

Interest rate hikes' effects on different economic and market factors



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**“Facts cannot be observed
without the guidance of
some theory”**

—Auguste Comte

01.

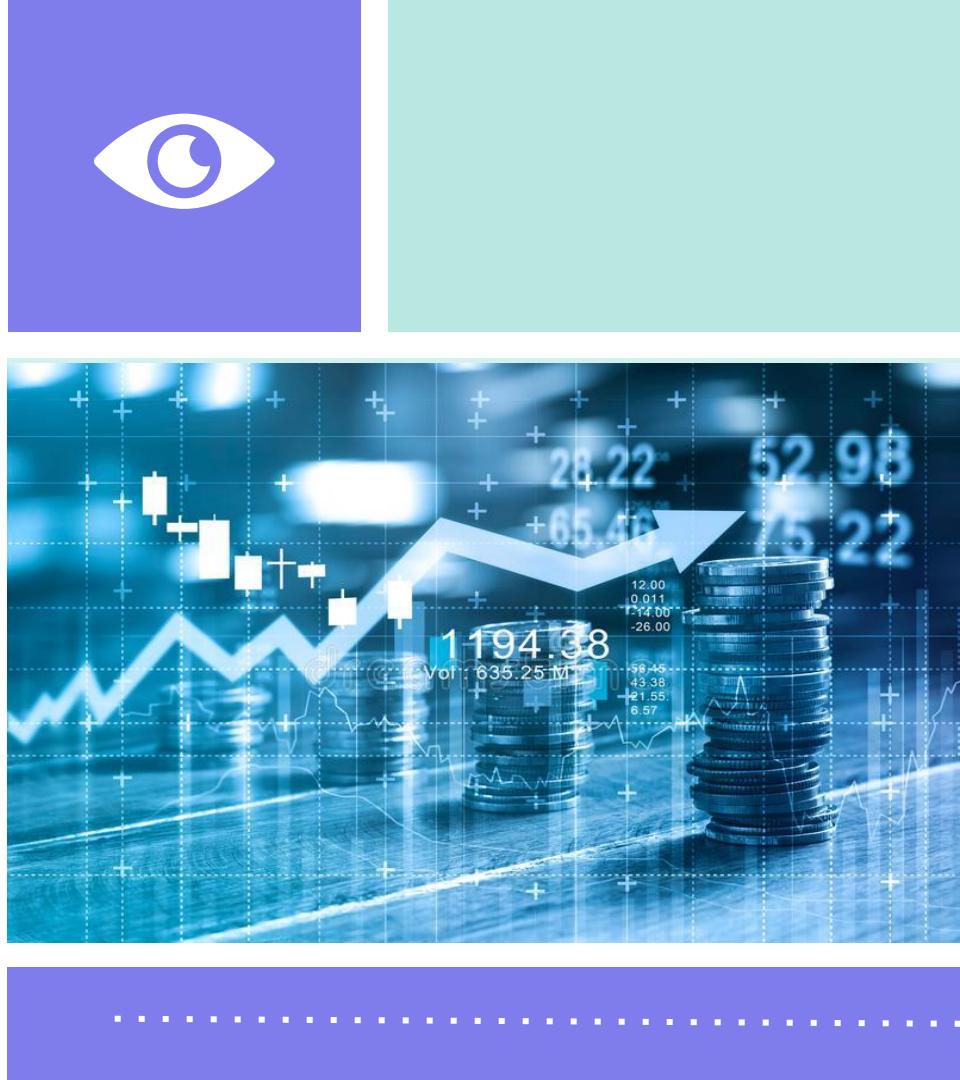
INTEREST RATES

Interest rate introduction and its fluctuation outputs on inflation



Introduction to interest rate

- ❖ Fixed rate charged on for borrowing money for particular time period on borrow debt by lender
- ❖ Decided by high level central body
- ❖ Different types of interest rates- APY (Annual Percentage Yield), Simple Interest, Compound Interest, Federal Funds Rate, etc.
- ❖ Debt transaction body includes banks, governments, central bank of nation, FOMC, companies, clients, etc.
- ❖ Source of income to lender considering low risk of borrower



Interest rates effect and inflation relation

- ❖ Relation is strongly determined by supply and demand for money.
- ❖ Money supply and inflation follow direct variation
- ❖ Less and more money supply triggers decrease and increase in inflation respectively
- ❖ To maintain nation's economy on good level nation's central bank comes into play
- ❖ Interest rates counterdrive inflation in opposite direction



Peeping more into interest and inflation drive

- ❖ In declining inflation period, central bank lowers interest rate
- ❖ Lower rate results in less return on deposits
- ❖ Enforces people to spend more on commodities triggering more demand in market
- ❖ Due to more demand, suppliers increase prices resulting increase in inflation
- ❖ Similarly in high inflation period, central bank increase interest rate triggering less demand and thus lowering inflation
- ❖ Central bank plays key role in maintaining nation's economy



02.

