Effects of Price Fluctuation of Petrol in the UK and possible ways to deal with it

Contents

Introduction:

The recent fall in the price of Petrol in the UK influences the economy of the country screamingly as well as the fall in oil price has affected the world economy extensively. The OPEC member has reached to the price fall in Petrol by not supporting the phenomena. The past scenario shows that the global economy was exhausted due to not controlling the excess use of Petrol (Great Britain, 2012). The fall in price will influence the consumer to consume more. Declining Petrol price has played an important role in the world economy (Noreng, 2006).

The demand and the supply of the Petrol have been influenced screamingly due to this fall in Petroleum price. Not only this has affected the demand for petrol but also it has influenced some other factors related to the Petrol. This research study is seeking to assess the effects of the fall in the price of petrol in the UK market (Great Britain, 2012).

Economic Problem of Scarcity due to falling in Price of Petrol:

From the ancient theory of the demand and the supply, it is very common that the fall in the price of a commodity helps to increase the demand for that particular commodity when the other factors are remaining constant (Gupta, 2004). The reality is highly associated with this economic theory. The demand and supply of petrol have affected by the fall in price and has influenced some other relevant factors related to the commodity. The decline in price due to a weak level of demand of a commodity reveals that the economic position of the country is worsening. Several literature has been reviewed to analyse the situation.

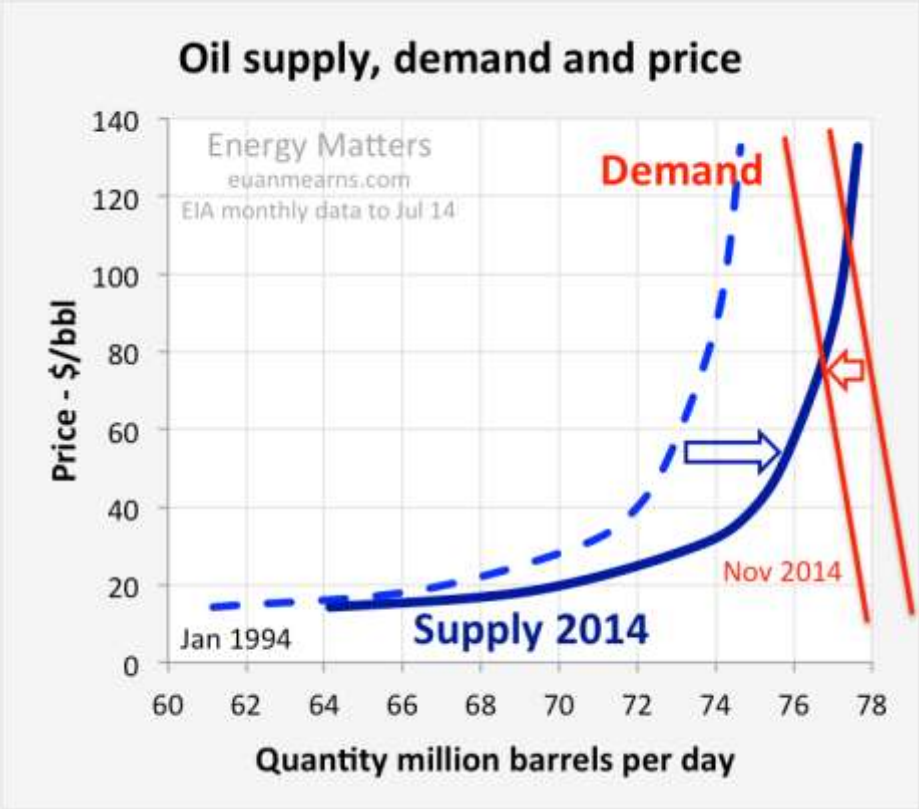

Chart: 1, Source: (Oil Price Analysis, 2014)

The above diagram depicts the relationship between the supply, price and demand for the Oil since 1994 to November 2014 (Oil Price Analysis, 2014). The exhaustible resource economic structure explains that in an equilibrium situation, the clear price of the exhaustible resources elaborated by the change in the market price of the Petrol and the marginal cost of removal have to increase at the similar rate with that of the interest rates. The name of this mechanism is Hoteling rule where the assumption has been taken that the exhaustible resources (petroleum) are retained by one specific firm and it thus has the curtailed power of extraction (Komalirani & Gaurav, 2013).

