**ENERGY SECTOR STRUCTURE POLICIES & REGULATIONS** 

# OPEC & its influence on Price of Oil

Submitted to Prof. Anupam Sircar towards End-Term Assessment

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Organisation of Petroleum Exporting Countries or OPEC has the largest oil reserves in the world and is responsible for the supply and prices of petroleum products to major extent. This interesting report explores more about the functioning of OPEC and on how it influences the price of Crude Oil globally.

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### Introduction

*Oil* is the blood of world economy. Out of top 10 Fortune 500 companies' list published in July 2010, five are Petroleum companies. Therefore any increase in world oil prices impacts every sector of the economy causing inflation.

The Oil policies form an important part of national policy making in all oil consuming countries. Some countries provide subsidy on oil and petroleum products to promote domestic industries and check inflation, whereas some countries impose tax on oil consumption to check demand and conserve. Economies all over the world constantly monitor the oil price movements.

Organisation of Petroleum Exporting Countries or OPEC has the largest oil reserves in the world and is responsible for the supply and prices of petroleum products to major extent.

### **Organisation of Petroleum Exporting Countries**

#### History

OPEC was founded in Baghdad, triggered by a 1960 law instituted by American President Dwight Eisenhower that forced quotas on Venezuelan and Persian Gulf oil imports in favor of the Canadian and Mexican oil industries. Eisenhower cited reasons of national security and land access to energy supplies at times of war. When this led to falling prices for oil in these regions, Venezuela's president Romulo Betancourt reacted by seeking an alliance with oil producing Arab nations as a preemptive strategy to maintain the continued autonomy and profitability of Venezuela's oil resources

Thus the Organization of the Petroleum Exporting Countries (OPEC) was formed and now it is a cartel of twelve developing countries. OPEC has maintained its headquarters in Vienna since 1965 and hosts regular meetings among the oil ministers of its Member Countries.

### **Objectives of OPEC**

- To coordinate & unify the petroleum policies of the member countries and to determine the best means for safeguarding their individual and collective interests.
- To seek ways and means of ensuring the stabilization of prices in international oil markets, with a view to eliminating harmful and unnecessary fluctuation; and
- To provide an efficient, economic and regular supply of petroleum to consuming nations and a fair return on capital to those investing in the petroleum industry.

### **Functioning of OPEC**

As stated in the objectives the OPEC countries work together to ensure supply of petroleum to the consuming nations and strives to maintain stable world oil prices by regulating supply according to the market demand.

Representatives of the OPEC member countries meet at the OPEC Conference to co-ordinate and unify their petroleum policies in order to promote stability and harmony in the oil market. The Conference is the supreme authority of the organisation. It consists of delegations headed by the minister of oil, mines & energy of the member countries. The conference generally meets twice a year in March and September and in extraordinary sessions whenever required. It is responsible for formulation and implementation of policies for the member countries.

### **Oil Embargo of 1973**

The persistence of the Arab-Israeli conflict finally triggered a response that transformed OPEC into a formidable political force. After the Six Day War of 1967, the Arab members of OPEC formed a separate, overlapping group, the Organization of Arab Petroleum Exporting Countries, for the purpose of centering policy and exerting pressure on the West over its support of Israel. Egypt and Syria, though not major oil-exporting countries, joined the latter grouping to help articulate its objectives. Later, the Yom Kippur War of 1973 galvanized Arab opinion. Furious at the emergency re-supply effort that had enabled Israel to withstand Egyptian and Syrian forces, the Arab world imposed the 1973 oil

embargo against the United States and Western Europe, while non-Arab OPEC members did not.

### Oil Glut of 1980

After 1980, oil prices began a six-year decline that culminated with a 46 percent price drop in 1986. This was due to reduced demand and over-production that produced a glut on the world market. Around this period, Iraq also increased its oil production to help pay for the Iran-Iraq War. Overall OPEC lost its unity and thus its net oil export revenues fell in the 1980s

#### War & Price Slump

Iraqi President Saddam Hussein, leading up to 1990-91 Gulf War, advocated that OPEC push world oil prices up, thereby helping Iraq, and other member states, service debts. But the division of OPEC countries occasioned by the Iraq-Iran War and the Iraqi invasion of Kuwait marked a low point in the cohesion of OPEC. Once supply disruption fears that accompanied these conflicts dissipated, oil prices began to slide dramatically.