STOCK AND BOND MARKETS

Interest rate effect on bond and stock markets



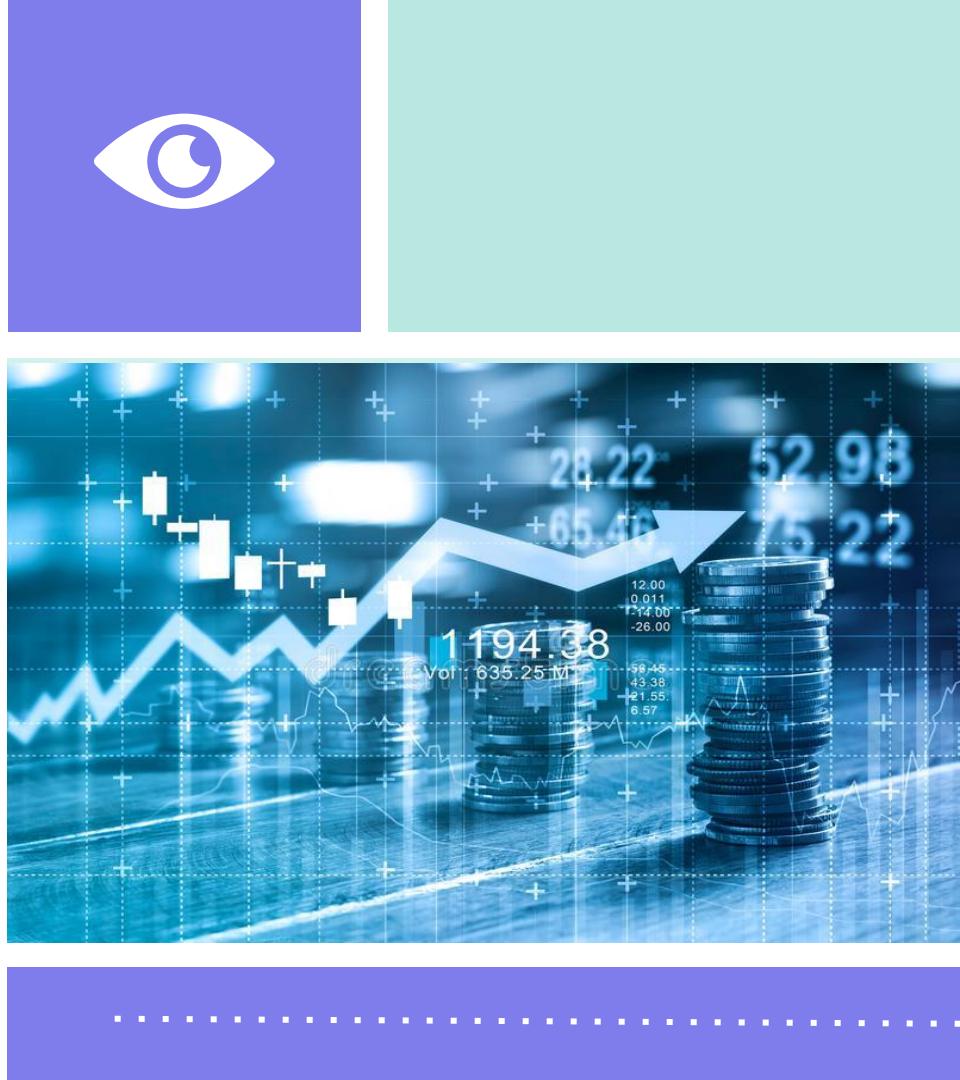
About Stock and Bond Market

- ❖ Stock market includes buyers and sellers of company shares and trading platforms stock exchanges
- ❖ Stockholders claim their ownerships on company in return to which they get dividend on share price
- ❖ Bonds are debt securities issued by companies to implement their plans
- ❖ Bond market is fixed income market, but with less returns amount