The price of the Petrol is elastic in nature from the viewpoint of the fluctuation of the price of the commodity. The demand of the Petrol always stays high especially in the developed country it is high due to their intensive consumption of the private vehicles. Speciously the entire supply and

demand influences the economies of different countries not only by the expenditure & consumptions, but also it is involved with the prices and demand of the other relevant commodity (Carollo, 2011). The main reason for occurring the economic crisis and difficulties are the endless wish and needs of the people. Petrol is a non-renewable and natural resource. It will be finished in some day. The intensive use of this natural resource is hampering the use of future generation. The stock of petrol is limited in the sense of its physical availability and its use (Neumayer, 2013).

The supply side of the petrol should be taken into the account to measure the effect of the decline in the price of the Oil. The most important aspect in this context is about the sustainability of the new supply of the petrol. The international economies are not much concerned about the profitability or benefits due to decline in the petrol price. The concern is much more significant in the perspective of the UK economy. The price fall affects the price of the vehicles of the UK economy, the tax structure of the country, technological changes etc. petrol price affects the other fuels as well (Euan Mearns, 2011).

The rise in the price of the petrol leads to increase in the demand for the other fuels with their respective price. The business of the world goes faster with the rise in the price of the Oil but as the price falls the business goes less fast as the cut in price offers discounts to the consumer (Charles Sweeney, 2015).

The fall in the oil price is an advantageous event for the consumers because now they have to pay less money for the same quantity and they can consume more. Petrol is a natural resource and the abandoned consumption of the petrol till date occurs a scarcity of this natural resource because the resource is exhaustible in nature (Komalirani & Gaurav, 2013).