After oil prices slumped at around \$15 a barrel in the late 1990s, concerted diplomacy, sometimes attributed to Venezuela's president Hugo Chávez, achieved a coordinated scaling back of oil production beginning in 1998. In 2000, Chávez hosted the first summit of heads of state of OPEC in 25 years. The next year, however, the September 11, 2001 attacks against the United States, the following invasion of Afghanistan, and 2003 invasion of Iraq and subsequent occupation prompted a surge in oil prices to levels far higher than those targeted by OPEC during the preceding period. Indonesia withdrew from OPEC to protect its oil supply interests.

On November 19, 2007, global oil prices reacted strongly as OPEC members spoke openly about potentially converting their cash reserves to the Euro and away from the US dollar.

#### **Production Disputes**

The economic needs of the OPEC member states often affect the internal politics behind OPEC production quotas. Various members have pushed for reductions in production quotas to increase the price of oil and thus their own revenues. These demands conflict with Saudi Arabia's stated long-term strategy of being a partner with the world's economic powers to ensure a steady flow of oil that would support economic expansion. Part of the basis for this policy is the Saudi concern that expensive oil or oil of uncertain supply will drive developed nations to conserve and develop alternative fuels.

One such production dispute occurred on September 10, 2008, when the Saudis reportedly walked out of OPEC negotiating session where the cartel voted to reduce production. Although Saudi Arabian OPEC delegates officially endorsed the new quotas, they stated anonymously that they would not observe them. The New York Times quoted one such anonymous OPEC delegate as saying "Saudi Arabia will meet the market's demand. We will see what the market requires and we will not leave a customer without oil. The policy has not changed."

### Members

Venezuela and Iran were the first countries to move towards the establishment of OPEC in the 1960s by approaching Iraq, Kuwait and Saudi Arabia in 1949, suggesting that they exchange views and explore avenues for regular and closer communication among petroleum-producing nations. The founding members are Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela. Later members include Algeria, Ecuador, Gabon, Indonesia, Libya, Qatar, Nigeria, and the United Arab Emirates.

### **Current Members**

OPEC has twelve third world member countries, six in the Middle East, four in Africa, and two in South America.

e	Algeria
-Q	Angola
ö	Ecuador
÷	Iran
<i>24</i>	Iraq
	Kuwait
	Libya
	Nigeria
	Qatar
100	Saudi Arabia
	United Arab Emirates
~	Venezuela

### **Former Members**



The United States was a de facto member during its formal occupation of Iraq via the Coalition Provisional Authority.

Indonesia left OPEC in 2008 because it ceased to be a net exporter of oil. It could not fulfill the demand of its own country's needs, as growth in demand outstripped output. The situation was made worse because of weak legal certainty and corruption that deterred foreign investors from investing in new reserves in Indonesia. In recent times, the government has increased financial incentives for foreign firms to invest in exploration and extraction but has found itself forced to import more supplies from the likes of Iran, Saudi Arabia and Kuwait. Indonesia's departure from OPEC will not likely affect the amount of oil it produces or imports. The country's growing dependence on imports is proving increasingly expensive as global prices soar.

### Influence of OPEC on Price

OPEC's influence on the market has been widely criticized, since it became effective in determining production and prices. Arab members of OPEC alarmed the developed world when they used the "oil weapon" during the Yom Kippur War by implementing oil embargoes and initiating the 1973 oil crisis. Although largely political explanations for the timing and extent of the OPEC price increases are also valid, from OPEC's point of view, these changes were triggered largely by previous unilateral changes in the world financial system and the ensuing period of high inflation in both the developed and developing world. This explanation encompasses OPEC actions both before and after the outbreak of hostilities in October 1973, and concludes that "OPEC countries were only 'staying even' by dramatically raising the dollar price of oil."