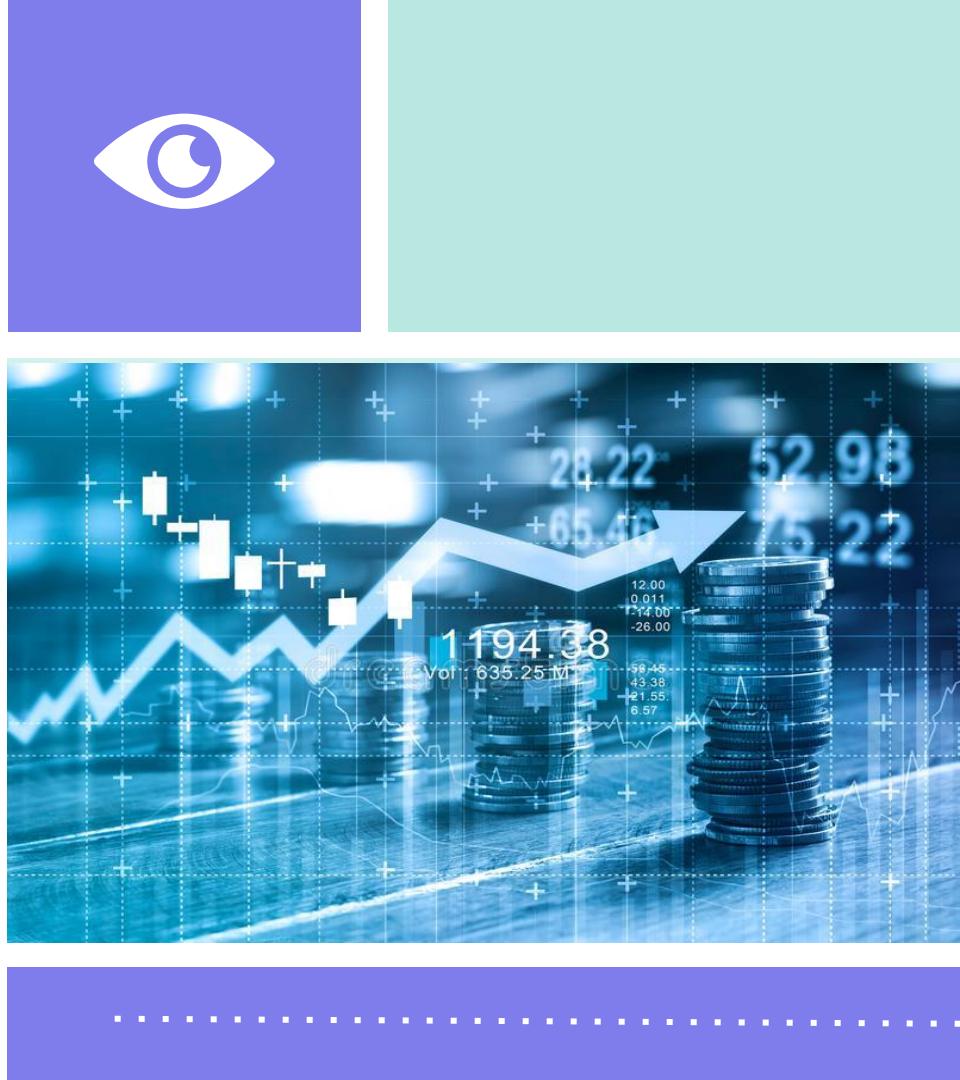
Interest rate effect on stock markets

- ❖ Federal Open Market Committee (FOMC) plays a key role in economy of stock markets
- ❖ Effect of interest rate on stocks time curve is quite drastic
- ❖ Interest rates hike affect stock status of companies MOSTLY in unsatisfied manner
- ❖ Rates rise declines purchasing power of stockholders
- ❖ Generally, hike in interest rates triggers sloping down stock markets
- ❖ In nutshell, interest rates and stock markets follow inverse variation



Interest rate effect on bond markets

- ❖ Interest rates fluctuation have great impact on bond demands which in turn affect yield of bond investor
- ❖ Bond investor tries to keep his yield and bond demand balanced
- ❖ When interest rates fall, bond demand increases thus investor keeps its price high
- ❖ When interest rates rise, bond demand decreases thus investor lowers bonds price
- ❖ Most volatile Zero-Couple bonds follow this inverse mechanism of rates and bond prices



03.

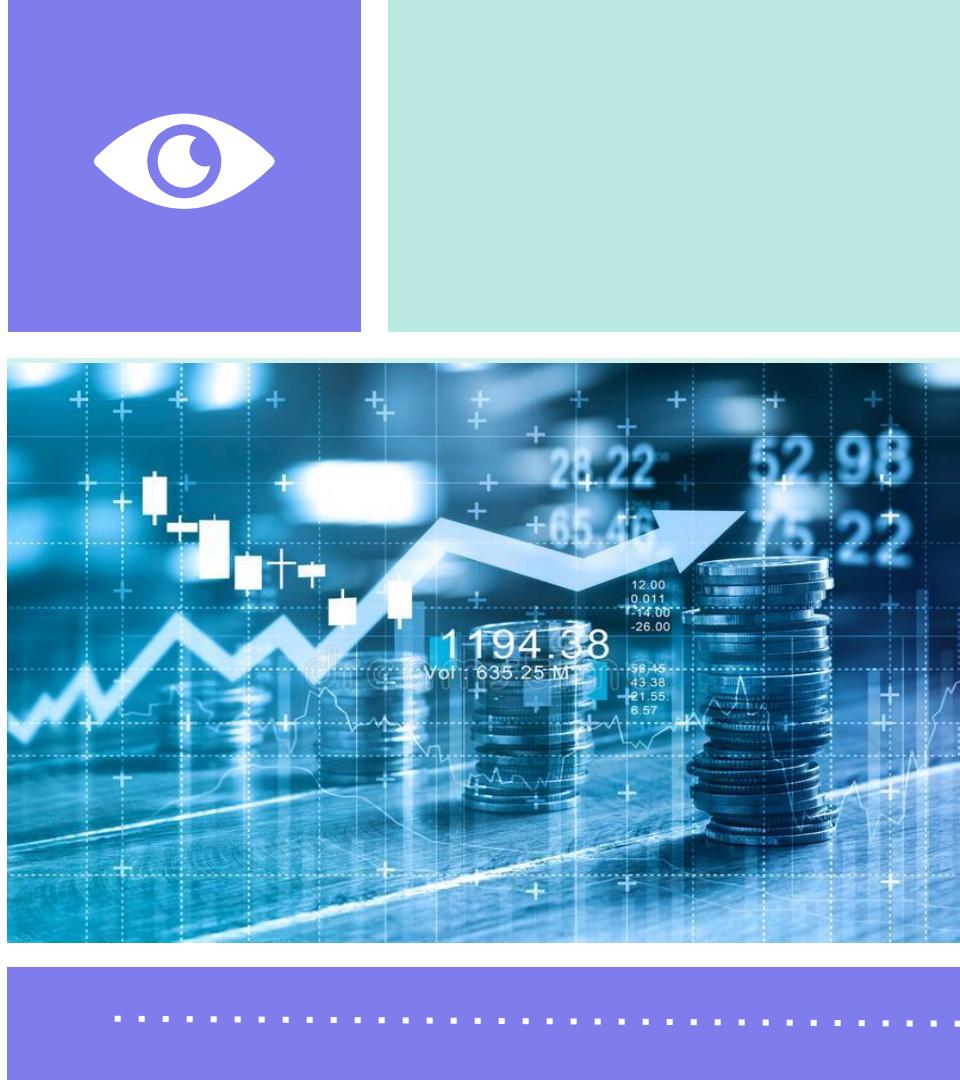
DERIVATIVES AND COMMODITY MARKETS

Interrelation between interest rate and derivatives, market body



What are Derivatives?