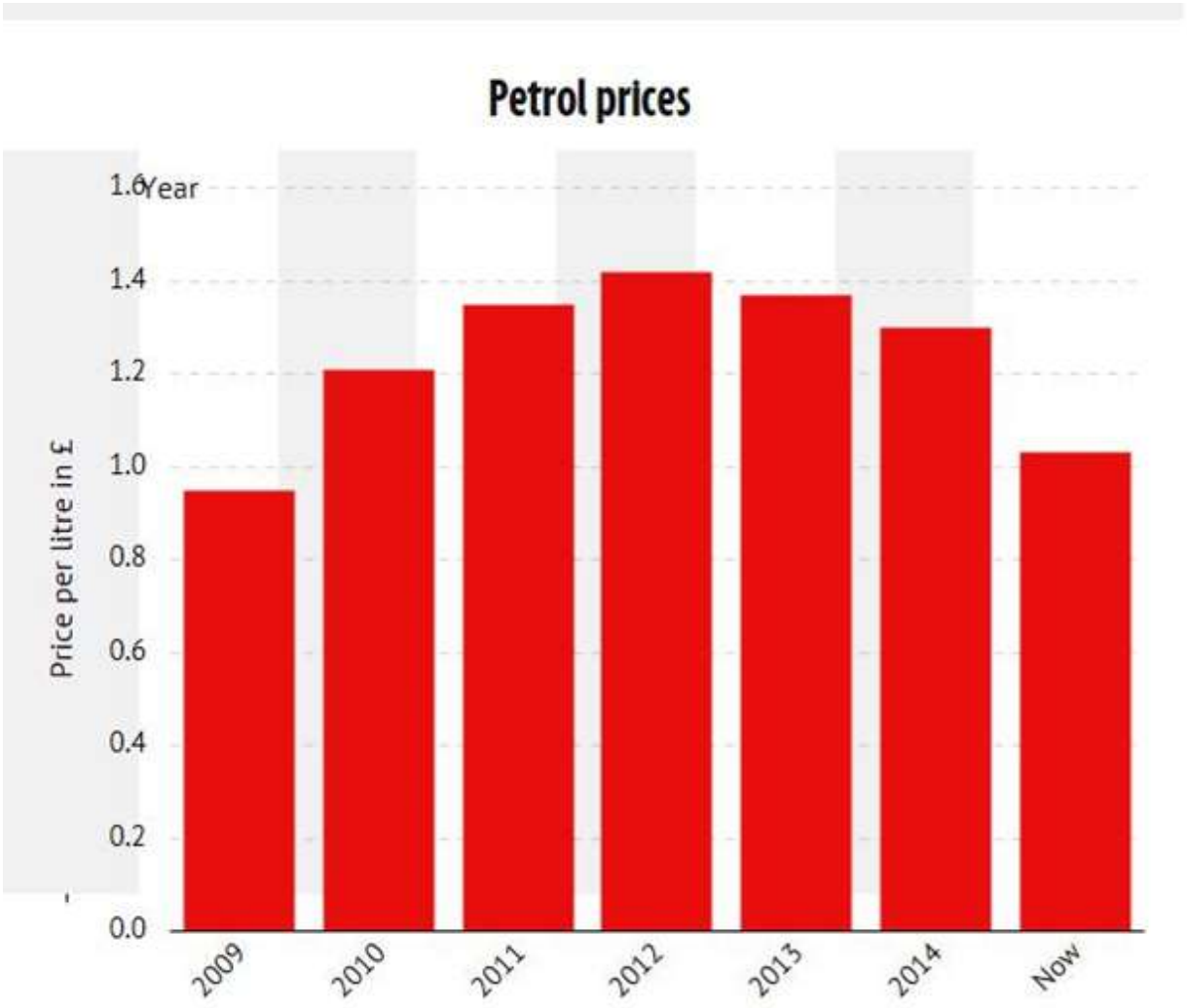

Chart: 2

Source: Charles Sweeney, 2015

The reason behind the high value of the Petrol is its exhaustible nature which leads to the scarcity of the resource. Chart 1 shows the fluctuation of Petroleum price in the UK. The price has been started to decline after the year 2012. The following chart shows respective GDP status of UK due to the fluctuation of the Petrol Price.

