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**PETROLUUM: THE LIQUID GOLD HIGH IN DEMAND,  
SCARCE IN QUANTITY  
(WORLD DOMINATING PRODUCT)**

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Employees State Insurance Corporation,  
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**ABSTRACT**

*Despite the advent of green economy, oil remains a valuable commodity capable of preserving the dominance of a nation in the international market. The oil prices are vital macro-economic variable: higher oil prices might lead to significant damage on the economies of oil importing nations and on the world economy. It is obvious that, there is a strong correlation between energy demand and economic prosperity. Development of millions of people and their living standards depend on the existing energy infrastructure of human. The fuel has become a scarce resource and its production is determined by few countries of the world. Due to its increasing prices, forced many countries to develop alternative energies to maintain their economic activities without having any problem. In this paper we will try to bring the major reasons for increasing the fuel prices in recent times in India, how the prices of fuels is determined rate of tax and why the government is not willing to cut the oil prices and its emphasis on alternative source of energy.*

**KEYWORDS:** OPEC, Oil Marketing Companies (OMC), Indian Oil Corporation(IOC),

**INTRODUCTON**

Petroleum occurs in Sedimentary rocks of tertiary period where fossil are deposit in ancient time. With passing of time due to very high temperature beneath the earth surface and immense pressure, these fossils are converted into crude. Crude oil is essentially the raw material from which petrol and diesel are extracted. Crude oil is also the most traded product which influences an economy. Petroleum known as “liquid gold” is compared to gold because it is an exhaustible resource and for its economic value.

India is the world’s third largest consumer of crude oil in the world. With the ever increasing number of private vehicles, an overall domestic consumption of petrol and petroleum product is on rise in India. Hence more demand of petrol than supply is a leading factor of its rising price. During recent months, petrol touched it highest-ever price of Rs. 85 per litre in the country. Exactly 20 years ago, in September 1998, we would have paid just Rs. 23.94 for a litre of petrol in Delhi. That’s an increase of 238 per cent in 20 years. That comes to about an average increase of 12 per cent per year.

## OBJECTIVES

The major objectives of the study are –

- To understand the level of production in Major countries of the world
- To bring forward the reasons for rising fuel prices and its impact on india economy.
- To evaluate the rate of various taxes imposed by both central and states government.
- To understand the role of alternative energy sources in reducing dependence on fuels.

## RESEARCH METHODOLOGY

The paper compiled on the title “Petroleum: The liquid gold high in demand, scarce in quantity (World dominating product)” is done on the basis of Descriptive method based on secondary sources

describing the situation of the rising fuels prices in the Indian economy. Various articles and Research papers on the relevant topic is studied. Since it is a Current issue of the Indian economy, more emphasis is given on Articles published in Newspaper, Editorials, debate and discussions in news channels and online learning sources. These sources have helped the author in bringing the latest data and facts about the study, in a comprehensive way.

## WORLD SCENARIO

The West Asia or Middle East is having the largest petroleum reserves of the world, which is about 60% of the world’s oil reserves. Top 5 oil producing countries of the world

Rankings	Oil Producing countries	million barrels / day	Share in world production (%)
1	United States	14.85 mb/d	21.24
2	Saudi Arabia	12.09 mb/d	18.00
3	Russia	11.20 mb/d	11.64
4	China	4.77 mb/d	4.7
5	Iran	4.66 mb/d	4.5

Source: *Indianexpress.com*

The Organization of Petroleum Exporting Countries (OPEC) comprises 15 members forming a cartel, and it accounts for around 40% of global production. Its head quarters are at Vienna, Austria. Saudi Arabia ranks as the largest exporter of petroleum.

In India the major oil producing areas for commercial purpose are Cambay (Gujarat), Mumbai High, Mangla area (Rajasthan), KG D6 ( Krishna Godavari basin, Andhra Pradesh) and Assam - Arkan fold belt. India’s crude oil production in 2017-18 is 35.68 million tonnes. India imports 82% of its oil needs and aims to bring that down to 67% by 2022 by replacing it with exploration renewable energy and indigenous ethanol fuel.