- ❖ Derivative is a trade between two or more parties
- ❖ The value of derivative is determined from certain underlying group of financial assets
- ❖ Can be used as leverage against some parties
- ❖ Its value is hard to determine due to certain risk factors and high sensitivity towards fluctuation of underlying price deciding factors
- ❖ Trade can be on the exchange or Over The Counter(OTC) policy



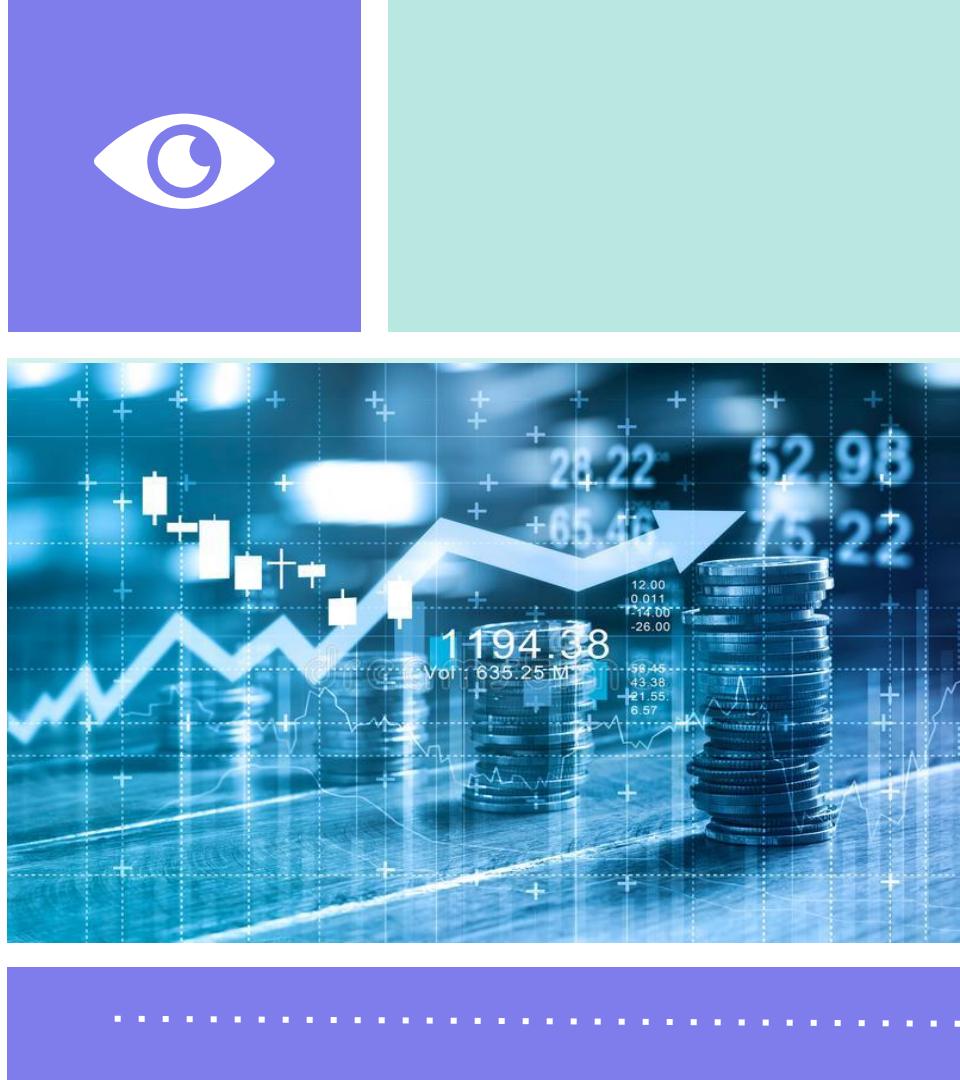
Central economic body- Commodity Markets

- ❖ Commodity market is a *Platform* for trading of primary commodities
- ❖ Fluidity of marketplace gives access to customers for buying commodities at one place
- ❖ Also gives access to producers to sell their commodities in centralized marketplace
- ❖ Certain permissions are to be granted for accessing market
- ❖ Trading platform could be either Physical Market or Derivatives market



