

***PETROLEUM PRICES - TRENDS AND ITS IMPACT ON COMMON MAN
WITH REFERENCE TO MUMBAI
(2008-2014)***

By Aksha Memon

Abstract:

Petroleum is the most traded product and also the most essential commodity which influences an economy. Petroleum known as “liquid gold” is an extract of crude oil and is compared to gold because it is an exhaustible resource and also of its economic value. The study is an attempt to understand the causes for rise in petroleum prices and the factors that influence it and its impact on common man. Petroleum being very indispensable it greatly affects the prices of commodities, particularly the transport sector. In India the change in the price of petroleum has been a major cause for the rise in inflation rate as it greatly affects the prices of essential commodities and adversely affecting the common man. The factors that are responsible for usage and pricing of gasoline (or *petrol*) are crude oil prices, local demand, processing and distribution costs, local taxation, the strength of local currencies, and the availability of local sources of petroleum (supply). Since fuels are traded, the trade prices are similar since fuels are traded worldwide. The price paid by consumers largely reflects national pricing policy.

Over the years there has been an increasing trend of petroleum prices, and a close consideration of the demand- and supply-side effects that sparked these price increases shows there is high probability that this trend will continue in the outlook period and beyond. The basic aim of the study is to point out the rising trends in petrol and its effect on common man. The aim is also to highlight the new technologies that can be used so as to reduce the consumption of petrol.

Keywords : Petroleum, Impact, Common man, Price, Trends

INTRODUCTION:

Industrial Revolution had progressed at the beginning of the 20th century to the extent that the use of petroleum for illuminants ceased to be of primary importance. Because of the introduction of automobile petroleum industry became the major supplier of energy. Although petroleum constitutes a major petrochemical feedstock, its of primary importance as an energy source on which the economy of the world depends.

The significance of petroleum as a world energy source is difficult to overdramatize. During the 20th century there was an immense growth in energy production, and by far the major contributor to that growth is increasing petroleum production. Every day more than 90 millions barrels of petroleum moves from producers to consumers. The production of oil mostly depends upon the supply and demand factor. International relations has given vital importance to the production and consumption of Gasoline is and has frequently been a crucial factor in the determination of foreign policy. The position of a country in this system depends on its production capacity as related to its consumption. Sometimes the possession of oil deposits becomes the determining factor between a developed and a developing country. For any country, however, the presence or absence of petroleum has a major economic and financial consequence. On a timescale within the span of prospective human history, the utilization of petroleum and petroleum products as a major source of energy will be a transitory affair of a century or two. Nonetheless, it will have been an affair of profound importance to world industrialization.

India's growing dependence on imported petroleum and the dramatic rise in the prices of the petroleum to as high as \$148/bbl. the international market in July 2008, followed by an equally dramatic fall, pose significant policy challenges. Petroleum is one of the most necessitated required commodities of today's world. And India is importing around 100 million tons of petroleum and petroleum products and spending a huge amount on foreign exchange. Such huge imports of petroleum products will have large impact on common man especially when the

petroleum prices in the international market shoots up. Any slightest fluctuation in petroleum prices can have both direct and indirect impact on common man.



The rise in petroleum prices has affected the needs of the Indian economy quite significantly and the country has to produce about one trillion worth of GDP to fulfill the needs of its ever increasing populations demand. In order to produce this one trillion dollar worth of output, India needs 2.5 millions of petroleum per day

which is 6.5 percent of total world demand for petroleum oil. But with the increase in the demand for petroleum the prices of these depleting resources are increasing and this effects the common man drastically. As with the increase in the prices of petroleum not only the prices of directly related goods but also indirectly related goods increases.