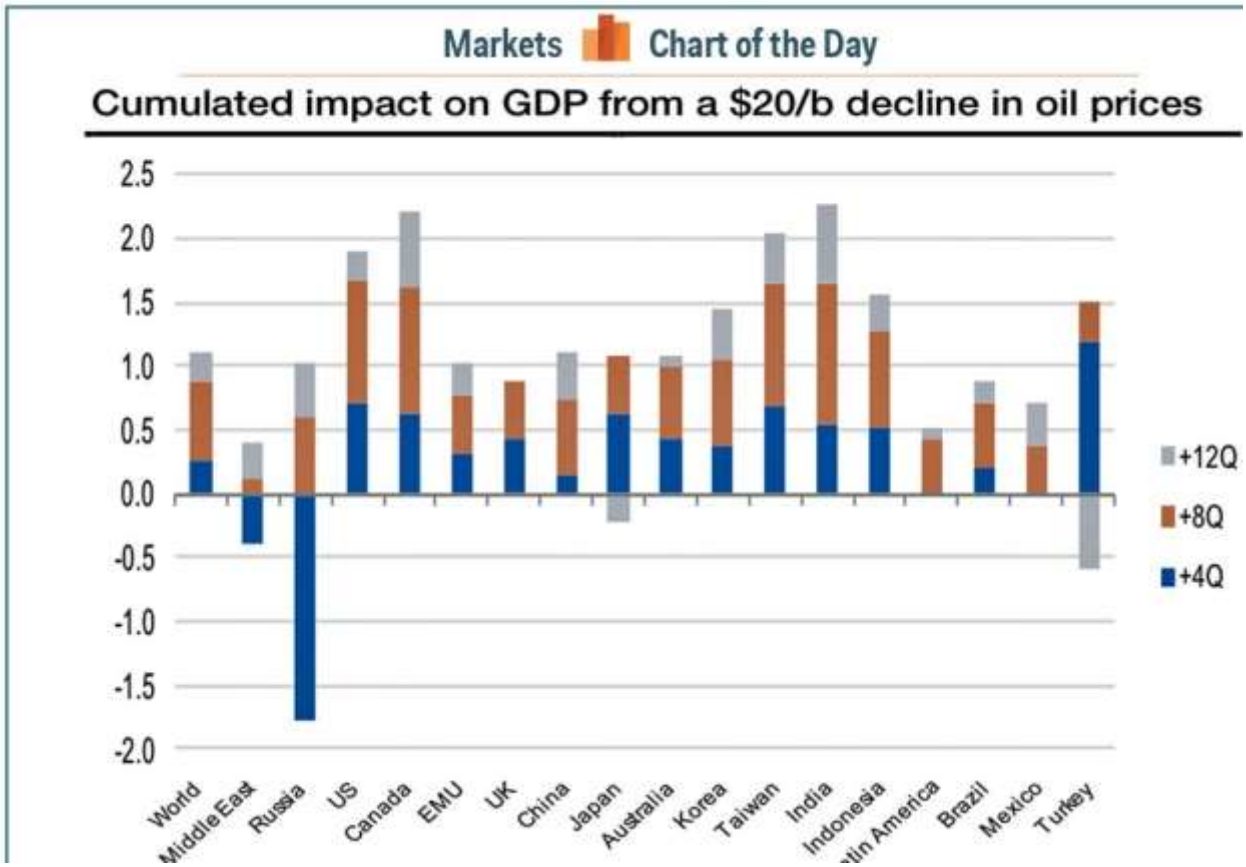

Chart: 3, Source: Nathan Randazzo, 2014

The opportunity cost concept has a strong relationship with the exhaustible nature of the Petrol. The concept of the opportunity cost reveals that a consumer has to sacrifice the consumption of one commodity to consume any alternative commodity. The opportunity cost relates to the choice that has to be made between numerous mutually exclusive substitutes provided limited resources. The opportunity cost is unrestricted in nature and not restricted to the economic costs and the monetary costs. It is the benefit of the person when he/she consider choosing one particular action over another. When massive deposits of crude oil are abused and oil is extracted today, it leads to the loss of the opportunity of extracting the oil. It is pre-expected that the stock of the non-renewable resources is going to be exhausted soon in the future. So the use of these resources can be controlled and preserved today then the possibility of extracting and selling them at a higher

price in future will increase. The continuous extraction of petroleum will tend to decline the sustainability of such usage. More and more resources are consumed today, lesser will be the stock of those natural resources. According to the Endres, (2011), the petrol price is highly related to the opportunity cost and price of the petroleum should be greater than the marginal cost.

Demand side factors that influence the price fluctuation of the Petroleum:

There are several demand side factors included in the economy that affects the price fluctuation of the Petroleum. In the case of UK, Change in national income, inflation and recession, transport communication services and the amount of vehicle increased (Endres, 2011). From the traditional theory of demand and supply, it is easily observed that as the demand for the Petrol increases, the price of the petrol is also increased and vice versa (Daly & Farley, 2004). A huge amount of petroleum extracted from the refineries is responsible for making UK price of petrol offshoot in current years. The change in the price of the petroleum in the UK has been shown in the following diagram.