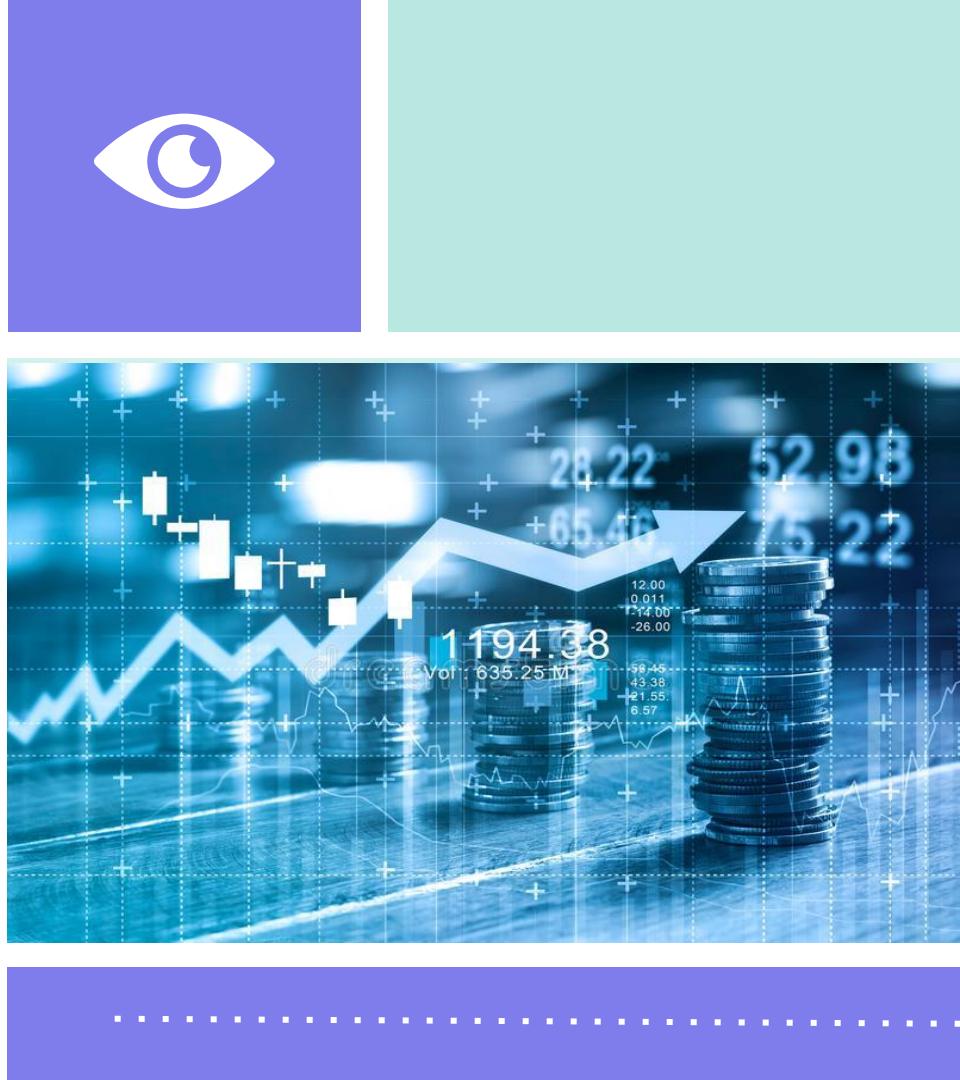
Relation between interest rates and derivative market

- ❖ Derivatives are highly sensitive to fluctuations in interest rate changes
- ❖ Derivatives having interest rates as underlying assets are Interest Rate Derivatives(IRD)
- ❖ Monetary policy of nation is very important aspect behind changes in OTC and exchange-trade based markets



Relation between interest rates and market trading

- ❖ Forex trading is the most active and highly influencable over all market trading
- ❖ It's country-relation sensitive. Even changes in economic factors of one nation can fluctuate interest exchange rates globally
- ❖ For return prices on principle amount many investors invest their money in forex market
- ❖ Global interest rates vary directly with individual country's interest rates



Relation between interest rates and market trading contd...

- ❖ More the country's currency interest rate, more likely it attracts global investors to invest money in that country
- ❖ Sudden jerks to global economy highly shifts interest rate graph which might be dangerous for some base level financial plans
- ❖ Interest rates fluctuations also give prescriptive analysis of country's interest rates which can affect local centralized market trading platforms in country



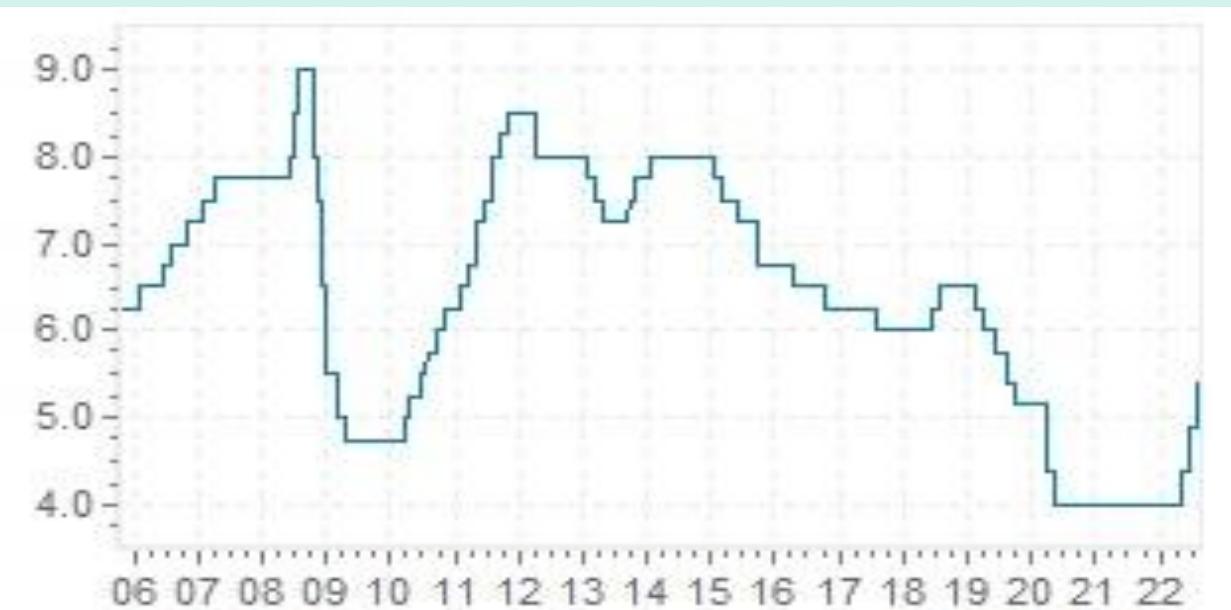
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Case Study

