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## Impact of changes in the prices of crude oil on the Indian Stock Market

## with special reference to National Stock Exchange (NSE) for the period

2022-2025.

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### Abstract:

For any growing economy basic raw material is crude oil. Manufacturing industry require large amount of crude. India is 2<sup>nd</sup> largest oil importer in the world next to China. As the need of oil for China increases impacts increase in prices of crude oil. The changes like increase in interest rates, inflation, US Dollar value, uncertainties in war escalation between Hamas and Israel in Middle East Asia impact stock market of India. Aggressive import of crude oil increases import bill of India. All the payments for this crude oil are to be made in US Dollars. Sometimes it happens that increase in both US Dollar and crude oil in together removes the money flow in stock market. Russian invasion on Ukraine created uncertainties in global oil market which directly impacted stock market of India.

Increase in crude prices also affects the GDP growth of any country. From the presented paper we will get keynote insights that how changes in oil prices negatively impacted Indian stock market between 2022-2025.

Key Words: NSE, Stock Market, NIFTY, Brent Crude Oil

### Introduction:

For a developing country like India, crude oil is the most required raw material for development. India imports 85% of total crude oil from the rest of the world. India and China are the most demanded countries for crude oil. Some of the countries Russia, Iraq, the United States, and Saudi Arabia are the largest exporters of crude oil to India. If there is slight increase in the prices of the Crude oil, the Indian economy get disturbed, because when there is increase in the prices of the crude oil, automatically transportation cost will increase, then because of increasing transportation cost inflation starts

rising. This inflation leads to decrease the profit margins of the different companies. Causes a huge decrease in the profits and ultimately the reason for decreasing the share prices. Some incidents happened between these three years, from 2022 which affected the crude oil prices drastically like an invasion of Russia on Ukraine's territory. Along with that, Hyuti and Hamas attacked the Israelis, this resulted fear of the war escalation and increase in the interest rates caused the hike in crude oil prices. (Belhassine, October 2021) Reveals some hedging effectiveness among the stock markets and crude oil. Countries and hedgers try

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to hedge oil prices. So, some cash flow went towards these types of commodities. Also, foreign investors play a vital role in India's oil prices. Markets of crude are money-earning

## Literature Review:

- 1. Dynamic linkages among oil price gold price exchange rate and stock market in India: Crude oil prices, gold, and exchange rates are linked with each other. Most of the crude oil transactions are done in the US Dollar currency. Some moments are happening that will impact the gold and oil prices. Which may be the results in an increase in the interest rate of loans. When there is a decrease in the value of the US dollar concerning the other currencies, many investors use gold to invest, which impacts the increase in the price of gold. India is the largest importer of crude oil. So, whenever there are changes in the international market for the oil and the gold has a vital impact on the stock market of India and other activities that are happening in the economy. (Jain, 2016)
- Gold and oil future markets: Are markets efficient? The study is done for the gold and oil future markets. This includes the framework, which states that whenever there is an increase in the price of the oil it tends to pressure
   Factors that affected the prices of

crude oil between 2022 and 2025.

3. To understand the importance of crude oil for the Indian economy.

4. To highlight scenarios that affected volatility in crude prices.

ways for many investors. Strong relations between oil with other factors impact the origin of its price. (Mokni, 2019)

inflation, which will give the investment in gold as part of a hedge against inflation. Sometimes the oil markets are used to predict them. Prices of gold and gold markets are also used for the prediction of changes in crude oil. (Narayan, October, 2010)

3. A Study on Impact of Crude Oil on Indian Economy with Reference to Automobile Sector: India imports the 79 % of its total crude oil need. Our India is in now the position of growing and. heading towards a developed country. So, this requires a large amount of crude oil. India itself cannot fulfill the need for crude oil. So, this shows that India requires a huge amount of crude oil from the world which is to be imported. There are some factors like inventory, demand, global geographical issues, production, and the collaboration of OPEC members which ultimately affect the prices of crude oil in the global markets. (Mr. Fasi Ur Rehman, 2024)

### **Objectives of the Research:**

1. To understand the position of Crude oil in the Indian economy.

### **Research Methodology:**

For this research, researchers used the secondary data. Data from the different websites and the research articles are used along with the related research papers, and some application of stock market, the appropriate citations are given.

### Discussion & Analysis:

## A) Discussion: Important Factor affected the crude oil prices:

# a) Russian invasion in Ukrainian territory:

On 20th February 2022 Russia attacked Ukraine with the thought of capturing the capital Kyiv within three days. This incident shook the whole world desperately. As the war went on, the United States and NATO imposed sanctions on the crude oil exported by Russia, so this disturbed the whole global economy and the Indian economy. So, the changes by the United States about crude oil impacted the crude oil prices globally to increase and automatically the prices of crude oil to be imported by India.

### b) Increase in Interest Rates:

Because of changing the global scenario and the. In situations in the United States, the Federal Open Market Committee that is FOMC started to increase the interest rate subsequently. Whenever there is an increase in the interest rate, the liquidity of the stock So the foreign exchange bill of India started increasing. The prices of crude oil near \$90 are in the manageable range by the Reserve Bank of India. But an increase in the price of crude oil above \$95 per barrel, affects the Indian economy very badly because ultimately

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market gets absorbed, and markets start falling.