Concept of Petroleum

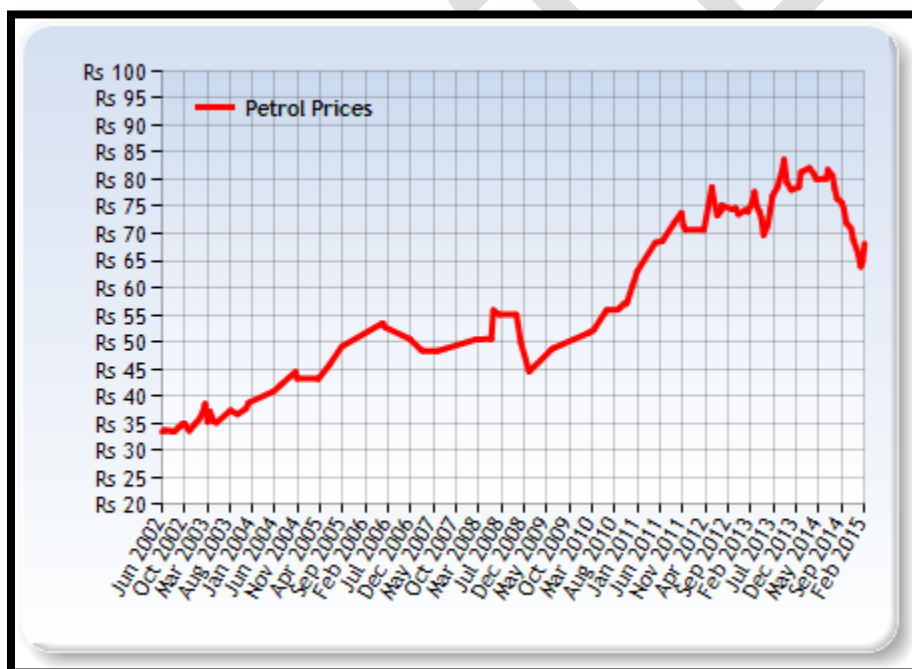
In today's world "PETROLEUM" is a magic word. There is hardly a person that does not seek this indispensable natural resource. Oil has many applications without it almost nothing in the modern world move. Transport by rail, road, air, water is largely dependant on oil. *Petroleum*, from Greek: *πέτρα* (rock) + Latin: *oleum* (oil) is a naturally occurring, yellow-to-black liquid found in geologic formations beneath the earth's surface, which is commonly refined into various types of fuels. It consists of various liquid organic compounds and hydrocarbons of different molecular weights. Oil drilling is mostly used to recover Petroleum. It is separated and refined, most easily by boiling point, into a large number of consumer products, from kerosene and gasoline (petrol) into chemical reagents and asphalt used to make pharmaceuticals and plastics.

It is estimated that the world consumes about 90 million barrels of petroleum each day. Petroleum is used in manufacturing a wide variety of materials.

The phrase “common man” has wide political currency in India, with parties across the political spectrum using it. But who exactly is the common man or, in Hindi, the *Aam Aadmi*? To ruling Congress party youth leader Rahul Gandhi, has stated that “Aam Aadmi in India is that person who does not have a connection to the system. Whether he is poor or rich, Hindu, Muslim, Sikh or Christian, educated or uneducated, if he is not connected to the system, he is an aam aadmi.”

“We call him the common man but in fact he is unique,” said Mr. Gandhi during his party’s anniversary conference in December. **“We will never build a nation until we build a system in which this man’s progress is based not on who he knows, but on what he knows.”**

Rise in trends of prices of petroleum in Mumbai



Review of Literature

There are very few studies on the topic of petroleum pricing policy of the Government of India. But as per my research there is none of the research which has taken into consideration the rising trends of petroleum prices with reference to common man. The study on the subject of Petroleum Pricing Policy was conducted by Geeta Gauri in a book titled "*Pricing for Welfare; Petroleum Products in India*". She did a time series analysis on the consumption pattern of major petroleum products product-wise and sector-wise **and** supplemented it with an econometric analysis of the market structure. The study also contains an analysis of the major objectives of pricing policy, namely, economic efficiency and distributional equity.

