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Saudi Arabia; Oil and Security

Saudi Arabia, possessing more than 21 percent of total world oil reserves, more than 13 percent of total world crude oil production, at least 15 percent of total world oil export (oil that is traded internationally) and 30 percent of OPEC's total oil export, has an important and unique position in the world of energy. In addition, Saudi Arabia is now the only oil producing country with a significant spare production capacity.

In view of such a position and place, it seems that there is a direct relationship between security of Saudi Arabia and world oil prices. World oil prices are currently seen as a symbol of energy crisis in the world. With an increase of this crisis, the security sensitivity of Saudi Arabia has also increased.

It can easily be conceived that in case of any political-military development in Saudi Arabia or any threat against this country or interruption of oil production in that country, it would leave a great impact on the world oil market (whether from psychological point of view or from disturbing the balance of world oil supply) especially under current world energy conditions. The importance of the Persian Gulf as a

region of producing a major portion of world energy requirements cannot be overemphasized. The significance of the security of Saudi Arabia is more revealed when we pay attention to this country's responsibility for exporting about half of the whole Middle East region's oil.

With the increasing importance of Saudi Arabia and ever-increasing world attention to oil production and especially Saudi spare production capacity as a factor of saving the oil market, the Saudi government should contemplate the security of the country. As it is revealed that this sensitivity is increasing day by day (especially under the condition that the world is under the unjust dominance of U.S.A. and its western allies), it will be very tempting for everyone who nurtures thought of confronting this domination to think of striking the economic interests of the West through endangering oil installations in Saudi Arabia. In addition, some of the Saudi Arabia's oil rivals may request higher market share or higher oil prices that may also favor such thoughts.

The place of oil in Saudi's national security is like a two-edged blade. One of the edges is known and has a clear-cut meaning. It is the US and West's obligation to provide for the country's security

and ignoring many of its vacuums like totalitarianism, lack of any public institutions and lack of people's participation and role in the country's power structure. In other words, this razor's edge causes threat to disappear. But the other side of the edge (particularly under conditions mentioned above) can act as a threat against Saudi Arabia. The focus of our attention in this writing is towards this issue. Saudi Arabia must establish a wise relationship between its level of oil production and security issue.

The Saudi Arabia's government cannot rely on its only ally, i.e. U.S.A, to provide their national security. First of all, the US administration desires to provide Saudi's security mainly through more

arms sale in return for plundering petro-dollars. But weapons are not solely sufficient to ensure Saudi's security. Secondly- the US policy for Middle East is associated with its interests and encounters different contradictions. Thus, this policy is not necessarily suitable for the security of Saudi Arabia. It has been a long time that Americans have requested Saudi Arabia to produce as much oil as possible and raise more capacities to have a free hand to commit aggression against any country in the region. Saudi Arabia was expected to compensate any reduction in other countries' oil output by increasing its own production. This is a double threat against Saudi Arabia which is not necessarily in agreement with Saudi's interests. Thus, one of the reasons that Saudi Arabia is possibly refraining from capacity-building and producing more might be due to this issue. This refusal is naturally fulfilled not in a clear and transparent form but in a complex way. This is because the Saudis should neither incite the reaction and sensitivity of the US and the West nor become careless of their country's independent interests. While not in a very distant past the Americans dreamt about 24 and even 28 million barrels per day for ultimate Saudi oil production capacity, the current Saudi declared policy based on the country's national interest is to reach the oil production capacity to about 12.5 million barrels per day in the year 2020.

Excessive oil revenues (being the other side of enormous oil production's coin) can also intensify the security sensitivity under discussion exposing Saudi Arabia to more desires and aspirations while Saudi Arabia lacks more capacity to absorb these dollars.



Perhaps many recent endeavors in Saudi's diplomacy can be analyzed in the context of this same security issue. The summit of dialogue between Islamic faiths held in the Holy Mecca in early June 2008 and exceptional invitation of Ayatollah Rafsanjani with a large entourage to participate in this summit is considered as a sample of such an endeavor. Interestingly the summit was held by the "Organization for Co-operation of the World of Islam" (Rabeta Al-alam Al-eslami). It was the same organization who has had most roles in adding fuel to conflicts in the world of Islam and especially provoking anti-Shia feelings. It can perhaps be said that Al-Qaeda was also formed by this organization. But under conditions mentioned, Saudi Arabia is in need of weakening conflicts especially religious disputes that may now harm itself. Also, Saudi Arabia is in need of good relations with Iran for its own safety as well as safety of its oil installations in case of escalation of hostility between Iran and U.S.A possibly leading to a military phase. Establishment of good relations with Russia has also been on the agenda in Saudi Arabia recently. Undoubtedly, alleviation of tensions between Islamic faiths will also promote affairs in relations with Russia who is facing problems like Chechnya.

Saudi oil policy-making can also be evaluated in this respect. During recent years, the Saudis have made great efforts (whether independently or within framework of OPEC or in other positions in which they have played a role with respect to energy and world oil market) to show that the current oil market conditions and continued rise in prices is due to oil supply and demand. Rather, the level of supply is sufficient to meet demand and the problem is the result of other issues. The rise in oil price will increase

pressures on Saudi Arabia. In view of the conditions explained, whether or not the Saudi government submits to these pressures will impact the country's security problems.

The recent Jeddah conference held on June 22 upon the invitation of Saudi government (but was somehow held within International Energy Forum or IEF which is a meeting for cooperation between energy consumers and producers) was apparently ineffective. And it did not have any new achievement for the world oil and energy markets. As a matter of fact, however, the holding of this conference can be regarded as a success for Saudi Arabia. Saudi Arabia succeeded to establish the fact that the market's issues can hardly be solved by oil producers only. In fact, the participants in the conference also accepted this view.

Meetings for cooperation between energy consumers and producers started in 1991. The first meeting was held in Paris and upon the invitation of France. Eleven meetings have since been held. These meetings lacked a permanent Secretariat previously. But since 1996, the meetings have been convened more regularly every two years. The last meeting was held in Italy from 20-22 April 2008. Upon invitation and capital investment by the Saudi government, a permanent Secretariat was established in Riyadh in 2004 for these meetings. These meetings or congresses were also renamed as the International Energy Forum. Perhaps when the Saudis made the capital investment, they could not imagine deriving such advantages from it.

The current Saudi diplomacy seems to be rational and wise. This country has successfully managed to establish a desirable relation between the three issues of oil, security and foreign policy.