Interrelation between interest rate and derivatives, market body



RBI historical rates data



Some noticeable spikes in 2008, 2010, 2014, 2022

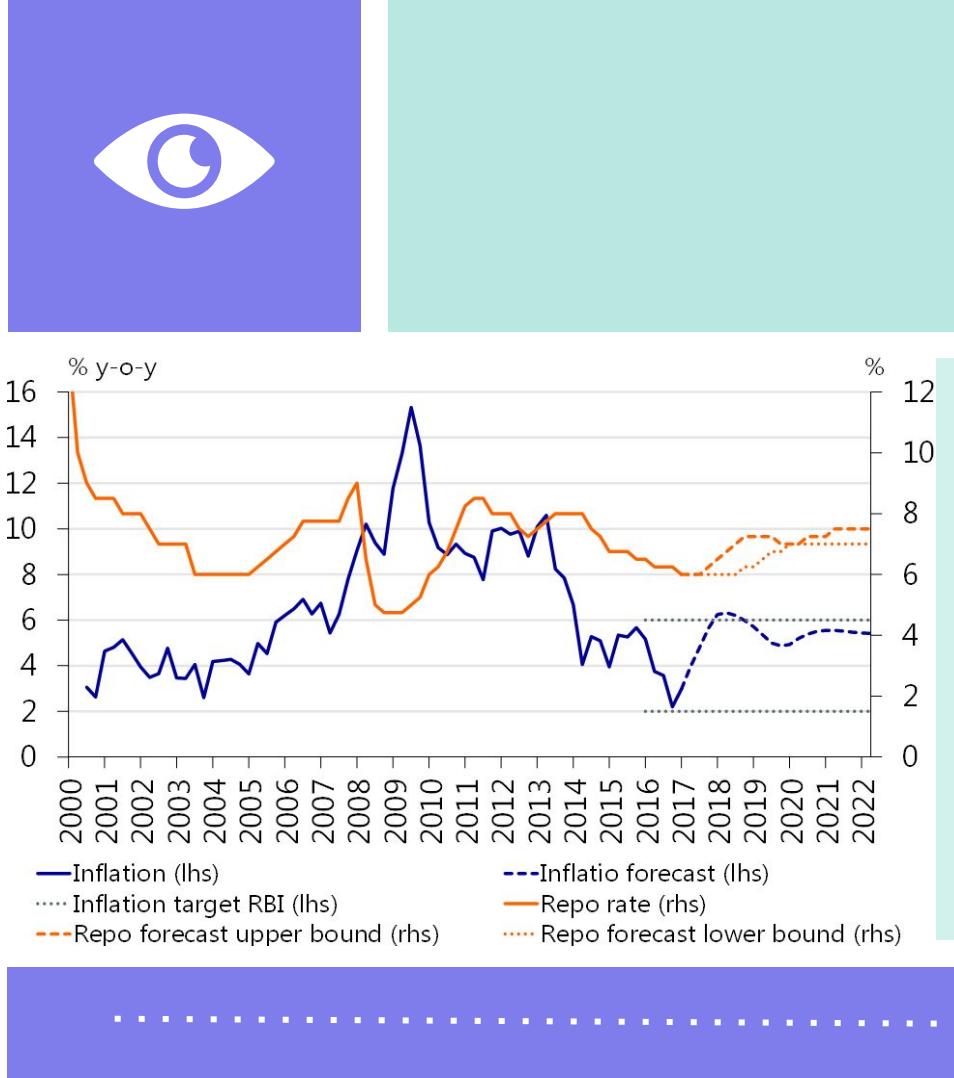
Latest interest rate hike happened on 8 June 2022 in India

Continuous increase in interest rate in year 2022

Monotonic increase in interest rate after staying constant over a period of covid pandemic situation is certainly interesting. Lets analyse its impacts :)