S.S.Khera and Sucha Singh's book "**Oil, RICH MAN, POOR MAN**" published in 1979 contains a systematic study of the reports of the first three oil price enquiry committees set up by the Government of India,. The book also describes the pricing system which was prevalent in India following the adoption of the Krishnaswamy Committee Report.

There is also a study done by Kumar G Prasanna on "The critique of the petroleum pricing policy of government of India" thesis submitted in June 1997 in Mahatma Gandhi University in which he has made a major study on pricing of the petrol .In his study he has shown how petrol was priced in earlier days. And then how the system of pricing changed. The objectives of his study are based on economic efficiency, financial viability, and Social equity. He has used trend series to show the prices of the petrol and consumption in Delhi for the period of 1968-1995. He has also used percentage to show the sectorial composition of net profits of public sector enterprises in 1994-95.

Objectives of the study:

1. To study the current scenario with reference to economical conditions of Common Man.
2. To study the relationship between petroleum prices and Inflation.

3. To analyze the factors that affect the petroleum prices
4. To study the effect of rise in petrol price on common man.
5. To highlight the ways in which petrol consumption can be reduced.

Problems of the study:

1. Ever increasing Prices of petrol drastically affects the economical condition of common man.
2. Increase in the demand of vehicles has increased demand of petrol.
3. High taxes levied by government have caused the rate of petrol to increase.
4. Depreciating value of rupees has led to increase in inflation rate of economy.

Hypothesis of the study:

1. There is no significance relationship between increasing Prices of petrol and its effects on economical condition of common man.
2. There is no significance relationship between increase in the demand of vehicles and increased demand of petrol.

Scope and Limitation of Study:

Scope of the study:

The proposed study will be focused on the following areas

1. The current scenario with reference to economic conditions of common Man.
2. To study and understand inflation rate and petrol prices.
3. To analyse trends in rates of petrol price.
4. To analyse the relation between petrol consumption and income level of various groups.

5. To study the role of Government to curb petrol prices.
6. To study new inventions, techniques to reduce the petrol consumption.
7. Comparing prices of petrol with foreign countries.

Limitations of the study:

1. The study requires the common people of Mumbai which are unknown to the researcher and may provide false information.
2. This study is a time consuming process.
3. There is no research done earlier on this topic.

Methodology

Exploration of the above objectives would require an approach that not only describes relationships between variables, but also the experiences of people. Therefore, the research aims suit a mixed method approach. The research consists of two components: quantitative methods to examine the relation between rise of the price and its effects on common man and qualitative methods to seek insights from individuals about their experiences of rising prices.

Source of Data Collection

a. Primary data :

The Primary data would be collected by

1. Questionnaire
2. Personal Interviews,
3. Telephonic conversations,
4. E-mails,

5. Observations,
6. Self-experiences

b. Secondary data:

Secondary data will be obtained from relevant sources like:

1. Annual Report,
2. RTI,
3. Journals,
4. Magazines,
5. Reference books,
6. News paper,
7. Articles,
8. Websites etc

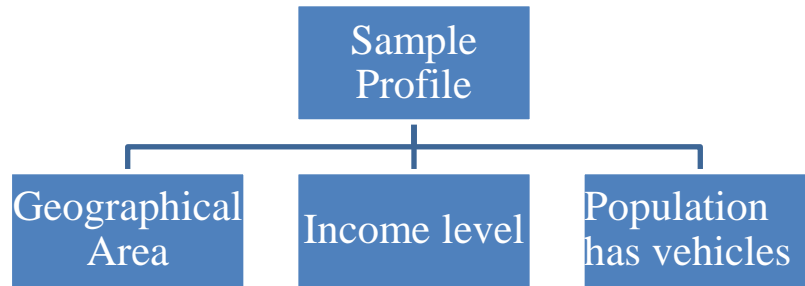
Sampling

a) Universe of the study

For the purposed study, researcher will select around 200 local people from Mumbai on the basis of geographical area, income levels, and people using vehicles etc. on random sampling method.

