = Short for each contract month)

Unlike securities – No primary market, **Only secondary market**

Differences:

➤ Futures – "double edged sword" for up and down market exposure

- » Leveraged Profits and Losses
- » Margin (account equity) requirements for Buy and Sell (long and short positions)
- » For all or most commodities
- » Much simpler, **should be established first**

➤ Options – upside leverage, but downside protection

- » Pay (insurance) premium – no downside market risk
- » Margin requirements only for short positions
- » (In India, options are called "insurance")
- » Primarily for securities (some oil options)

➤ Derivatives create more trading activity

- ❑ US – millions to billions shares / day on NYSE
- ❑ India – NSE (India) – in 8th year; 25X pre-derivative levels
 - » 4X more than Cash business
- ❑ Korea – KSE became KE



Other “new” Hedges

In India, they are working on establishing a “rainfall index” to reduce the amount of farmer suicides.

Why the INCREASE?



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As simple as 1, 2, 3



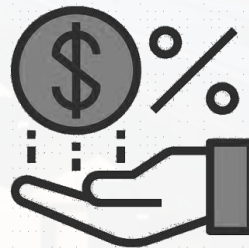
1. Hedging – reduce or eliminate price risk

Portfolio managers, producers or sellers
(e.g., farmers, oil producers), buyers
(e.g., food wholesalers, oil refiners)



2. Ability to “go short”

No lending or borrowing (nor systems)
No upticks



3. Leveraged Buying and Selling

individual stocks or the “entire” market

Distribution of Futures and Options - FIA (Futures Industry Assoc.)



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All Markets – only organized exchanges (2008)

Sector	% of Total (contracts)
Equity Index	32.7
Individual equities	31.7
Interest rates	21.9
Agricultural	5.0
Energy	3.3
Currency	3.2
Metals	2.0
Other	0.2

Based upon more than 8 billion contracts traded

Additional functions required for establishing Futures and Options



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1



Rules and Regulations

My current understanding is that NSE has already dealt with the appropriate rules and regulation modifications

2



Settlement system

Also, I was told that the NSE is currently working on establishing a derivative settlement system

3



Trading system

for derivatives is essentially the same as for stocks in current NSE Cash market

Additional functions required for establishing Futures and Options Cont'd



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I can provide the following:



Education and Understanding: For NSE and Depository staffs, Brokerage staff, Customers (current and potential) –

Workshop (8 to 10 hours) – Understanding these financial instruments (book published on this subject). - operations, some strategies, concepts, terminology, benefits, applications, etc.

Initially, Futures (7 to 8 hours)



Brokerage Back-Office system modifications (enhancement)

- Thorough description and implementation of additional back-office system requirements and modifications (e.g., IM, VM, MM, Calls, etc.) -
 - Interface or work with in-house IT staff, service provider, and service bureau to complete modification

Question and Answers



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– endorsement

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