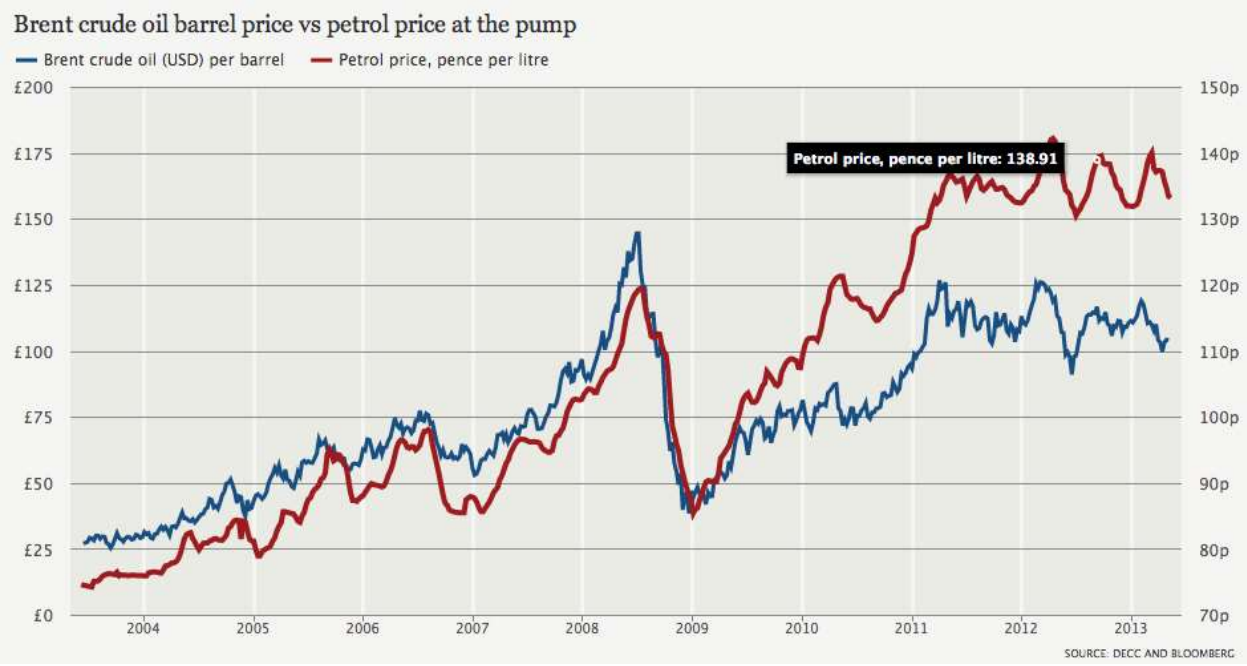

Chart: 4, Source: The Telegraph, 2013

The recession and the inflation affect the price of the petroleum extensively. This is the reason behind the growth of the petroleum price. When the demand goes faster than the supply then the price of the petroleum increases. Hence, the recession arises.