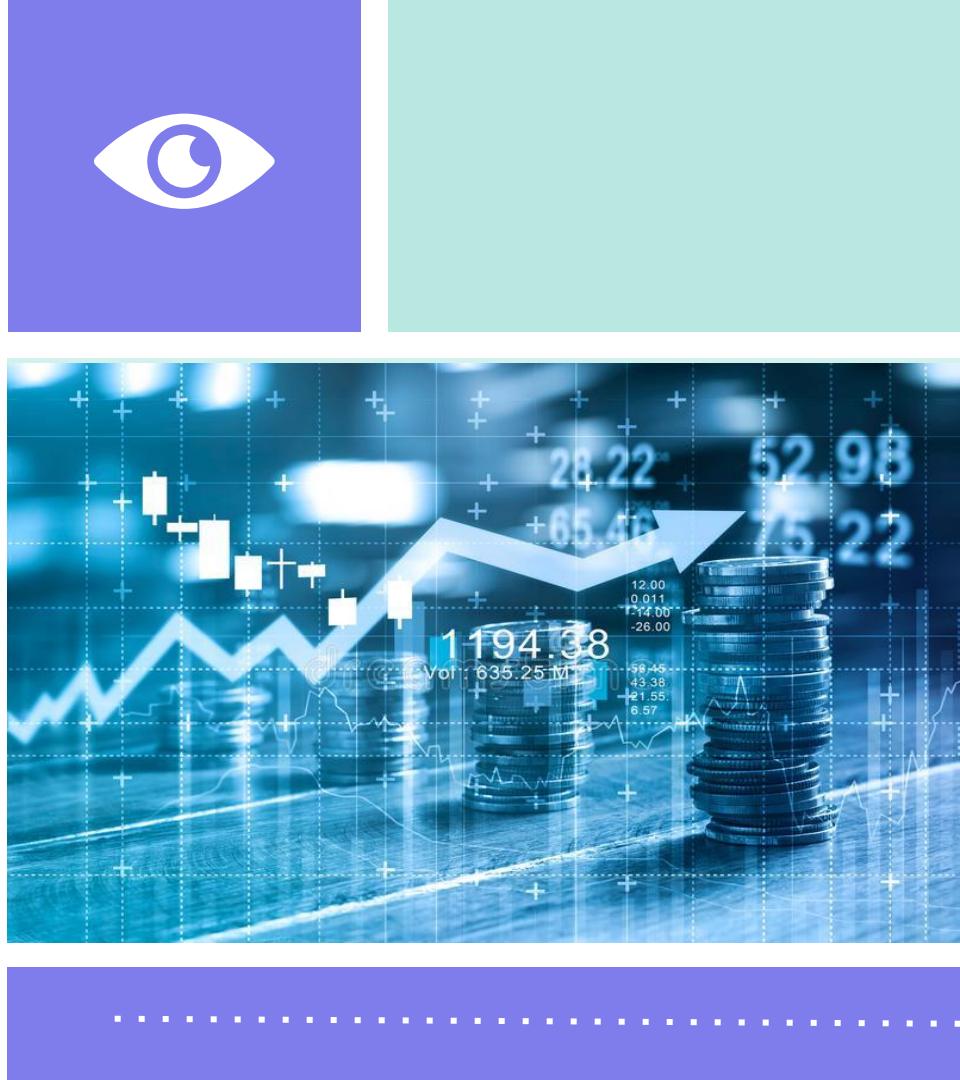
Analysis of inflation relation

- ❖ The RBI Monetary Policy Committee (MPC) raised the policy rates by 50 basis points (bps) today, bringing the repo rate to 4.90% in June 2022
- ❖ Inflation was rising since Dec 2021 got above inflation target rate of RBI, in April 2022 it was 7.8% (Plotted alongside)
- ❖ MPC predicted to have inflationary pressure due to high international commodity prices in pandemic period
- ❖ Thus, rising inflation got RBI's attention to increase rates to maintain nation's economy at good level



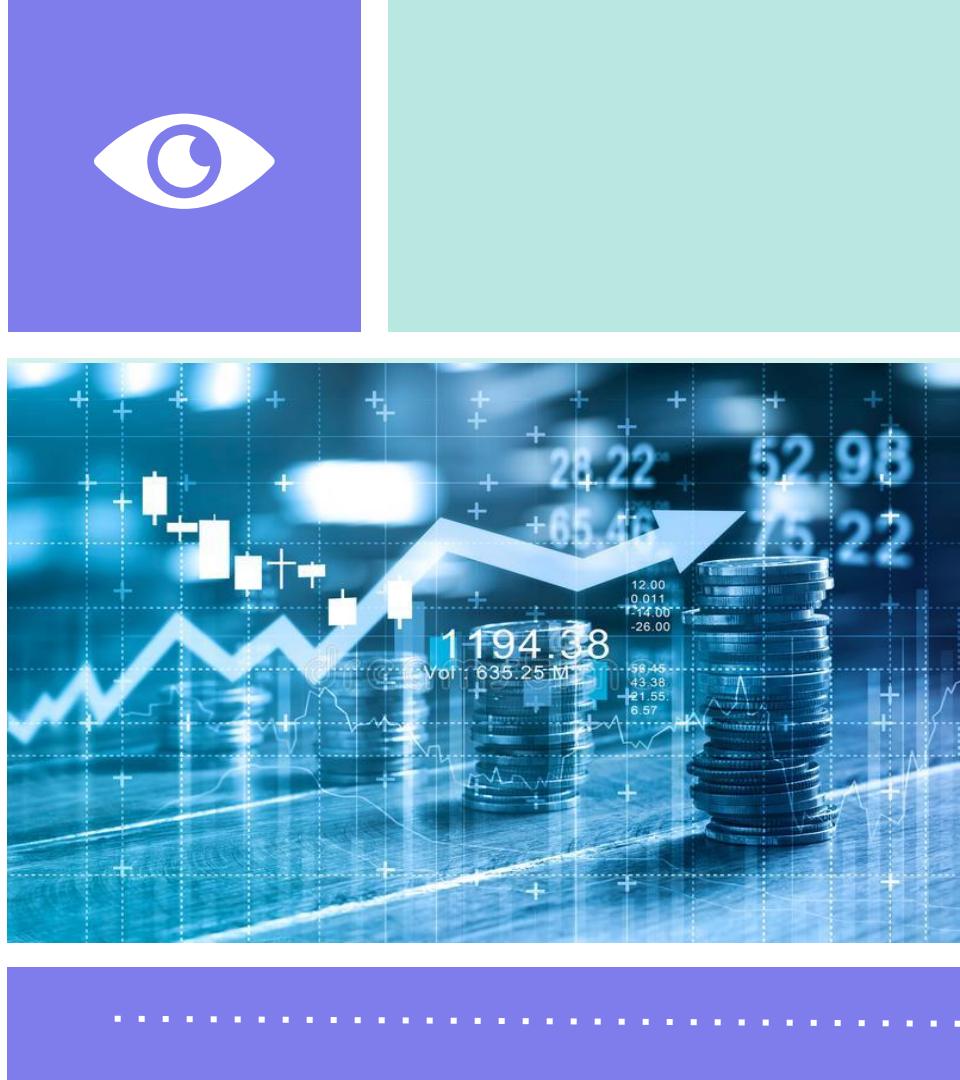
Impact on different local market economical factors