## MAJOR CAUSES FOR RISING OIL PRICES IN INDIA

### 1. Demand and Supply:

The price of crude oil, like any other commodity is highly volatile and is largely determined by the demand and supply in the international market. The 15 OPEC countries from the Middle East hold the largest proven reserves of oil in the world. The Organisation of Petroleum Exporting Countries (OPEC) regulates the oil production and it’s pricing. The global economic growth slowdown has resulted in the reduction of demand of crude oil , OPEC decided to cut down its production with effect from January 2017, which forced the oil prices to rise. The cost of the Indian basket of crude, which averaged \$47.56 a barrel in 2016-2017, rose to touch \$63.80 (average price) in March 2018 and later the price was \$76.84 a barrel. The Indian basket represents the average of Oman, Dubai and Brent crude.

### 2. Political and Economic Instability in the Oil Producing Countries:

Geopolitical crisis, as is prevailing in the Middle East, is also one of the major factors that determine the fluctuation in oil prices. The disruption in oil production that was being globally contributed by major oil producing countries of the world due to various reasons like, ongoing conflict in the Middle East, crippling economic sanctions on Russia, re-imposition of sanctions on Iran by US and political instability in Venezuela have begun to create an artificial scarcity of oil in the global market. Saudi Arabia has decided to cut oil production. In July, Saudi Arabia cut its oil production by an average of 2,00,000 barrels per day. The international markets are under pressure due US sanctions on Iran and the price of fuel may increase further.

### 3. Increased Production of US Shale Oil:

Availability of cheap funds and advanced directional drilling technologies has enabled US to extract crude oil from Shale wells. US has huge Shale oil reserves and by way of perfecting its oil extraction technology, US has managed to extract more oil per well. But this increase in oil production exponentially has no use US believing in its Protectionist policy, it’s only a matter of time when US will start determining the global oil prices rather than the OPEC.

### 4. Increased Interest Rate of US Bonds & Depreciation of Indian currency:

The higher rate of interest of dollar denominated bonds is becoming more attractive for investors, thereby increasing the exchange value of dollars against other currencies. Since, most of the oil sales worldwide are denominated in dollars, a rise

in the dollar means it costs more in other currencies to buy a barrel of oil.

The gradually weakening rupee against the dollar is considered to be a major reason for the continuous rise in oil prices in India. India imports about 80% of its oil requirements. With the value of Rupee falling continuously against the US Dollar, the imports in turn become naturally costlier. This increases the already high pressure on Petrol and Diesel prices, nudging them to take an uphill route.

**5. Nature of taxation in India and Tax Rates on Petrol & Diesel in India:**

Taxes on petrol and diesel are a key revenue source for both the Centre and states, and a cut will hit their fiscal position. Rates of state sales tax or Value Added Tax (VAT) vary from state to state. Unlike Centre’s excise duty. The VAT imposed on petrol and diesel is ad valorem, which means that as prices go up, more tax is imposed and this results in higher revenues for the state when rates move up.

Petrol price is the cost price that includes procuring, refining and marketing plus taxes that include central and state taxes. Petrol price is calculated on the basis of worldwide supply and demand factors. Foreign suppliers sell crude oil to Oil Marketing Companies (OMCs) in India at benchmark prices. Oil Marketing Companies (OMC) add their margin to it and sell it to the dealers. The fixed excise duty that the central government charges. And the VAT charged by the states. The dealer commission and the VAT which the states charges vary from state to state. In April 2002 India abolished the Administrative Pricing Mechanism (APM) controlling the domestic price of petroleum products in India. Under the APM, product prices

were directly administered by India’s Central Government.