Director

Dialogue of Oil Producers

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Crude oil prices have recently increased to an unprecedented level. This issue has caused the oil consumers to press the producers through exerting political pressures to supply more oil to the market. They suppose that supplying more crude oil can reduce the prices. For example, the law makers in the USA have tried a number of times to persecute OPEC for output control through approving laws. Although they have not succeeded to take this measure up to now, but the visit by the US authorities and political authorities from other consuming countries are made in order to convince the oil producing countries to produce more oil. The eight industrial countries and the European Union (EU) always emphasize in their meetings that OPEC must raise its crude oil production. Even international media say that the shortage of OPEC oil in the market is a factor responsible for the rising oil prices. Since the international media are mainly controlled by major oil consumers, the producers have been unable to attract the attention of the world to the market's undeniable realities. This is whilst the producers have strong logic but less attention has been paid to their logic and reasoning. In this report, attempt has been made to discuss briefly the logic of the oil producers with respect to current market conditions:

- 1- At present, the oil market is faced with surplus supply. This surplus in supply will reach 1.2 million barrels per day (mbpd) and 0.5 mbpd in the second and third quarters of 2008 respectively. So, the oil market is not faced with physical shortage of the crude oil.
- 2- The rising prices have nothing to do with supply and demand fundamentals. Rather, factors out of control of the oil producers have caused such a trend. As an example, the fluctuation of prices by more than 10 dollars in a single day (6th June, 2008) clearly demonstrated that the prices are under the influence of non-fundamental factors.
- 3- Political and military tensions especially in oil regions have caused anxiety in the oil market. And military actions conducted against countries (that are oil producers) contribute to instability in the oil market. It seems that currently the world desires stability in the oil market and thus the big world powers should avoid stirring up tensions and provide opportunity for the oil market to amend itself in a peaceful atmosphere.
- 4 - The fall in the value of dollar in recent years especially following recent crisis in financial markets caused many financial institutions move towards commodity stock-exchange market particularly oil in order to protect themselves against fluctuations of the dollar. The latest crisis in financial markets appeared after the occurrence of problems in the housing

mortgage sector in the US. This caused financial institutions to get involved in oil stock-exchange markets with more rapidity and capacity. The conduct of these groups of institutions caused fluctuation and hike in the oil prices. It appears that economic instability in the industrial countries is one of the factors contributing to the instability in the world oil market. The correct performance of economy in these countries can put an end to this situation to a large extent.

- 5- In recent years, speculation has had an important role in changes of the oil prices. From theoretical point of view, it was stipulated that oil bourses provide transparent atmosphere for finding out the price. Under current conditions, however, the oil bourses not only have not caused transparency in the oil market but have become the cause of more ambiguity in the market by intensifying the effects of non-fundamental anxieties in the market. Therefore, regulations which control the bourse markets must change to bring about more transparency. Since the bourses influencing the oil market are located in London and New York and are being under the influence of the US and English policy-makers, they are the ones who should take action in this regard since this is outside OPEC's sphere of influence.
- 6- The most important point to be considered by mass media is the fact that the devaluation of dollar and the rate of inflation in the world during the past three decades has caused a sharp reduction in the value of oil revenues earned by the producers. What is now addressed in the media as high crude oil prices has only been able to help maintain the producers' purchasing power.
- 7- In recent years, the shortage of refining capacity in the world has caused chaos in the oil market.

At a time when the crude oil producers have made every effort for supplying crude oil, it seems the consumers should also take action for development of their refining sector in order to eliminate the problems in the oil market by collective action. It is evident that the consumers should not expect that the producers invest their capitals in the refining sector in order to reduce prices whilst they need these capitals mainly for their economic development.

- 8- The crude oil producers are trying to cool down the market by producing and supplying crude oil. Production of crude oil more than the volume currently offered to the market requires making heavy investments. This is while non-essential policies like imposing sanctions against a number of oil-producing countries have hampered their efforts to increase production capacity. Thus, the market has become worried. Due to the need and insistence of the international community for more oil, it seems that these policies must change in order to provide more crude oil for the prosperity of the world economy.
- 9- Shortage of investment has been cited as one of the most important factors that caused the shortage of capacity in the upstream and downstream sectors in the oil market during the past several decades. Because in the past de-



ades, low oil prices had created an atmosphere in which there was no attractive prospective for investment in the areas of oil exploration and production. The continuation of high oil prices can provide a positive outlook helping an increase in the level of investments. In particular the investment costs have at present significantly increased.

10- Many oil-producing countries consume a lot of oil. These countries are interested to export more crude oil through reducing their domestic



consumption. Increase in energy efficiency and reduction of energy intensity in oil producing countries can free more oil for export. Therefore, the advanced countries should allow easy transfer of the advanced technologies to the oil-producing countries facilitating less fuel consumption. This necessitates investments by industrial countries in

the area of technology transfer.

11- By using renewable energies and particularly nuclear energy, the oil-producing countries can reduce their domestic consumption of oil products and in return export more crude oil to international markets. Therefore, the industrial countries must assist the oil-producing countries to reap the benefits of such energies by transferring modern technologies to them. At present, some industrial countries oppose development of peaceful nuclear energy in Iran

with the reasoning that the nuclear energy is unnecessary for the owners of oil and gas reserves. Even they cause difficulty in the way of development of Iran's petroleum industry by imposing various sanctions.

12- The oil-producing countries have always emphasized that they required a clear outlook of demand for making investments in exploration and production. Making heavy investments will not be logical without having an exact estimation of the volume of demand in future years. The estimations currently announced about demand by oil institutions and entities in consuming countries have significant statistical differences making it hard to decide about raising capacity. The usage of substitute energies and prioritizing energy policies are on top of agendas in the consumer countries. Such plans cause uncertainty about demand. The oil consumers must make more efforts in order to create confidence in generating sufficient demand in the foreseeable future.

13- Heavy taxes are imposed on oil products in consuming countries. In some cases, such taxes constitute more than half of the product's price. Meanwhile, the authorities in these countries claim that high product prices have put pressure on the final consumers. And OPEC must increase its output to lower the prices. While a large part of the price paid by the consumers in these countries reach the budget of the governments. It seems the governments in these countries must reduce their share from the taxes in order to stabilize the products' prices. Certainly, the industrial governments claim that tax is applied in order to encourage saving. Evidently, they should accept that an increase in crude oil prices would also encourage energy saving.

Azadegan produced over 2 Mln bbls of crude in 7 months

Ever since the early production of Azadegan oilfield started, seven months ago, a total of over 2 Mln barrels of crude have been produced by the field, says Hassan Shokrollah Zadeh, technical manager of the National Iranian South Oil Company (NISOC).

According to the news agency of Iran's oil ministry, Shokrollah Zadeh went on to explain: "The foreign company involved in the project (Japanese Inpex) had only collected static data about Azadegan. Much of the dynamic data we have collected were not available with that company. Besides, their (Inpex's) design was based on a recovery rate of a

mere 5% for the largest oil layers (Ilam & Sarvak with super-heavy crude) of Azadegan".

The NISOC official also said that Inpex had decided to produce 30-40% of the field's crude from its Fahlian layer



which houses crude of 37 API, but was later found by NISOC experts to contain asphaltin sediments. "NISOC is now trying to remove the asphaltin sedi-

ments through a research plan" Shokrollah Zadeh added.

NISOC plans to boost the field's output to 50,000 bpd by drilling another 8 production wells. So far, one of those new wells has been completed and the rest are being drilled, clarified Shokrollah Zadeh.

The NISOC technical manager went on to stress that no foreign company was allowed to have a say in the management of NISOC's reservoirs or their sustainable production.

Despite what Shokrollah Zadeh has said, NIOC is currently talking with the Chinese Sinopec on the development of Yadavaran, with the Italian ENI on the development of 3rd phase of Darkhoain and with the Russian Gazprom/Lukoil on the development of North Azadegan. All three oilfields are in the purview of NISOC.