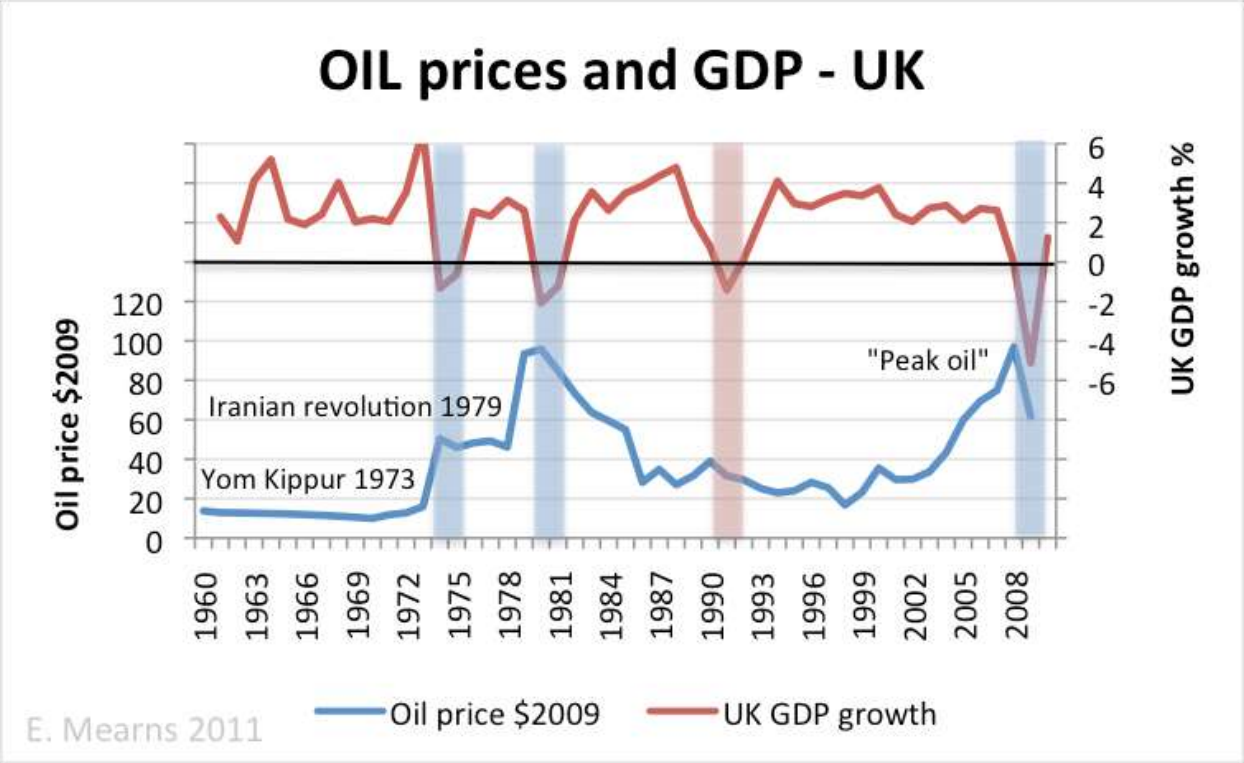

Chart: 5, Source: Euan Mearns, 2011

The above image shows the association of the GDP growth in Uk with the price fluctuation of the Oil Price. In the year 2002, it is clearly seen that GDP growth has declined from 1999 with a decline in the price of the Oil. In the year 2008, there is a huge decline in both the price and the GDP growth in the UK when the recession occurred in the world economy (Euan Mearns, 2011).

However the exhaustion of the natural resources nowadays spreading awareness across the countries. Countries are more aware of the usage of natural resources nowadays. The search for

alternative renewable resources like solar energy, wind and nuclear energy, geothermal, trading flow etc.has been increased after the increment of the global warming. All these difficulties have been raised due to the random use of this natural resources. Thus, Sustainable growth helped in controlling unregulated petrol consumption by UK (Azapagic, et al., 2004).

Supply-Side Factors:

The factors that affect the supply of the Petroleum extensively are production capacity, organisations of petroleum exporting countries, inventories, exchange rate and other factors. The UK Oil and Petroleum Market is an international set up. The supply rate of the petroleum oil become slower than its demand in the market in last few decades. As the production of the petroleum oil has been decreased, so its supply has been declined. The geopolitical difficulties such as Arab Spring. The speculation in the world trade market is another significant reason that influences the supply side factor of the Oil price in UK market (Nathan Randazzo, 2014).

The OECD member countries are the owner of the 72% of the Petroleum reserves and the biggest supplier of the Petroleum Oil. The OECD members meet twice in a year and fixed the price of the Petroleum and oil. The supply factor of the Oil is highly dependent upon the price fixed by the OECD members each year. Crude and petroleum commodity inventories help to stabilise the effect of efficient supply disturbances in the short period. In the case of low inventories, markets can be sensitive more than before to genuine or apparent supply disturbances or demand variations. The crude oil and the petroleum are traded in US$ and the strength of the currency can influence the oil price extensively. This affects the supply of the commodity. Moreover, oil exploration and the cost of production also have an impact on the supply of the oil and the petroleum. The market sentiment of the oil also has an impact on prices. In the last half of 2014, US has consumed extraction of the 9 million barrels per day (Great Britain, 2012).