The central government excise rate is fixed and is around Rs19.48 per litre on petrol and Rs15.33 on diesel. Among the 29 states-

- Maharashtra (39.12 per cent) charges maximum VAT on petrol. Madhya Pradesh (35.78 per cent) and Punjab (35.12 per cent) are the second and third state, respectively.
- Goa (16.66 per cent) charges minimum VAT while Mizoram (18.88 per cent) and Arunachal Pradesh (20.00 per cent) are second and third best, respectively.

As petrol and diesel are out of the GST framework, there is no compulsion to lower these rates.

**MAJOR SOURCE OF REVENUE**

Nearly 35% of government’s income is generated through petroleum taxes and so Petroleum and petroleum products are an important source of revenues for the government –both central and states as these taxes are discretionary and most of the products are out of the purview of GST.

The Centre mopped up Rs 2.29 lakh crore from excise duty on petroleum products in 2017-18 and Rs 2.42 lakh crore in 2016-17. There’s no Customs duty on crude, but petrol and diesel attract a Customs duty of 2.5%.

States earnings through sales tax/VAT on petroleum products increased to Rs 1.84 lakh crore in 2017-18 from Rs 1.66 lakh crore in 2016-17. The revenue earned in FY17-18 (provisional) is given in the table below.

Sl.No.	Earnings in crore from sales tax/VAT on petroleum products in 2017-18.	Rs. In Crores
1	Maharashtra	25,611 crore
2	Uttar Pradesh	17,420 crore
3	Tamil Nadu	15,507 crore
4	Gujarat	14,852 crore
5	Karnataka	13,307 crore

Source: *Indianexpress.com*

Besides taxes, the Centre and the states have other earnings from the petroleum sector. Such as dividend income, dividend distribution tax, corporate/income tax and profit on exploration of oil and gas, the Centre’s total earnings from crude and petroleum products were Rs 3.43 lakh crore in 2017-18 and Rs 3.34 lakh crore in 2016-17.

Due to the high prices, the profits of OMCs have gone up substantially. The Indian Oil Corporation (IOC), which is the biggest OMC in India, has declared a profit of Rs 21,346 crore for the year 2017-2018. Its profit in 2016-17 was Rs 19,106 crore.

**PETROL PRICES IN NEIGHBOURING COUNTRIES**

India is one of the expensive places to buy petrol. In neighbouring countries that share boundaries with India, Myanmar is the cheapest place to buy petrol. One litre of petrol will cost just Rs 41.99 (Indian rupee) in Myanmar. In other neighbouring countries, the cost of one litre of petrol in Indian rupees is: Pakistan - Rs 54.33, Bhutan - Rs 63.71, Nepal - Rs 69.55, Sri Lanka - Rs 70.99, Bangladesh - Rs 76.06 and China - Rs 79.60.

Well there are three points why Government is not decreasing taxes on Petrol:

1. Reduction of excise duty or value added tax (VAT) will mean lower revenue collections for the central and state governments. In

July 2018, the consumption of petrol and high-speed diesel stood at around 8,900 thousand tonnes. If the excise duty is reduced by Re1 per litre, it might lead to reduction in revenue collections of around Rs7000 to Rs 8000 crore on an annualized basis. Government wants to boost its revenue so that it could spend more for public in terms of Schemes.

2. The target of the government to reduce its Fiscal deficit to less than 3% by 2019 is also a reason for not reducing the oil prices.
3. Twin-deficit hypothesis - there is strong linkage between fiscal deficit and trade deficit. When the government's fiscal deficit is increasing i.e. government is spending more than its earning. Hence, people are left with more money, and this would increase imports which results in more imports than exports leading to trade deficit.
4. Another effect of not increasing the prices oil products is that, government will need to compensate the OMCs for the subsidy offered. Government will finance this deficit by borrowing from the market leading crowding out of the private investment which will slow down our economic growth.