German firm to build equipments for 'Iran LNG' plant



A German company is to build equipments for three liquefied gas plants in Iran, worth 100 million euros, the daily Siegener Zeitung newspaper reported Wednesday.

The technical firm Steiner has received an order from Iran to construct equipments for the liquefied gas installations.

The final assembling of the plants will be done at a location in southern Iran, according to

the paper.

Based in the German city of Siegen, Steiner is also involved in building chemical and petrochemical plants in several other countries, among them Qatar, Saudi Arabia, China and Russia.

German firms have actively eyed Iran's growing petrochemical sector in recent years, in a bid to increase their market presence in that country.

Iran sets out plans to up capacity over next 10 years

Iran's proven oil reserves will increase by 5% over 10 years to 145 billion barrels through the development of new fields and enhanced recovery measures at existing reservoirs.

The country's long-term energy plans also include a 7% increase in gas reserves to 30 trillion cubic metres by finding new reservoirs to consolidate its position as the holder of the world's second biggest reserves.

The increase of 7 billion barrels in crude reserves will come from the development of 37 new oilfields and the re-pressurisation of 13 existing

fields through gas injection, according to National Iranian Oil Company corporate planning manager Abdul Mohammad Delparish.

The projections cover the 10-year lifespan of two of the country's five-year national development plans, of which the next one starts in March 2009.

Crude production capacity will increase during the first of the two plans by about one quarter to 5.316 million barrels per day, Delparish said, reiterating a target already cited by senior oil officials.

Necessary investment from buy-back deals in this period would total \$25 billion, he added.

Crude output capacity, now

officially set at 4.3 million bpd, will increase by 150,000 bpd to 4.45 million bpd by March 2009, Delparish said earlier. Projections early in this decade had set a capacity target of 5 million bpd before 2010.

The planned 5.3 million bpd target for 2019 will be boosted by about 1 million bpd in other liquids, mainly condensate from the South Pars gas field, increasing overall liquids production capacity to well above 6 million bpd before the end of the next decade. The Oil Ministry has a separate 20-year projection for a liquids capacity of 7 million bpd. Sources said only about 5.5 million bpd of that may be accounted for by crude.

Another fresh oilfield found in Iran: Nozary

Talking on the sidelines of '1st Petrochemical Conference' in Tehran yesterday, Gholam Hossein Nozary, Iran's oil minister, disclosed that a fresh oilfield with 500 Mln barrels of oil-in-place had been discovered near the city of Abadan, which has been named 'Arvand'.

On the 15th of this July, Arvand Oil & Gas Production Company, a subsidiary of NIOC,

had invited interested companies to a tender for the development of 'Arvand' oilfield. The volume of oil-in-place of the field had been put at 338 Mln barrels in that tender.

Earlier, Nozary had revealed the discovery of another two oilfields; in the north of Andimeshk city and in Assalouyeh. The total volume of



oil-in-place of the said three fields is estimated at about 2 Bln barrels.

Ecuador looks to Iran and China in new oil refinery

China and Iran are interested in investing in a six-billion-dollar oil refinery Ecuador is building with Venezuelan help on the Pacific coast, President Rafael Correa said Saturday.

"That refinery is being built with (Venezuela's state giant) PDVSA although Iran and China also are interested," the Ecuadoran leader said in his weekly television address.

The megaplant on the coast, on which Correa and his Venezuelan counterpart Hugo

Chavez broke ground Wednesday, will be on line fully in 2013 and will be able to produce 300,000 barrels of oil per day.



Correa said Iran could be involved and shrugged off any

concern that might cause.

"Iran has a lot of experience in their oil field, it has been a producer for a long time, almost a century... and China is the leading oil consumer, so we will have a guaranteed market," said Correa, a leftist economist by training.

"Somebody may say: Iran, Axis of Evil. But what do I care what other countries think? We have to be masters of our own destiny. We have nothing against Iran. Iran has done nothing to us," Correa said.

Venezuela and Ecuador are the Latin American members of OPEC.

Members selected for NIOC-Gazprom joint group



In line with the MoU signed between NIOC and Gazprom, members of the joint working group required in it have been selected, says Saifullah Jashn Saz, managing director of NIOC.

According to the Fars news agency, Jashn Saz named the members as following:

Naji Sa'douni, the PEDEC MD, Abdolmohammad Delparish, director of corporate planning dept of NIOC, Hojatollah Ghanimifard, NIOC deputy MD for foreign investment, Bahman Soroushi, head of production supervision of NIOC, and two persons from NIGC and NIORDC.

Last week, NIOC and the Russian Gazprom signed a MoU, which called for cooperation in

developing Iran's South Pars gas field, in constructing Neka-Jask crude pipeline (joining Caspian Sea with Persian Gulf), in building an oil refinery in the north of Iran and in developing Iran's North Azadegan oilfield.

According to Iran's oil minister, the MoU also includes a gas swap scheme for Gazprom to receive gas in the north of Iran and sell it in the south and allows Gazprom to undertake the operatorship of Iran/Pak/India gas pipeline (when built) or to join the pipeline's construction.

APA debating creation of 'Asian Integrated Energy Market'



The aim of creation of an 'Asian Integrated Energy Market' (AIEM), which has been proposed to the Asian Parliamentary Assembly (APA) is to allow for all members to have access to energy at a uniform price, the most outstanding feature of which is the construction of a gas pipeline network around the Persian Gulf, says

Mohammad-Hadi Nejad Hosseinian, the present Secretary General of APA and former deputy oil minister for int'l affairs of Iran.

Nejad Hosseinian went on to explain: "The pipeline around the Persian Gulf will allow for each littoral country to inject into the line its gas output and, in turn, allows for each country to take from it the volume of gas it needs. This will make creation of gas storage facilities in the said countries unnecessary".

The APASG said the sub-committee established for setting up an AIEM was active and has even proposed certain schemes for the purpose. He then added that under a proposed plan, a pipeline would connect the Persian Gulf

pipeline to the Mediterranean region, and another extension would be taken from the same line toward the East-Asian region via the Oman Sea. He also added that all members of the energy committee in APA had accepted the generality of the plan and only needed couple of months to examine the scheme.

Ironically, the plan to export Iran's gas to the UAE, known as Crescent deal and signed several years ago, has failed to materialize because of gas price dispute. If a price problem over such a small-scale deal can not be settled, how does the APA's energy committee expect to manage a huge scheme like the Asian Integrated Energy Market?

Iranians consumed almost 30 bcm of gas in 3 months



During the first three months of this (Iranian) year, a total of about 29.67 Bln cubic meters of gas (319 mcm/d) were used up by Iran's household, commercial

and industrial sector as well as its power plants plus the country's export to Turkey, says Hassan Montazer Torbatie, manager of dispatching of NIGC.

According to ISNA, Torbati went on to explain: "Some 12.456 bcm of that volume was consumed by power plants (42%), 4.966 bcm was used up by major industries (16.7%), about 11.055 bcm was given to the household, commercial and industrial sector (37.2%) and

some 1.191 bcm (13 mcm/d) was exported to Turkey (about 4%)".