Government's action towards the high consumption of Petrol including such externalities:

The resource stock of Oil is going to be exhausted due to the intensive use of the resource. It becomes the sole reason for the exhaustion of the resource. The government of UK should maintain also the sustainability part of the country. So the UK government can introduce several substitute to decrease the usage of the Oil price. Externalities are the impacts that affect an individual that may or may not be involved directly with the movement, but indirectly either enjoys or hurts due to the outcome of the economic action. The benefits of the economic activity called positive externality and the disadvantages of such actions called negative externalities. Negative externalities play a role in the society to harm the individual whereas the positive externality benefits the economy.

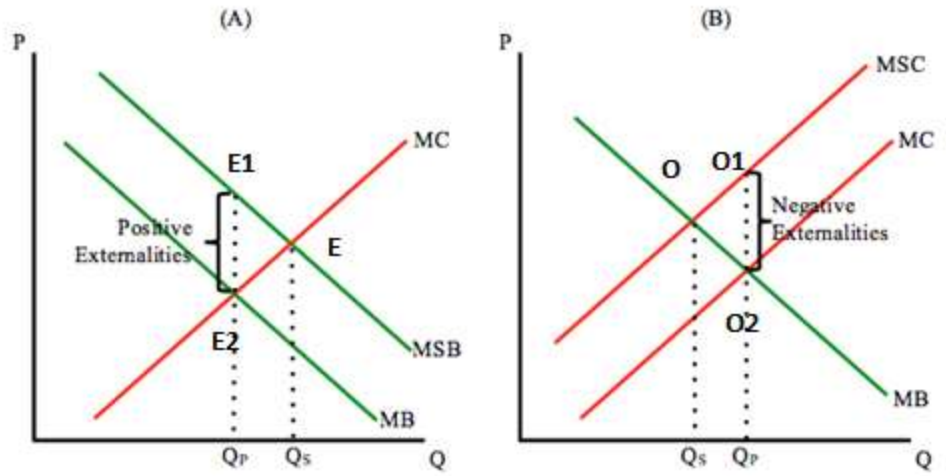

Chart 6, Source: William Lawrence McKinney, 2013

In the above diagram MSB=Merginal Social Benefit, MC=Merginal Cost, MSC=Merginal Social Cost, MB=Merginal Benefit.

The figure depicts that, MSB= MB+Positive Externalities Where positive externalities = E1E2

MSC= MC+Negative Externalities, Where Negative Externalities = O1O2.

The Oil price market is associated with some harmful externalities in the market. Such are the random use of this natural resource, exhaustion occurs due to the intensive usage of petroleum, increment in the amount of vehicles etc. The main negative externality that affects the economy extensively is the random emission of the greenhouse gases. The random consumption of several kind of fuels is the reason behind this excess increment of greenhouse gases in the environment. The fall in Oil and Petroleum price influences the society to use more fuels. Thus, pollution increases and affects the economy as a whole. However, UK Government can take several steps to reduce the consumption of the fuels (Fowler & Hope, 2007).

Introducing other substitutes of Petrol:

The price of petrol is increasing day by day. The stock of this natural resource tends to be exhausted in near future. The world has to consider about other substitutes that can be used as the replacement of the Oil. So the natural gas can be used as the replacement of the product. The price of the Natural gas is lower than that of the price of Petroleum (Carollo, 2011). This thing can help to decrease the price of the oil. Though the price of the natural gas is lower and using solar energy or natural gas is much more sustainable for the economy, it needs a huge amount of investment to create these energies. Developed country like the UK has good infrastructure and facilities to establish these setup but it is not easy for the developing countries to afford this infrastructure.