## IMPACT OF RISING OIL PRICES FOR INDIA

Rising fuel prices in the world market will directly affecting the development and future planning of the national economy. Rising fuel prices also indirectly lead to the increase of daily necessities such as food and public transport fares.

1. Adversely Affect India's Economic Growth: India imports 82% of its oil requirements and is the third largest consumer of oil after US and China. Economic Survey- 2018 estimates that for every increase of cost of oil by \$10/barrel the corresponding reduction in the GDP is 0.2 to 0.3% points. The survey has further forecasted that during the FY 2018-19, the price of crude oil is likely to grow at an average of 12%.
2. Inflation will Increase: An increase in the price of Global crude oil influences both the wholesale price index (WPI) and consumer price index (CPI) inflation. Petrol and diesel have a combined weight of around 4.7% in the WPI and 3% of CPI is directly impacted as it increases the cost of transportation. The impact of fuel price hike on inflation can be gauged by the following example: the price of petrol in Delhi was around Rs70 per litre, which is now around Rs78.80. The price increase of above 10% would mean that WPI would have increased

by around 0.5% on this score. In case of CPI the increase would be 0.3%.

3. Current Account Deficit will Rise: The current account deficit (CAD) is a measurement of a country's trade, where the value of the goods and services it imports exceeds its exports. India's FY19 current account deficit (CAD) could be 2.7% of the GDP with oil at \$80 a barrel average. It is considered that current account deficit above 2.5% is not considered sustainable.
4. Increase in Fiscal Deficit: The Gross fiscal deficit (total revenue minus total expenditure), which includes interest payments, stands at 3.2%, of the GDP, if the oil prices continue to follow the current trend the fiscal deficit may rise.
5. Increase in Repo rates: Higher fuel prices will mean that the Reserve Bank of India (RBI) would have to take action on interest rates. RBI will raise the repo rate — its key lending rate.
6. Unstable balance of Payments: Major portion of India's import is oil. Since import of oil is always paid in dollars, so importers need to buy dollar by paying rupees. Present currency crisis means more rupees have to be given for the same dollars. India would encounter deterioration in its balance of payments, and reduces exchange rates. As a consequence, oil importing countries imports will be more expensive whereas exports are less priceless, resulting in a decline in real national income. Lower oil prices had dramatically improved India's terms of trade in 2015-16, thus boosting India's gross domestic product (GDP).
7. Increase in cost of production: Rise in petrol price in turn has a rippling effect. The cost of production has risen because of the increase in fuel prices, and the producers of many products charge consumers a greater price. As a consequence, the wages are flat and the spending is rising at a rapid pace. Greater fuel prices lead to higher unemployment rates. In this case, the gap between rich and poor is increasing. Farmers are constrained to the old means of ploughing due to the higher oil prices. The cost of delivering products to different locations will become more expensive than before.

### Could the inclusion of petrol and diesel under GST change this situation?

The fuel has not been included in the framework of GST by the Government of India and tax is levied as per the previous taxation regime of excise duty at the centre and VAT at the state level. LPG, kerosene, naphtha, furnace oil, and light diesel oil attract GST, but five other petroleum products — crude oil, high speed diesel, motor spirit (petrol),

natural gas, and aviation turbine fuel lies outside the GST. The Constitution 101<sup>st</sup> Act, 2016 empowers the GST Council to recommend the date on which these five items are to be brought under GST. The Ministries of Petroleum and Natural Gas and Civil Aviation have approached the Finance Ministry for inclusion of petrol and diesel, and jet fuel respectively under GST. States are reluctant, since the VAT on petrol and diesel is one of the biggest sources of their income. *“Most people feel that if we put petroleum products under GST then the highest slab of 28% will be levied and prices will come down. It will affect prices only in a minor way, as states will levy additional taxes to boost revenues,”* - Sushil Kumar Modi, Bihar Deputy Chief Minister and member of the GST Council.