#### **Oil Economics**

OPEC is a swing producer and its decisions have had considerable influence on international oil prices. For example, in the 1973 energy crisis OPEC refused to ship oil to western countries that had supported Israel in the Yom Kippur War or 6 Day War, which Israel had fought against Egypt and Syria. This refusal caused a fourfold increase in the price of oil, which lasted five months, starting on October 17, 1973, and ending on March 18, 1974. OPEC nations then agreed, on January 7, 1975, to raise crude oil prices by 10%. At that time, OPEC nations, including many whom had recently nationalized their oil industries, joined the call for a new international economic order to be initiated by coalitions of primary producers. Concluding the First OPEC Summit in Algiers they called for stable and just commodity prices, an international food and agriculture program, technology transfer from North to South, and the democratization of the economic system. Overall, the evidence suggests that OPEC did act as a cartel, when it adopted output rationing in order to maintain price.

Since currently worldwide oil sales are denominated in U.S. dollars, changes in the value of the dollar against other world currencies affect OPEC's decisions on how much oil to produce. For example, when the dollar falls relative to the other currencies, OPEC-member states receive smaller revenues in other currencies for their oil, causing substantial cuts in their purchasing power. After the introduction of the Euro, pre-invasion Iraq decided it wanted to be paid for its oil in Euros instead of US dollars causing OPEC to consider changing its oil exchange currency to Euros, although after Iraq's invasion, the interim government reversed this policy, and the subsequent Iraq governments stuck to the US dollar. Member states Iran and Venezuela have undergone similar shifts from the dollar to the Euro.

### **OPEC Basket**

OPEC basket is a weighted average of oil prices collected from various oil producing countries. This average is determined according to the production and exports of each country and is used as a reference point by OPEC to monitor worldwide oil market conditions.

The new OPEC Reference Basket (ORB) Introduced on 16 June 2005, is currently made up of the following: Saharan Blend (Algeria), Girassol (Angola), Oriente (Ecuador), Iran Heavy (Islamic Republic of Iran), Basra Light (Iraq), Kuwait Export (Kuwait), Es Sider (Libya), Bonny Light (Nigeria), Qatar Marine (Qatar), Arab Light (Saudi Arabia), Murban (UAE) and Merey (Venezuela).

OPEC daily basket price stood at \$93.96 a barrel on Thursday 13<sup>th</sup> January 2011

### **Production Allocation**

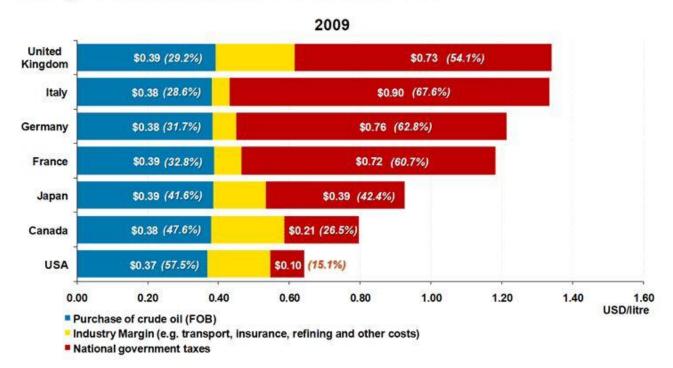
OPEC allocates quotas to its member countries every few months. The most popular view is that these nations agree to increase global demand by restrict its production but as stated earlier Saudi Arabia takes a different stand. The recent allocation data has no distributions allocated from November 2007

### **OPEC Reserves**

OPEC's ability to control the price of oil has diminished somewhat since the Gulf War due to the subsequent discovery and development of large oil reserves in Alaska, the North Sea, Canada, the Gulf of Mexico, the opening up of Russia, and market modernization. As of November 2010, OPEC members collectively hold 79% of world crude oil reserves and 44% of the world's crude oil production, affording them considerable control over the global market. The next largest group of producers, members of the OECD and the Post-Soviet states produced only 23.8% and 14.8%, respectively, of the world's total oil production. As early as 2003, concerns that OPEC members had little excess pumping capacity sparked speculation that their influence on crude oil prices would begin to slip.

### Who gets What - by OPEC

Although the popular view is that OPEC is responsible for all the volatility of crude oil prices globally, the research division of OPEC contradicts this view by regularly analyzing and publishing the "Who gets What from a litre of imported oil" of the G7 countries. The latest report published in November 2010 states the following.



### Who gets what from a litre of oil in the G7?

The crude basket price of OPEC may fluctuate widely but OPEC claims its percentage share of cost per litre of oil has remained steady.