b) Sample Size of the study

To assess the quality of the study, time limitation, the Universe mentioned above is not possible for a researcher to reach to each and every people hence; the proposed study is based on random sampling method. Purposively following samples will be selected for the study:



Tools and Techniques of data analyses

The proposed methodology adopts a general-to-specific approach. Researcher start by proposing research problems followed by research questions which would be further followed by an analysis on how these questions can be accessed in a general model, given the data limitations and the econometric tools available for the purposes of our research. From all the questions that economic theory may suggest, only few can be tested against data and, more often than not, these tests are imperfect. The general approach will be narrowed later to address specific research questions.

Tools & techniques of data Analyzing are as followed:

1. Chi Square test
2. Percentage
3. Average
4. Any Special tools as per the data

Reference Period

The information and primary data would be collected for the five consecutive year's viz. 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014.

Testing Of Hypothesis:

The researcher tested the hypothesis by Chi Square test where the significant level is 0.05 :

$$X^2 = \sum \frac{(O-E)^2}{E}$$

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
Yes	40	22	05	35	05	107
No	18	25	20	25	05	93
Total	58	47	25	60	10	200

Degree of freedom = (r-1)*(c-1)

Where:

r = row

c = column

Degree of freedom = 4

$$X^2 = \sum \frac{(O-E)^2}{E}$$

Where O = Observed frequency

E = Expected frequency

So after calculations we get

$$X^2 = 1.165$$

P – Value at significance level is 9.488

Where Probability Value (P - value) ≤ 0.55

As the probability value is less than the significant value i.e 0.05 so we reject the null hypothesis and accept the H_1 hypothesis and hence prove that there is a significant relationship between increasing Prices of petrol and its effects on economical condition of common man.

Findings and interpretations

Findings:

India is the world's fourth largest consumer of energy but with low per capita energy consumption. An overall domestic consumption of petrol and petroleum product is on rise in India with the ever increasing number of private vehicles,. There was a registered growth of 5% of the same in the year 2011-12 and to meet the increasing demand, government has to import more and more petrol. The country as a whole spends around 80-90% on the payment of the import bills on petroleum products, which is accounted as country's expenditure. Hence ever increasing demand of petrol as compared to its supply is a leading factor of its rising price in India.

But rise in petrol price in turn has a rippling effect. Increase in petrol price results in price rise of commodities, as most of the commodities are transported across India on vehicles that run on petrol or diesel. 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. Every food item will get costlier if the petrol price in India keeps on increasing. It will result in more of expenditure and less of savings. 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.

As India does not have enough of oil to meet the growing demand of oil. Near about 1.4 million barrels of diesels are used per day in India especially by farmers, trucks and industry. So to meet the growing demand, most of the oil is imported from other countries resulting more expenditure.

It has been seen that petrol price has increased about 10 times within the period of three years and still rising. Ultimate result of price hike of petrol is inflation.

Not only this but the condition of Indian currency is also not favorable at present. India is going through currency crisis where value of Indian Rupee is falling to US Dollar. That is why Oil Marketing Companies (OMCs) like Indian Oil Corporation (IOCL), Bharat Petroleum (BPCL) are paying more for the same quantity of crude oil.

The price of petrol used to be stable in India but with the deregulation of petrol in 2010, Oil Marketing Companies can increase the petrol price if large variation in cost is observed by these companies. Oil marketing companies do so by linking the domestic price of petrol to international market rates.

“India’s consumer market till now was broadly defined as a pyramid; a very small affluent class with an appetite for luxury and high-end goods and services at the top, a middle class at the center and a huge economically disadvantaged class at the bottom. This pyramid structure of the Indian market is slowly collapsing and being replaced by a diamond – a relatively large affluent class at the top, a huge middle class at the center and a small economically disadvantaged class at the lower end. The diamond represents increasing volume and value across all classes of Indian consumer market.”