The volume of gas exported to Turkey in the said period shows a drop of 33% year on year, clarified Torabi.

Last April, Reza Kassayie Zadeh, managing director of NIGC had warned in last April that the gas consumption in January 2009 was projected to reach 700 mcm/d, but its production will at best reach 538 mcm/d.

wind Energy

Introduction:

With increasing oil and gas prices in the world markets, the usage of other energy carriers has become possible. Oil prices have reached to over \$ 100 causing consideration of the use of new energies from economic point of view. Meanwhile, environmental taxes imposed against fossil fuels and social detriments resulting from their usage, increases economic justification for profiting from renewable carriers. Based on this and for the purpose of investigating the rate of growth of the use of new energies in Iran under prevailing oil market conditions, we have conducted an interview with technical-executive deputy of the "Organization for New Energies in Iran" Dr. Mohammad Ali Ramezani regarding making use of wind energy in the country. Dr. Ramezani started his works at the Office for New Energies (ONE) in 1994 in the areas of converting new energies into fuel cell and hydrogen. Later with the changing of the Office for New energies into an Organization, he accepted the technical – executive responsibility in the organization. Despite industrial activity, Dr. Ramezani has been teaching subjects of power plants and thermodynamic in the country's universities for nearly 14 years.

Q- When was the plan initiated for making use of wind energy in the country?

A- Wind energy is one of new energy sources getting the most attention in the country. This energy has advantage compared to other renewable energy carriers. The activity on this sector was initiated in Iran in 1994 at the ONE. In the initial step and with the definition of a project for evaluating potential of wind power in Iran, the initial studies on evaluating potential were conducted by a foreign consultant. The study showed that a minimum capacity for installing 5000 MW wind power plant exists in the country. This potential has significantly



increased in view of the scientific progress made in the world with respect to wind power plants since the study was conducted. Thus, processes for converting wind energy into electricity were started and effort was made to design and construct two turbines with capacities of 600 KW and 10 KW in the country by implementing a parallel project. Some research was also conducted in parallel for the application of these turbines in agricultural industries. With the completion of these two projects, the 10-KW turbine – manufactured domestically – was installed in the vicinity of Sahand University in Tabriz. The 600-KW turbine was completed and constructed after obtaining some of the main parts from abroad. This success was the first step taken in this direction in the region introducing Iran as among one of several Asian countries engaged in this area.

Q- Prior to this, had any other activity been implemented for establishing sites for wind power plant in the country?

A- Prior to this, permission for construction of a 100 MW wind power plant in the Manjil region had been obtained by the Atomic Energy Organization. Also, Binalud wind power plant was also under construction. With the establishment of the organization and acquisition of experience, the project to establish these two wind power plants were transferred to the "Organization for New Energies". Manjil power plant was under construction by the Sadid industrial group in cooperation with Westat Company. With delivery of these two projects to the organization, the speed of installing turbines in the Manjil region's sites accelerated. Currently, the capacity of this

power plant has reached 45.34 MW. Of course, this trend was slowed down to some extent due to problems faced by the contractor for procuring parts for the turbines. But it is expected to install 15 new wind turbines each with a capacity of 660 KW in the region by July raising the power plant's capacity by nearly 10 MW. In this site, some 81 wind turbines in different capacities ranging from 300 to 660 KW have already been installed. Also, out of the total of 43 turbines designed for the Binalud project (handed over to the organization early 1386 (2007)), some 20 turbines had been installed. Thanks to the efforts made by the organization and the contractor, another 23 turbines were installed during a short period of 10 months completing the power plant's capacity.

Q- How much is the share of domestic industries in designing and constructing wind turbines?

A- Wista Company carried out the design work for the 660-KW turbines. However, we have managed to provide nearly 50 percent of the parts domestically by establishing its production line inside the country. In order to reduce dependency with respect to required parts, it has also been planned to produce locally sensitive parts such as generator, gearbox, hydraulic system and their electronic boards. The project's contractor has claimed that it has manufactured electrical boards domestically and can also produce main parts of the hydraulic system. To complete this cycle, the organization intends to pursue the production of generator and gearbox for the turbines in two parallel projects.

Q- What is the capacity of turbines used in the world under current conditions?

A- Due to limitations in wind resources and accessible lands for construction of these turbines, some efforts have been made in the world to increase the capacity of wind turbines. At present, high-capacity (MW) turbines have allocated major share of this market to themselves. And most companies who execute construction of wind power plants are making use of Mega-watt turbines. Currently, 3-5 Mega-watt turbines are available in the market. But it must be noted that transportation, installation and the usage of these turbines requires special equipment. At present, 160-ton cranes are used to install 660 KW turbines in Iran. There are a limited number of those cranes in Iran. In order to install higher capacity turbines, an infrastructure is required which are currently limited in the country. Implementation of a project is underway to investigate suitable capacity for wind turbines in Iran considering all parameters. By conducting this study, the optimized capacity for turbines will be determined for use in the country. Afterwards, the design and construction of the turbine will be started. This project will be implemented jointly by the research institute of Iran ministry of energy (having experience in constructing small turbines), the Sadid industrial group and a foreign consultant.

Q- What is the finished cost for electricity generated by wind power plants?

A- There is not a comprehensive agreement in

this respect. Different prices are mentioned based on preconditions considered for each scenario. According to estimates made by the organization, if the government purchases wind power for 95 tomans per kilo-watt, this sector will have suitable attractiveness for the private sector. This price is, of course, influenced by the type of investment, rate of interest applied and a set of other parameters. An increase in the oil and gas prices in the energy markets would also leave an impact on the price of other energy carriers. On the other hand, the costs of manufacturing equipment have also severely been increased affecting the level of investment and the finished price. Currently we are facing a tangible increase in the market for wind turbines in the world due to increased demand for wind turbines and the rise in the cost of manufacturing equipment.

Q- What is subsidy gap between wind electricity and the electricity delivered to consumers?

A- The price for every kilowatt has been set 64.2 tomans and nearly 77.8 tomans in the last year's and current year's Budget Law respectively. If this is considered as real prices for electricity generated, the increased share in the government's subsidy is nearly 10-15 tomans which is not a high share. Certainly beside the finished price of electricity produced from gas and coal power plants, the social costs should also be taken into account (in view of the type of the power plant) which increases the finished price of produced electricity from these power plants

making the electricity produced by wind economical without receiving additional subsidy.

Q- How much the country's wind turbines' industry has gained access to latest world technologies?

A- One of the most important parts in accessing the technology of wind turbines' industries is related to the design part. If we gain know-how in the area of designing wind turbines, we have managed to go through the essential part for development of this technology. We claim that the industry for wind turbine can be established in the country. It must be noted that there is much difference between possessing industry for wind turbine and equipping the country's wind power plants. In case of possessing wind turbine's industry, not only can we raise capacity of domestic power plants by making use of turbines manufactured locally, but we can also get a share of the regional market in cooperation with the private sector. We can also take steps to export technical and engineering services. By means of this along with a comprehensive plan, the possibility for the presence of the country's industrialists in the world market can be provided. During recent years, the market for wind turbines has experienced a growth of 20 percent every year and we can also gain access to a part of this market.