- ❖ Financial companies are enforced to increase their deposit rates to get their target growth in their credits
- ❖ 70% of the total digital payment volumes done via UPI in April 2022 as compared to 58% in April 2021
- ❖ Increase in housing loan limits of roughly 100% in Urban Cooperative Banks and of 50% in Rural Cooperative Banks



Interest rate hike effect on Forex Trading market

- ❖ Since last 3 months forex exchange rate has risen slowly from 7% to 7.2%
- ❖ Drastic credit growth was promoted due to higher consumption of particular goods
- ❖ Also increase in production after post pandemic recovery across manufacturing sectors
- ❖ Increase in no. of investments in India of famous global investor
- ❖ India has became great benchmark in forex market due to more production and high interest rate.



Case study of Indian Stock markets



Before hike
analysis



After hike
analysis

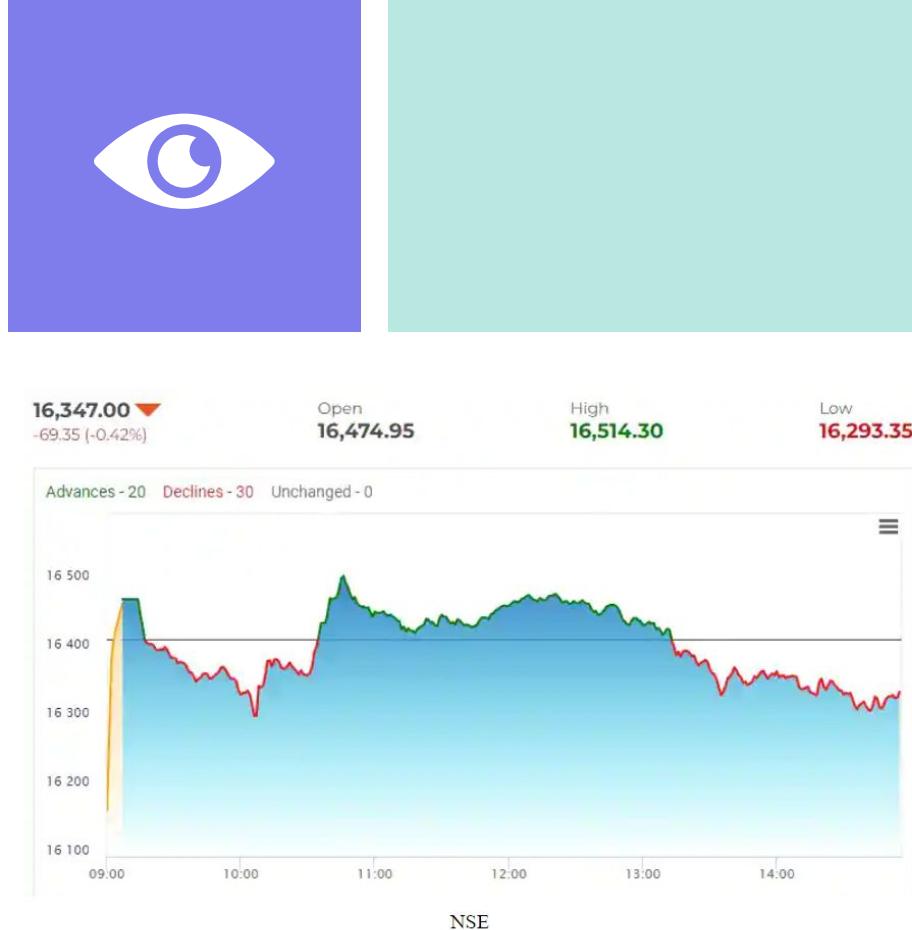
Before hike analysis...

- ❖ Alongside plot shows NIFTY stock report in May 2022
- ❖ The stock seems to deepdown and then go narrow towards a constant value around May-June 2022
- ❖ Spikes in Mid-April may be due to effect of other economic factors



After hike analysis...

- ❖ After RBI increased repo rate by 50 bps to mitigate inflation, Nifty slided down to Red Zone by around of 0.4-0.6% drop
- ❖ Nifty50 declined 60.10 points and was finally at 16,356.25
- ❖ Companies like Airtel, RIL, ITC, Bajaj hit very hard
- ❖ It made many investors to worry
- ❖ This concludes that interest rate hike stock market drives in opposite sense



Bond Market Analysis study



Interest hike impact on bond market

- ❖ It's clear from alongside plot show that bonds yields took peak up after repo rate hike declaration by RBI
- ❖ Analysis shows that yield of government bond over a period of 10 years raised by 26 bps
- ❖ Yields on shorter period went up by more bps(>26 bps) as compared to jump bps over a 10 years period
- ❖ This concludes high sensitivity of bond markets towards interest rates fluctuation



**THANK
YOU!!!**