Increase the intensity of using Public Transport rather than private Transport:

In the developed country like the UK, maximum people use their private vehicle as the transport medium. So the usage of the fuel is increasing day by day. More and more the country is

developing, higher the consumption of the fuel will be. The UK Government should encourage their people to use public vehicle more intensively instead of using their own cars or bikes. The private transport wastes so many natural resources like petrol, oil, gas etc. Moreover, the Government can take some strict action against the intensive use of private transport. It can increase the tax rate on vehicles or the decrease the fair of using public transport. So the people will not become able to buy private cars randomly and use public transport. Then the reduction in the consumption become possible (Daly & Farley, 2004).

Increase the use of Renewable Resources:

The Government can increase the production of renewable resources. The demand of the people is endless so it is not easy to pressurise them to cut their consumption. The government has to innovate some other resources to satisfy its country people. Some renewable resources are very common these days. The United Kingdom recently has increased their production of solar power and cutting their consumption of fuels (Sen, 2008). The United Kingdom had fitted near about 12 megawatts (MW) of photovoltaic dimensions and embodied only 0.3% of entire European solar PV of 3,400 MW (EPIA, 2010). The government should try to influence people to use some resources that will not become finished at any time. The UK is taking major steps toward the consumption of other resources like natural gas, solar energy etc. The increase in the use of renewable resources tends to decrease in the use of non-renewables.

Reduction in dependency:

The UK market for Oil and Petroleum is extensively dependent upon the Middle East countries. The supply of the petroleum and the oil in the UK comes from the Middle East countries. It is a messy procedure to supply oil from those countries. Also, the price set by the OPEC has to be maintained by the supplier. The OPEC curtail charges a high price for petroleum from other

countries (Oil Price Analysis, 2014). So the price of the fuels increased in the international market. However, the dependency cannot be reduced easily because it is naturally provided by nature. The only way that the UK can deduct the dependency is to introduce some substitutes of those fuel in the market.

Increase the use of different type of Vehicles:

UK Government may encourage their country people to use cycle as a private transport medium to reach their destination. Using cycle is good for health as well as it does not need any fuel to run. People also can use their foot to reach their destinations. This is another way that the people can reduce the consumption of the Oil. The technology is improving day by day. The battery scooter and cars are a new innovation of the decade which help severely to reduce pollution because battery vehicles do not need oil or petrol consumption (Great Britain, 2012). The price of such equipment is cheap and easily available to buy. This way the demand for the petrol will be decreased and supply will be increased. Then the price of oil will fall further due to low consumption and the country can preserve more for the future.

Preserve Stocks for Future:

The Government should preserve their stock for future. The UK government can cut their excess consumption of and Petrol or Oil and preserve them for the future concern. Preserving stock for the future will increase the stock of supply and hence the possibility of consuming in future will become high. This way the Government can meet the future demand for the petrol and the oil.

Traffic Jam:

The number of vehicles is increasing day by day the country is developing faster. This increases the frequency of the traffic jam. The traffic jam is another reason of wasting the petrol. Maximum vehicles in the jam keep on their engine until the signal becomes green. These lead to the loss of the stock of petrol and crude oil. The government should take some strict action to reduce the frequency of traffic jam across the country.

Conclusion:

The above discussion depicts that the exhaustible resources will become finished one day. The Petrol and other non-renewable resources are not the exceptions in that case. This is important for the present generation to consider about their future generation that they also can consume the resource and sustainability retain (Gordon & Valentine, 2009). So the government has to take some serious steps to decrease the consumption of Oil. The renewable resource like solar energy, wind energy etc. are using this day but the country has to increase the usage of such resources. The study has advised several strategy that can be applied to reduce the consumption. The Government itself has to establish these rules and strategy strictly to stop the excess consumption of the Petrol. It is to be concluded, the excess use of Petrol not only decrease the stock but also increase the Global warming, environmental pollution by emitting greenhouse gases.

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