Q- What plans have been prepared for accessing a part of the market of this industry?

A- Based on the experts' viewpoint, the indus-



try for wind turbines can be established and promoted in the country by implementing a set of policies like, purchasing guaranteed electricity with just and rational prices from the private sector, providing support to private sector and construction of some wind power plants with limited capacity in the initial stage using government resources to speed up the course of action. We are not going to face much difficulty in acquisition of know-how for designing wind turbines. Some of the parts can also be imported from abroad. But by creating a suitable and attractive market, the private sector can also become active and move toward supplying the required parts (manufactured locally) to the market in cooperation with the country's industrialists.

OPEC & Its Role in Regulating Price of Petroleum

S. A. Oskooee¹ & F. Ebghae²

Abstract

The present paper offers a short history of the Organization of Petroleum Exporting Countries (OPEC) together with a brief account of its goals, operational structure, membership requirements and its role in regulating oil prices. Studying oil price developments and OPEC's role since its foundation shows that OPEC has reacted sensitively to oil price volatilities and attempted to stabilize oil prices. In fact, the organization has played an effective role through different crises.

Key terms: OPEC, crude oil prices, oil market

Introduction

Oil and oil revenues are considered a vital factor influencing economic behavior and developments of oil-rich and oil exporting nations. Today, more than 50% of the major oil producing countries, directly or indirectly, rely on oil revenues income and any fluctuation in oil prices is reflected in their economies.

The fact that crude oil has not been substituted by any form of energy throughout the 20th century is indicative of the importance of this energy carrier in terms of cost-effectiveness as well as preferable value-added index in contrast to other forms of energy. While mankind has made substantial progress in making use of alternative energy resources, oil is still at the focal point of the measures

for creating value-added indexes and maximizing profit³.

The history of oil industry shows that, in certain periods, major oil companies held monopoly on the industry, however, since the foundation of OPEC, oil exporting countries have managed to gain a partial control over the market.

The oil prices have long been the most pivotal issue in the industry. The main reason for creation of OPEC was the debates between oil exporters and oil companies over oil prices as well as the companies' unilateral measures to reduce oil prices. The truth is that establishment of the Organization of Petroleum Exporting Countries (OPEC) was a political and, in the meantime, anti-colonial reaction by the developing oil exporter countries against the policies and stratagems of the international oil companies.

Therefore, this research paper attempts to, firstly, review the short history of the organization and, secondly, introduce its members, operational units and vision of organization. The paper finally examines OPEC performance during different crises and its role in regulating oil prices.

Short History of OPEC

Generally, factors leading to the formation of OPEC fall into five categories:

1-Oil Companies

Before 1960, oil market was under the monopoly of seven major oil companies known as "The Seven Oil Sisters"⁴: five American companies, an English company and an English-Dutch company. These

Sisters had monopoly on almost all discovered oil reserves of the world at the global oil market was entirely dependent on their decisions⁵.

The scope of the dominance of the Sisters was so vast and deep that in the 1950s, 90% of the production and sales of crude oil as well as oil products from outside of the United States and about half of the oil reserves inside the US were held under control of the Sisters⁶. These companies had control, on the one hand, over exploration and production of oil in oil-rich countries and, on the other hand, over refineries and distribution networks in other parts of the world. Consequently, they had all the exported oil of Iran, Iraq, Saudi Arabia, Kuwait and Venezuela equal to some 86% of the world's crude oil export then⁷. They also held licenses for oil production in other oil-rich countries like Indonesia, Qatar, Libya and the AUE. Not only did they ignore the exporters' rights to increase royalties, taxes, and oil revenues in general, but they also weakened the global oil market so badly that the Persian Gulf oil prices, which were considered a basis for calculating taxes and oil revenues levied by oil-rich countries, plummeted down to 18 cents in 1959 and eventually 10 cents in 1960.

2- Venezuela's oil-related activities

The Venezuelan government started a revolutionary movement against the Sisters by increasing oil taxes. In September 1949, the country sent a delegation to Iran, Iraq, Saudi Arabia and Kuwait to prepare the grounds for cooperation and mutual advancements. In fact, Venezuela was the first country to step towards creating OPEC by starting negotiations with the mentioned countries.

3-Movements for nationalization of oil industry

The anti-colonialism movements which began in Mexico (1930s) and in Venezuela (1940s) found their way into the Middle East. Since the 1950s, the

host countries began to feel sensitized to the political and economical supremacy of the international companies and realized that the credit pacts are pure colonial rights that the countries had offered the strangers. Therefore, the host countries began their campaign with the Seven Sisters and led to the emergence of agreements based of 50-50 profits⁸.

Nationalization of Iranian oil industry in 1951 and consequently nationalization of Suez Canal by Egypt in 1956 disclosed the significance of oil supply for the westerners and Arab states learned about the capabilities of the oil weapon. Consequent attempts made by other oil-rich countries, namely Iraq in 1958, accelerated the trend.

4-Reduction of oil prices

In the 1950s, several American companies managed to gain a foothold in Venezuela and the Middle East. Emergence of the newcomers to the Middle East resulted in the rise of oil production in the region. With exports to Europe on the rise, oil price start sliding in the market. In 1959, international oil companies unilaterally reduced royalty by 18 cents/b and 25 cents/b in the Middle East and Venezuela respectively. In the meantime, new oil discoveries in the Middle East and Africa leading to oversupply of oil supply in 1960, enabled the Sisters to cut oil prices further⁹.

5-Arab countries' insistence: Cooperation on creating an organization for protecting the interests

Subsequent to the reduction in oil prices followed by the decrease in the exporters' income, oil-rich Arab states invited Iranian and Venezuelan delegations to the first oil conference to draw up an oil policy. The conference was held in Cairo in 1959 and laid the foundations for the project of a permanent organization for unifying the policies of the oil-exporting countries. Saudi Arabia, Iraq and Kuwait

supplied almost 40% of the world demand at that time. However, the amount hiked to 90% when Iran and Venezuela joined the club.

The Arab Union endeavors to hold sessions and conferences, to carry out studies and to establish the experts committees together with efforts by Iraqi government in the form of proposals to the Economic Council of the Arab Union in 1959 on unifying their oil policies and finally and establishment of the Arab Oil Congress can be seen as some of the initial steps towards the emergence of OPEC. On the pretext of the \$93bn loss allegedly imposed by the Sisters on oil exporting countries through dumping oil prices in August 1960, Iraq invited delegations from Iran, Saudi Arabia, Venezuela and Kuwait to a summit.

The Baghdad Conference was a four day summit (10-14 September 1960) where the grounds were paved for the creation of a permanent petroleum organization (OPEC). At birth, the organization accounted for 67% of the world's oil reserves and 38% of the global oil production¹⁰.

Organization's ultimate goals

- 1- Unification and coordination of the petroleum policies of the member states and determining the best means for safeguarding their interests, individually and collectively.
- 2- Devising ways and means on ensuring the stabilization of prices in international oil markets

with a view to eliminating harmful and unnecessary fluctuations.

- 3- Giving due regard at all times to the interests of the producing nations and to the necessity of securing a steady income to the producing countries; and efficient, economic and regular supply of petroleum to consuming nations; and a fair return on their capital to those investing in the petroleum industry.