### **OPEC's position in trading Spot & Oil Futures**

Most of the oil futures of different blends produced by OPEC traded at The **Dubai Mercantile Exchange.** The DME is the premier energy-focused commodities exchange in the East of Suez.

The DME was launched in June 2007 with the goal of bringing fair and transparent price discovery and efficient risk management to the East of Suez (Asia Pacific and Middle East), the world's fastest growing commodities market and already the largest crude oil supply/demand corridor in the world.

The DME lists the Oman Crude Oil Futures Contract (DME Oman) as its flagship contract, providing the most fair and transparent crude oil benchmark in the East of Suez. Today, DME Oman is the explicit and sole benchmark for Oman and Dubai crude oil Official Selling Prices – the historically established markers for Middle East crude oil exports to Asia.

The DME is regulated by the Dubai Financial Services Authority (DFSA) and all trades executed on the exchange are cleared through and guaranteed by the New York Mercantile Exchange (NYMEX), a member of the CME Group, which is regulated by the U.S. Commodity Futures Trading Commission (CFTC) and is a Recognized Body by the DFSA. The DME is recognized by over 20 international regulatory bodies across Europe and Asia, further cementing its position as truly global and well-regulated marketplace.

Another fact that significantly strengthens the OPEC's position is the fact that among the entire world's oil producing countries only OPEC nations have a significant spare oil production capacity. They can expand oil production when demand increases. OPEC member countries respond to market fundamentals and forecast developments by co-coordinating their petroleum policies. If demand grows or some producers are producing less oil, OPEC can increase its oil production in order to prevent a sudden rise in prices. It can also reduce production in response to market conditions.

But increasing oil production is not a simple procedure. In order to expand their output the member countries need to be sure that the oil industry will continue to be profitable. Oil producers invest billions of dollars in explorations and infrastructures. A new field can take 3 to 10 years to locate and develop. Sometimes when it is not used or used less than capacity for a long period, the plant may suffer irreparable damage. It is also difficult and a colossal loss if a plant in the middle of the ocean has to be shut due to lack of demand. If oil producers do not invest enough money and do it far enough in advance, then the world could face a shortage of oil supplies in future.

From the early 1970s to the mid 1980s, the OPEC did set crude oil prices. It is not so today. The price of crude oil is affected by movements of three major international petroleum exchanges – the New York Mercantile Exchange (NYMEX), the International Petroleum Exchange in London (IPE) and the Singapore International Monetary Exchange (SIMEX). International Energy Agency

(IEA) of Paris and US Energy Information Administration (EIA) are also important players. The spot and future trading in these affect the oil prices.

Even though today OPEC is not entirely responsible for oil prices, OPEC member countries do voluntarily restrain their crude oil production in order to stabilize the oil market. Sometimes it does so to maintain profits so as to maintain the member countries' economic growth. This may happen when these countries, whose sole earning is from oil exports, suffer losses due to sluggish demand caused by restrictions like taxes on oil import & consumption.

Security of oil supplies relies on security of oil demand. The year 2008-09 were the first time since 1981 when global oil demand declined in two successive years due to global recession. Demand fell by 1.8 million barrels per day and the price of a barrel of crude lost almost 100 \$ in less than 6 months from mid 2008, resulting in unused production capacity.

## Impact of Kyoto Protocol on OPEC

Environmental concerns have forced mankind to diversify into alternate sources of energy. The possible losses that OPEC countries may incur due to threat by these Non- Conventional sources have triggered a debate on the green paradox (Sinn 2008). This paradox is based on the assumption that suppliers of oil feel threatened by a decline of future prices due to gradual reduction of oil consumption in abating countries. If this reduction reduces the discounted value of the oil price in the future more than at present, the oil producing countries will expand production in the short run which will increase oil consumption and thus accelerate global warming.

OPEC stated that its Nations are dependent on oil exports and hence need to be compensated for the adverse impacts arising due to KYOTO Protocol.