#### c) Attack of Hamas on Israel:

On 7th October 2023. The Middle East terrorist organization Hamas attacked on the Israeli border and took some tourists as hostages for their reasons. So, this again started the war between the Hamas and Israel which caused the change increase in the crude oil prices because of the uncertainty. As the attacks on Israel increased by Hamas, the Houthis and other terrorist organizations also started attacking the Israelis. All these terrorist organizations are backed up by Iran and militarily supported by Russia. So, there was a rising chance of scalating the war between Iran and Israel. Whenever there is uncertainty in the global geographical or any issues, the stock market starts reducing money inflow.

Main Body: As a result of the Russian invasion and the. U. S. sanctions on Russian crude oil. The crude oil markets. Get volatile. India needs a large amount of imported crude oil.

crude oil increases the prices of transportation which impact the increase in the prices of all goods and services. So increases in the prices of goods and services ultimately aim for inflation. (Mr. Kali Charan Modak, 2015)

## B) Analysis:

 Chart No: 1

 Crude Oil WTI (USD/Bbl) 116.23 +4.00 (+3.56%)

 120

 100

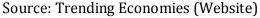
 78.087

 60

 40

 20

 2021
 202 May 30 2022
 2023
 2024
 2025



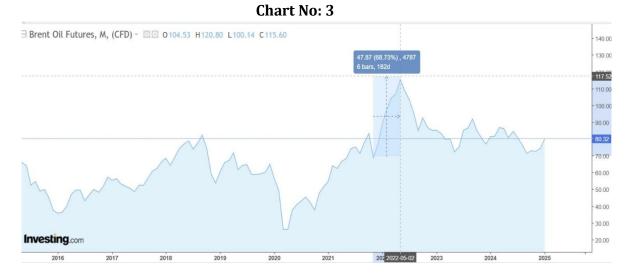
As we can see in the. Figure that crude oil price WTI crude oil prices went up to 115 US dollars per barrel in May 2022 as the impact of the Russian invasion. After February 20, 2022, Russia itself needed crude oil for invasion purposes and military activities. Russia is the second largest producer of oil and the exporter of natural gas This Russia, Ukraine, war developed a short- term emergency in the whole global and the long-term response plan. (Qi)



Source: Zerodha Kite Application

The above figure shows that nifty 50 downfalls to 2641 points, which is 14% from its top level between the months of January, February, and March

2022. The main reason behind this was the Russia - Ukraine War and the crude oil prices to be raised.



The chart shows an increase of up to 70% in the Brent crude oil futures. This is

the period between the initial phases of Russian invasion of Ukraine.





Source: Zerodha Kite Application

The figure shows the downfall of 1031 points in the Nifty 50 index of India. That is 5.2% between the 18 – 23rd of October. This happened after the Hamas attacked Israel. The reason behind this was the uncertainties in Middle East Asia resulted in an increase the crude oil prices.





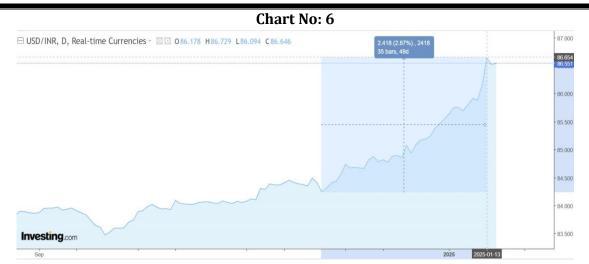
Source: Investing.com (Website)

The above figures show that there is an increase in the brand oil futures for 4 months. This increase is about 17%. So, this 17% increase in the futures of the brand oil shows that there is greater demand for the Brent Crude oil future. It means there can be an increase in the prices of crude oil. Globally Russia is one of the largest crude oil producers. Russia produces about 10% of the total global production of crude. On the the first fourteenth of January, the United States imposed the highest sanctions in History on Russian crude oil. This impacted on the increase in crude prices within the world. Along with a change in crude prices, the value of the US Dollar also increased up to  $\Box$  86. An increase in the US Dollar and a hike in crude oil prices caused huge selling pressure on the National Stock Exchange.



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The above figure shows an increase in the value of US Dollars in the last two months. There is an increase in value by 2.87%.

Payment of Crude oil transactions is done in the currency of the dollar. So increase in both the oil prices and dollar value absorbed liquidity from the Indian stock market.



Source: Zerodha Kite Application

Above Chart No. 5 of Crude oil and Chart No. 6 of US Dollars show an increasing trend within a particular time. And Chart No. 7 shows the impact of them on the stock market, that is NSE.

NIFTY 50 index came down nearly 7 % as result of increased oil prices and US Dollar rate. Another reason for stock

#### **Findings and Conclusion:**

There are very few points that affect the crude oil prices. They include geographical tension in the Middle East market falls is uncertainty about the Interest Rates. There are reports running in the market showing rate hike from United States in coming months. If the interest rate gets increased liquidity in markets goes down as people will have to pay more interest in and advances.

Asia, imbalance in the Russian economy, oil sanctions by the superpower United States on superpower Russia. Changes in crude oil prices affect stock market adversely. The cascading impact of oil prices covers logistics, interest rates and inflation. These impacts removing the liquidity from stock market. The value of US Dollars also contributes towards Vol. 14 Special Issue No.1/January 2025

market fall. This happens because FIIs prefers to invest in US markets other than Indian market.

Events	Increase in Crude oil Prices	Downfall of Market
Russia Ukraine War	69%	14%
Hamas Attack on Isreal	16	6
Sanctions by United States on Russia	3	7.40%

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