Operational structure of the organization

OPEC is composed of four main parts: the Conference, the Board of Governors, the Secretariat and the Economic Commission.

- 1- OPEC Conference (the organization's highest reference) is made up of delegations representing the member states. The delegations are headed by the Petroleum, Mines and Energy ministers of the member states. OPEC has two meetings every year (in the middle and end of the year), however, it may, when necessary, call for emergency meetings. Public strategies, appropriate means of accomplishing the goals, new membership applications and the reports prepared by the Board of Governors are discussed in the meetings.
- 2- The Board of Governors: Managers and undersecretaries of the ministries of the member states represent the Board of Governors. The Board of Governors are composed by the Member Countries and confirmed by the for a period of two years. The Board of Governors shall meet no less than twice each year, at suitable intervals to be determined by the Chairman of the Board, after consultation with the Secretary General. The Board of Governors shall:
 - direct the management of the affairs of the Organization and the implementation of the decisions of the Conference;
 - consider and decide upon any reports submitted by the Secretary General;



- submit reports and make recommendations to the Conference on the affairs of the Organization;4. draw up the Budget of the Organization for each calendar year and submit it to the Conference for approval;
- nominate the Auditor of the Organization for a duration of one year;
- consider the Statement of Accounts and the Auditor's Report and submit them to the Conference for approval;
- approve the appointment of Directors of Divisions and Heads of Departments, upon nomination by Member Countries, due consideration being given to the recommendations of the Secretary General;
- convene an Extraordinary Meeting of the Conference; and
- prepare the Agenda for the Conference.

3- Secretariat: The Secretariat shall carry out the executive functions of the Organization in accordance with the provisions of this Statute under the direction of the Board of Governors. The OPEC secretariat is composed of the following:

3-1- Secretary General

The Secretary General shall be the chief officer of the Secretariat, and in that capacity shall have the authority to direct the affairs of the Organization, in accordance with directions of the Board of Governors. The Conference shall appoint the Secretary General for a period of three years, which term of office may be renewed once for the same period of time. This appointment shall take place upon nomination by Member Countries and after a comparative study of the nominees' qualifications¹¹.

3-2- The Secretariat

The Secretariat carries out the executive



functions of the Organization in accordance with the provisions of the OPEC Statute and under the direction of the Board of Governors. The Secretariat of the organization shall consist of the Secretary General and such Staff as may be required.

3-3- Division of Research and Study

The member countries of the Organization are also members of this division. In its meetings the needs of the organization and the member states are discussed with putting emphasis on oil and related matters. The Division is composed of three subdivisions: Energy Studies, Oil market and Statistical Service divisions.

3-4- The Administration and Human Resource Department

It shall be responsible for:

- The provision of administrative services for all meetings, personal matters and budgets.
- Study and review general administrative policies and industrial relations methods used in the oil industry in Member and other countries, and advise Member Countries of any possible improvements

3-5- The Public Relations and Information Department

The department shall be responsible for presenting OPEC objectives, decisions and actions in their true and most desirable perspective; OPEC News Agency with more than 3000 news agencies, magazines, radio and TV stations disseminates news of general interest regarding the Organization and the Member Countries on energy and related matters; and its journals are placed in more than 80 different parts of the world.

- 4-** The Economic Commission Board (ECB) Based on its activities, the ECB is a specialized body that operates within the framework of the Secretariat. In 1964, ECB was established to examine oil price developments and supervise production and export of the member countries. Its performance relies on the Secretariat research results and analytic bases. ECB is responsible for reviewing of all analytic affairs of the organization before each conference. The Board is also responsible for conducting conference decisions, setting budgets for every year, introducing an auditor and admission of the managers of different units¹².

Membership

Members are of three types with reference to OPEC statute; founder members, new members and Associate members.

- 1-** Founder Members of the Organization are those countries which were represented at the First Conference, held in Baghdad, and which signed the original agreement of the establishment of the Organization.
- 2-** New members: Any other country with a substantial net export of crude petroleum, which has fundamentally similar interests to those of Member Countries, may become a Full Member of the Organization, if accepted by a majority of three-fourths of Full Members, including the

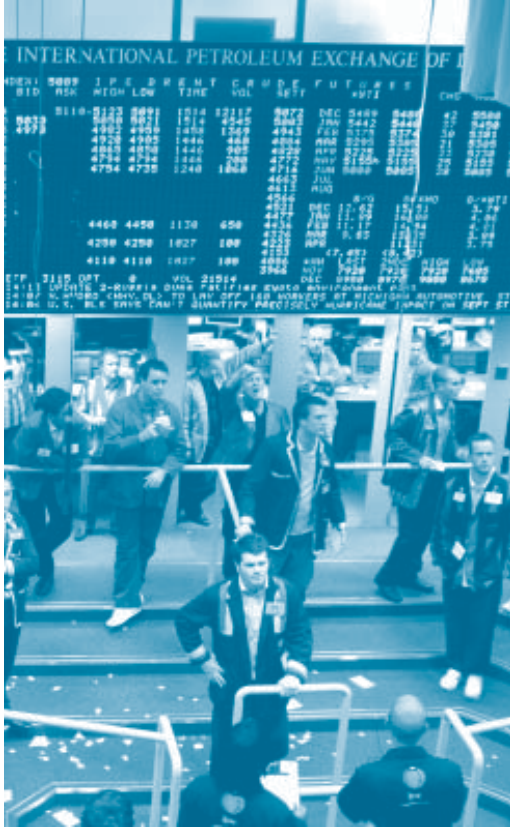
concurrent vote of all Founder Members. Qatar, Libya and Indonesia are considered new members

- 3-** Associate members: A net petroleum-exporting country may be admitted as an Associate Member by the Conference under such special conditions as may be prescribed by the Conference, if accepted by a majority of three-fourths, including the concurrent vote of all Founder Members.

As it is noted above, Iran, Iraq, Kuwait, Saudi Arabia and Venezuela are the founder members of the Organization. Ecuador in December 1992 and Gabon in January 1995 terminated their membership. However, Ecuador is planning to renew its membership in now and the country's Energy Minister is optimistic to join OPEC in the second quarter of 2007. Iraq's production has not been included in OPEC production reports since 1998, although the country is still considered a full member of the Organization.

Saudi Arabia with the daily production of 261.5 billion barrels is the biggest oil producer and exporter in the world. Following Saudi Arabia lie Iran, Iraq, the United Arab Emirates and Kuwait.





OPEC Performance in the 1960s

OPEC came into existence when the ownership of oil reserves as well as the upstream and downstream of the industry was totally controlled by the Seven Sisters. International associations were counting down the collapse of the newborn Organization. This was never materialized, rather the Organization managed to have a word in the international arena. In addition, OPEC let the small producers join in to improve its bargaining position against the Sisters. Consequently, at the end of the 1960s, Qatar, Indonesia, Libya, the UAE and Algeria joined the Organization and the number of the member states reached 10, two times the first five members, helping the Organization gain necessary leverage to influence oil pricing in the global markets.