# Impact of OPEC on India

Although India partly subsidizes few products of the refined petroleum to check inflation it extracts huge tax revenues from import of crude oil. The rate of change of market prices of refined products largely remains unaltered compared to the fluctuations in the international market largely due to regulated pricing mechanisms. As a result India is suffering from vast fiscal deficits and is reflected in the recent outstanding balance of payment to Iran

Iran is India's second biggest crude oil supplier after Saudi Arabia, accounting for about 13 per cent of its total crude oil imports. If the present issue of payment with Iran remains unsolved it would potentially hit Indian imports of 400,000 barrels per day of Iranian crude oil, forcing Asia's third-largest economy to look for more expensive alternatives that would swell its already high current account deficit.

After King Abdullah visited India in 2006, India has steadily moved its oil imports and made Saudi Arabia its largest oil source by 2010. Given a growing convergence with Saudi Arabia even on security issues, India is likely to find that both the Saudis and the UAE would be more than willing to make up the loss of oil imports from Iran.

# Conclusion

Prices are fore-casted to rise due to global economic recovery (leading to increased oil demand), and slower growth in non-OPEC oil supply and continuous production restraint by members of OPEC. Despite environmental concerns and various conservation policies, the energy demand is bound to grow due to economic growth, expanding population and higher standards of living. Energy growth can be expected to grow by more than 40% by 2030.

Fossil fuels, oil and natural gas will continue to meet most of the world's energy needs and thus OPEC having the maximum oil reserves will remain the leading player in the world oil scenario.

Meeting the demand of oil consumers, being mindful of the major global climate change challenges, as well as oil capacity investment needs, are likely to be the predominant issues facing this large organisation going forward.

# Key Words

**Cartel** - A formal (explicit) agreement among competing firms. It is a formal organization of producers and manufacturers that agree to fix prices, marketing, and production. Cartels usually occur in an oligopolistic industry, where there is a small number of sellers and usually involve homogeneous products. Cartel members may agree on such matters as price fixing, total industry output, market shares, allocation of customers, allocation of territories, bid rigging, establishment of common sales agencies, and the division of profits or combination of these. The aim of such collusion (also called the cartel agreement) is to increase individual members' profits by reducing competition.

**Statute** - A formal written enactment of a legislative authority that governs a state, city, or county. Typically, statutes command or prohibit something, or declare policy. The word is often used to distinguish law made by legislative bodies from case law, decided by courts, and regulations issued by government agencies. Statutes are sometimes referred to as legislation or "black letter law". As a source of law, statutes are considered primary authority (as opposed to secondary authority). Ideally all Statutes must be in Harmony with the fundamental law of the land (Constitutional).

**OECD** - The Organisation for Economic Co-operation and Development is an international economic organisation of 34 countries founded in 1961 to stimulate economic progress and world trade. It defines itself as a forum of countries committed to democracy and the market economy, providing a platform to compare policy experiences, seeking answers to common problems, identifying good practices, and coordinating domestic and international policies of its member

**De facto** - A Latin expression that means "by [the] fact." In law, it means "in practice but not necessarily ordained by law" or "in practice or actuality, but without being officially established." It is commonly used in contrast to de jure (which means "concerning the law") when referring to matters of law, governance, or technique (such as standards) that are found in the common experience as created or developed without or contrary to a regulation. When discussing a legal situation, de jure designates what the law says, while de facto designates action of what happens in practice. It is analogous and similar to the expressions "for all intents and purposes" or "in fact."

**Swing producer** - A supplier or a close oligopolistic group of suppliers of any commodity, controlling its global deposits and possessing large spare manufacturing capacity. A swing producer is able to increase or decrease commodity supply at minimal additional cost for himself, and thus able to influence prices and balance the markets, providing downside protection in the short to middle term. In the long term, however, the price of commodity is subject to major changes over time, particularly tied to the overall business cycle.

**Oligopoly** - A market form in which a market or industry is dominated by a small number of sellers known as oligopolists.

# References

OPEC Website - http://www.opec.org/opec\_web/en/ Oil Market Report from Public Website of International Energy Agency http://omrpublic.iea.org/ Wikipedia CNN Money Website India on slippery ground over crude-India on slippery ground over crude - The Times of India http://timesofindia.indiatimes.com/business/india-business/India-on-slippery-ground-overcrude/articleshow/7202894.cms#ixzz1B0tdlC00 India's oil fee issues with Iran remain unsolved http://www.commodityonline.com/news/India%E2%80%99s-oil-fee-issues-with-Iran-remainunsolved-35341-3-1.html