But this statement is nullified by the opposition - If petrol comes under GST even in the highest slab of 28 per cent and no additional cess is imposed on it, you will get a litre of petrol in Delhi for just about Rs 57. However, now if the centre government reduces excise duty, it will not be able to meet its target of reducing the fiscal deficit from 3.5% to 3.3% of the GDP in the current fiscal. Hence, the Centre had asked states to lower VAT, but just four states, namely Maharashtra, Gujarat, Madhya Pradesh and Himachal Pradesh have reduced the rates, To bring petrol and diesel pricing under the GST regime, thereby replacing 45% taxes by a maximum slab of 28%. However, considering petrol and diesel are significant contributors to the government coffers, it is hesitant to act in this direction, especially in a fiscally tight environment. The global oil prices are believed to continue to follow the current trend of an upwards trajectory during 2018 and the fiscal situation in our country is not conducive enough to provide the common man with any relief.

#### ALTERNATIVE SOURCES OF FUELS

India has enormous potential for electricity generation with bio-ethanol and biogas. The same holds true when it comes to bio-CNG or biomethane from farming and agri-industrial residues as a substitution of diesel fuel. Rajasthan has become the first Indian state to implement the national policy on biofuels. Policies must be implemented now to increase the efficiency of energy in transport, mitigate environmental impact at local and global scale.

1. As per the directions of the government with effect from end 2017, it is mandatory to mix 10% Ethanol with petrol. Ethanol is a natural Fuel, made from Sugar and starch, which mixes well with petrol and also has no PM (Particulate Material) Pollution.
2. The logical and solution was to invest intensively in mass public transport, shared vehicles and general habit changes. A new infrastructure for power distribution is also needed and India must make massive investments in new forms of power

generation, as 75.1% of its current generation is derived from coal, and another 4.2% from other fossil-based fuels such as gas and diesel.

3. Ethanol is economically competitive and its cost today is about \$1.3 per gallon, while petrol has a wholesale price of \$2.1 per gallon. Therefore, it helps alleviate the price pressure on consumers. Ethanol and bio-CNG can be the source of energy for hybrid, e-electric and fuel cell vehicles and takes advantage of their high energy density.
4. There are lots of alternative energies such as wind, solar, bio fuels, geothermal and all experience rises in demand due to the increasing price of oil. On a global scale, these also provide very low carbon intensity and efficient solution to mitigate global warming.
5. To maintain economic progress on the whole world, economic experts should reinvent the ways in which they create, distribute and utilize energy. Alternative source of energy might contribute the economies to decrease their dependency on fuel as the key energy source.

#### ROLES OF CITIZENS

Instead of wondering what the government could do we, as citizens should think and act on what we can do to lower our fuel consumption quantities.

- Control over usage of fuels on Individual basis and giving more importance to Public mode of transport.
- Merging several tasks when going out and make just one trip- during non peak hours. Use online & digital payments, purchases to avoid driving to bill payment centers and
- Switching to an electric bike or car for short distance and travelling - powered from a solar panel can reduce the running cost.
- Driving carefully avoiding frequent braking and hard acceleration - increases mileage and produce full hybrid cars and it will enhance penetration rates of these cars.

#### CONCLUSION

The variables that determine the final cost of fuel include international oil price, currency exchange rate, central taxation, state taxation and the dealer's commission. The only variable, which is within the control of the government, is the taxation. The greatest sufferer of all this is a common man. He is already bearing the pressure of inflation and any increase in petrol price will further reduce his actual household income. Today every Indian spends almost half of his income on food items. If the petrol price in India keeps on increasing then every food item will get costlier. It will result in less of savings and more of expenditure. This in turn will affect the

real estate, banking and other sectors in India. Eventually, more and more people will be pushed towards poverty line. There are larger implications for macros like inflation, interest rates, trade deficit, exchange rate of the rupee and the forex reserves. It is this strong downstream impact of oil that makes it a big challenge for the economy and also for the individual household budgets

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