Comparison of prices between countries and their percentage increase

Country and Currency	2007	2012	% increase
India (INR)	48.38	78.57	62.40
USA (US\$)	0.87	1.02	17.98
Russia (Rubel)	16.79	25.41	51.34
China (Yuan)	4.94	8.33	68.62
Japan (Yen)	136.7	149.4	9.29

Brazil (Real)	1.54175	1.51468	-1.75
Germany (Euro)	1.394	1.631	17.00
UK (Pound)	1.40197	1.68137	19.92

Interpretations:

We can't imagine our life without petrol as petrol has become an indispensable part of our day-to-day life. But the petrol prices are sky rocketing, eventually everything that we use in our day to day life is going to affect. Poor people are already working hard to earn square meal a day and this hike is definitely going to paralyze these already-burdened people. Within three years petrol price has increased 10 times and is still increasing. It is nothing but adding fuel to the fire. Petrol hike directly or indirectly affects all the major sectors like transportation, textiles, auto, FMCG etc. for manufacturing & transportation. This affects the prices of daily essential commodities which are transported on a daily basis. Banking sector is also expected to suffer due to high inflation level.

Increase in fuel price will also increase in food price. This will have a more severe impact on poor people because poor households spend more than half of their income on food and only a tenth on fuel. It is a chain reaction once started will affect all. Increase in petrol price will increase the transportation cost, increase in transportation cost will increase in price of goods, and this increase in price of goods would gradually force the people to loosen their pockets even more, and so on like this, the chain will further propagate. These ups and downs push more people into poverty and leading to a more pathetic situation of those already poor. This has obviously sent shock waves to the common man who is trying hard to make both ends meet. Price hike affects only the low wages or fixed salaried middle class families as compared to higher wages salaried class. The existing middle class is squeezed and many of those striving to attain the middle-class standard find it persistently out of remit will bring no negative impact on government employees as their DAs will be increase accordingly. Rich and corrupted people are least bothered of it. Business class like auto-rickshaw drivers shall transfer the burden to

common people so they are also safe. Common people if doing business shall also pass the burden to customers and chain reactions. The community that suffers the most is the common people or “aam aadmi”.

Conclusion:

Most of the current users expect the future cars to be further automated with enhanced features for comfort and safety. Others emphasize on connectivity with Internet and Bluetooth with in-built enhanced maneuverability, navigational and parking capabilities.

While these could be looked as roadblocks, the burgeoning Indian economy presents itself as one of the most lucrative growth markets in the world. With a plethora of indigenous, foreign and several multinational joint venture firms struggle to capture a pie, there are several opportunities that are worth noticing:

- With the traffic situation deteriorating every day, the companies should focus on power or mileage
- They should invest in an extensive network of service centers and improve brand image or let multi brand outlets take care of it and save on cost and reduce prices
- The manufacturers should target the youth with cheaper models and contemporary styling and play the volume game rather than playing the price game with established designs with the more settled middle aged
- The companies should focus their research budgets on enhanced accessories climate control, navigation systems, voice control along with improving core components engine, fuel injection systems, etc.
- With the cars turning into more of a personal space and mini offices there is need for better communication devices to connect safely with others while driving and have a better audio quality

Suggestions:

As the prices of petroleum are increasing, there is a need for research into alternative fuels & energy technology. Alternative source of eneelpful torgy should be developed to reduce dependence on petroleum imports in India. India can develop solar and wind energy so as reduce its imports as India is also the fourth largest producer of wind energy it will be helpful to utilise this energy to reduce its imports. India should use energy more efficiently. For every unit of GDP, India consumes more energy than other developed countries such as United Kingdom. Indian railways the largest consumer of diesel is using a blend of high-speed diesel & bio-fuel in some regions on an experimental basis.

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