In the period of 1960-1970, the organization achieved goals as follows:

- Inclusion of royalty in total costs calculations
- Reduction of marketing costs of oil companies
- Participation of the member states in the licenses awarded to the Sisters

Oil price regulation in 1973

Since crude oil is sold in dollars, any fluctuation

in dollar exchange rate will influence OPEC decisions regarding oil production and price. When dollar depreciates against other currencies, oil income of OPEC members will drop resulting in their decreased purchase power.

Following depreciation of dollar against other dominant currencies and the US government declaration of dollar as a floating currency, oil revenues of oil exporting countries fell in 1971. This encouraged the countries to hike oil prices up by 8.4% through an agreement signed in Geneva in 1972. However, with the consecutive depreciations of dollar in the same year, OPEC's analysis revealed that the Geneva agreement was not efficient enough to compensate for the losses resulted from dollar depreciation. Therefore, it was decided in a secondary agreement in Geneva that the prices should be raised further by 11.9%.

Under such circumstances, in a conference held in Kuwait in 1973, OPEC member states decided to make a 70% increase in oil prices and put it up to \$5.12 per barrel.

The out break of war between Egypt and Israel, just a month after the rise in oil prices, led to the oil embargo imposed on the US and other supporters of Israel (except for Iraq). This resulted in a withdrawal of 4.5mb/d from the global oil markets,

Founder Members Year of accession Location

Country	Date of Accession	Region
IR Iran	1960	Middle East
Iraq	1960	Middle East
Kuwait	1960	Middle East
Saudi Arabia	1960	Middle East
Venezuela	1960	Middle East
Full Members		
Algeria	1969	Africa
Angola	2007	Africa
Indonesia	1962	Africa
Libya	1962	Africa
Nigeria	1971	Africa
Qatar	1961	Middle East
United Arab Emirates	1967	Middle East
Gabon	1975	Africa

culminating in an unprecedented concern among industrial countries about oil supply and as a result oil prices hit a historical record. This trend continued for five consecutive months from October 17, 1973 to March 18, 1974. In this period, price of oil for each barrel reached \$12.35, so the first oil Shock was marked.

The first oil shock, on the one hand, increased oil revenues of oil-rich countries from \$23bn to \$95bn in 1974 and, on the other hand, helped the US achieve its goals since the surge in oil prices ousted the rivals, namely Japan and Germany with no considerable oil reserves at hand from the international oil markets. The shock also led to ascending trend of exports from the United States to the countries of the region. Increased purchase power intensified the import of food and other consuming goods to the oil-rich countries. Consequently, oil exporting countries became increasingly reliant on the imports of foreign goods.

Mismanagement together with a heavy reliance on the industrial countries gave rise to the return of a large portion of oil revenues to the foreign countries, particularly Britain and the United States, while the revenue could play an important role in the development of the oil exporting countries. In return, the industrial countries, particularly the United States, gained a lot of benefits by overcharging their customers and, to a great extent, managed to compensate for their loss caused by oil price surges.

Following the first oil crisis, OPEC, in an attempt to develop a policy to guarantee annual rises of oil prices with the aim of maintaining real term oil prices, introduced gradual increases in oil prices in 1975 and decided to increase oil prices by 10% on an annual basis. The policy proved to be effective and oil prices were acceptably hiked up¹³.

Oil price regulation in 1979

In the conclusion of 1978 and the beginning of

1979, following Iran's political developments and extensive strikes in the industry to support the revolution, Iran's oil export of 5 million b/d¹⁴ to the international markets was halted and the stage was set for the second oil shock.

The psychological pressure resulted from such tense atmosphere made the oil companies and oil consuming countries build up oil inventories so that they imposed an excess production of 3 million b/d on OPEC state members. Since the futures market was unable to meet the needs of the consumers, highly industrialized countries found no way but to appeal to spot markets where oil was able to be traded immediately and in cash. Consequently, spot markets become responsible for more than 30% of the global oil trade¹⁵. As a result an increasing gap between the OPEC official prices, as a basis for oil trade in official markets, and prices in free markets was created.

The second oil shock of 1979 gave rise to a hike of oil prices from \$15.12 to around \$30 for each barrel in spot markets and to \$45 per barrel in the free market. Under current conditions, OPEC set its prices on basis of the prices in free markets and called on the member states to charge their customers a price differential while maintaining OPEC official prices. However, in numerous conferences held on oil prices, the base price of \$18 per barrel of oil was approved while the members were allowed





to charge higher prices proportionate to the market conditions, proviso that the prices do not exceed \$23.5 bbl.

Thus, average price of OPEC crude oil in 1980 rose by 65% compared with the previous year. Generally due to unique political and economic developments happened in 1970's, OPEC member states succeeded to put an end to the policies pursued by the industrialized countries to obtain cheap oil.

The significant drop of oil prices in 1986

With the outbreak of war between Iran and Iraq (with the second and the third biggest oil reserves respectively) in 1980, the global market encountered new changes and the lingering anxiety over disruptions in oil supplies caused another rise of oil prices. However, this surge of prices did not last more than two months because some other OPEC member states, especially Saudi Arabia, decided to compensate for the shortage oil supply in the market through producing at full flange. Moreover, adopting policies and measures by the International Energy Agency (IEA) obliging all its member states to initially hold strategic oil stocks equivalent to 3 months of their prior year's net imports, imposing limitations on oil consumption in the consumer countries, replacing oil with natural gas, coal, etc.,

expanding exploration operations beyond OPEC regions led to the decrease of industrial countries' reliance on OPEC oil. Also, with the entrance of non-OPEC oil producers like Norway into the market and the excess production capacity maintained by OPEC members an extra pressure was put on oil prices and pulled them down in the official markets.

To change the imposed critical conditions in the market, OPEC introduced a price ceiling as well as a quota system for the members, aiming at stopping the price reduction. In 1981, the organization ratified the price decrease to \$34 and approved the quota policy to control the production of the member states. This heralded OPEC's new policy to take measures against the saturated market.

The policies of the non-OPEC producers aggravated the fall of prices. In 1983, for instance, the British National Oil Company reduced the price of North Sea oil by \$3/bbl in a rough competition with Nigerian oil and dragged the prices to \$30/bbl. The shock was so hard for Nigeria's too-dependent-on-oil economy that its oil export was put to a halt completely. Consequently, OPEC member states reduced oil prices to \$29/bbl from \$34/bbl to confront the crisis.

In 1984 and 1985, the non-OPEC producers still followed their policies of supplying the market with abundant oil so the prices kept sliding. The organization, aiming at defending its crude oil prices, reduced its production ceiling from 17.5million b/d to 16 million b/d. In early 1986, the main exporters of the North Sea, namely Britain and Norway, (of course with some help and support from western industrial countries) succeeded to reduce oil prices to around \$10/bbl just in the period of less than 5 months. At the same time, they put their production and export on the rise which exacerbated the instability of the markets.

Non-OPEC producers' tendency to increase their oil supply coupled with OPEC member states'

desperate need to oil revenues led to a competitive increase in oil production and export, leading to the third oil crisis. In 1986, oil prices in spot markets fell from \$23.65/bbl in January to \$10.67/bbl in June and \$8.63/bbl in July.

Through numerous conferences, the organization managed to alleviate instability in the markets by insisting on the necessity of production cuts by the members and defending its prior 18-dollar basis.

The global oil markets were strengthened following the critical period in 1986 and the oil prices followed an ascending trend afterwards in 1987, and in the middle of 1987, it was believed that they could survived the impacts of the third Shocks. In 1988 and 1989, the organization, with the aim of stabilizing its position in the global markets, kept on trying to improve the production of the members and achieve ideal oil prices. The adopted policies led to the better and stronger position for the organization in 1989.

Increased production ceiling and base price of \$18/bbl of OPEC oil and consequently improved oil revenues of the members are some of the achievements made by the organization.

The substantial depreciation of prices in 1998

In 1990, oil reserves mainly located in the five biggest oil producing countries in the Persian Gulf and Venezuela increased while the Persian Gulf countries held two thirds of the world's oil reserves. But Iraqi invasion of Kuwait and the consequent crisis in the region made OPEC encounter a new arrangement where western troops were present in the region and oil production of two major producers was. Therefore, due to lingering concerns over oil supply the price of oil began skyrocketed in beginning month of the Iraq-Kuwait war from \$30/bbl to \$40/bbl.

The organization increased its export to adjust oil prices and compensate for the absence of Iraq and Kuwait in the oil market. The action led to a slow-

down of the rising trend of the prices at the end of 1990.

Kuwait's return to the oil market in 1992 and its production growth of two million barrels in 1994 was materialized by the surge of the global demands for oil. Furthermore, OPEC's share of production and export rose with the UN resolution allowing Iraq to return to the market at the end of 1996.

In the meantime, in the 103rd and 104th OPEC Meetings both held in Jakarta in November 1997 and March 1998, OPEC's production ceiling was announced rising from 25.03 million b/d to 27.5 million b/d to satisfy the needs of the lucrative market at that time, but the rise coincided with the economic crisis in the Southeast Asia which had a very profound impact on oil demands. Oil inventory build ups as well as milder-than-expected weather aggravated the problem. As a result, oil prices fell from \$18.84/bbl in November 1997 to as low as \$12.41/bbl in March 1998 and \$7.9/bbl in December 1998. This was the climax of the fourth oil shock.

With falling oil prices, OPEC member states stressed the importance of a shared and long-term policy to strengthen the prices and defuse the crises. They agreed to cut their production in three phases. Based on the agreement, the organization reduced its production by 1.240 million b/d in the first phase. Such non-OPEC producers as Mexico, Russia, Norway and Oman agreed to reduce a sum of 391 thousand b/d concurrently. Such measures led the prices to stand at \$11.67/bbl.

In the second phase, the Organization reduced 1.350mb/d of its production, but the market did not react as it was expected and reduced the average prices to \$11.19pb. In the third phase, however, OPEC cut 1.7mb/d of its production ceiling and this time received a positive reaction from the market. Consequently, crude oil prices reached \$21.67pb in 1999. In the 108 Summit, it was decided that the current production ceiling remains at the same level until March 2000 and consequently the

price of oil increased to \$26.71/bbl in March. In June 2000, due to shortage of light distillates in the US markets, crude oil prices rose to \$21.12/bbl.

OPEC member states who had encountered numerous difficult situations and crises during preceding 46 years, in the OPEC Meeting held in Karakas in 2000, decided to develop oil pricing policies in such a way that they can not only provide more stability profitability for the member states but also materialize a fair market share for OPEC producers at the global markets. Therefore, the 109th OPEC Meeting succeeded to introduce the 22-28 dollar price band for OPEC crude basket aiming at providing an automatic mechanism to adjust supply and price in the market¹⁶.

While 2001 was about to over with the OPEC crude basket prices almost within the range of 22-28 dollar price band, 9/11 terrorist attacks set the stage for another skyrocketing oil prices. However, decline of demand for oil in coming months checked OPEC attempts to maintain oil prices above \$22/bbl. As a result, OPEC cut its production by 3.5 million b/d in order to contain the prices within the price band. But with worsening the economic recession in the world and oil prices falling to less than \$18/bbl in late 2001, OPEC again decided to have another cut in its member state production by 1.5 million b/d as January 1, 2002.

The beginning of 2002 marked OPEC basket prices sliding below the 22-28 dollar price band and declining global demand for oil coupled with increasing oil supply from non-OPEC producers caused the organization's production to fall by 1.8

million b/d. But in the second half of the year oil prices started rising because firstly, lingering worries over the United States' military attack on Iraq (not only leading to the withdrawal of Iraqi oil from the global markets in the short run but also could be viewed as a potential threat to oil production in other countries in the region) and secondly, overwhelming strikes in Venezuela's oil industry affecting oil markets in the country and has led the oil exports to decrease to some one million b/d from 2.9 million b/d.

In the wake of the shortage of oil supply and consequent rise of oil prices, OPEC members agreed upon increasing their oil production by 2 million b/d as of January 1, 2003. One month later, while oil prices were still hovering above \$28/bbl, they announced a further increase of 1.5 million b/d in their production. Ascending oil prices in early 2003 due to lingering uncertainties about the US military attack on Iraq reached their peak (\$30.55/bbl)¹⁷.

From early 2004, such factors as draw downs in crude oil inventories, growing demand, existing tensions and unrests in Saudi Arabia and Iraq pushed oil prices up and OPEC, with the aim of weakening the market tried to increase the member states production quotas in 5 steps.

In 2005, high growth rate of the economies of the world, especially China, India and the United States caused the global demand for oil to grow by 1.23 million b/d. Rita and Katrina hurricanes in September 2005 revealed the lack of sufficient refining capacity in this sector. The aforementioned factors coupled tensions in Venezuela and Nigeria led to



unprecedented high oil prices so that OPEC basket price reached a historical record high of \$50.64/bbl.

Since early 2006, oil prices rose to \$66.3/bbl due to rising tensions in Nigeria. Oil prices kept on rising so that they reached \$79/bbl in the midst of the year mainly due to the missile tests by North Korea and the Israeli invasion of Lebanon. In September 2006, oil prices started declining and in October they fell to \$59/bbl. Such a decline was mainly due to several factors like growing oil supply and slowed down growth of the world economy and subsidence of local storms in the Gulf of Mexico.

The OPEC Ministerial Meeting held in Qatar in 4Q 2006 decided to cut the members' production by 1.2 million b/d since such factors as existing excess production capacity maintained by some non-OPEC producers and declining rate of oil consumption had contributed to falling oil prices in September and October¹⁸.

Conclusion

Considering intervening policies adopted and pursued by the industrialized countries to the detriment of oil producing countries interests, convergence of oil producing countries and establishment of OPEC was regarded the first step collectively taken to secure their interests and reclaim the ownership of their natural resources.

Recent developments of the global oil markets are indicative of the crucial role of OPEC in avoiding volatile oil prices since the organization have always tried to provide costumers with the needed oil at rational and fair prices by such different means as voluntary production cuts or increases at different times (like the Persian Gulf War in 1990's when several million barrels of oil was taken from the market on a daily basis).

Oil price is a decisive factor determining the destiny of OPEC. If OPEC can maintain oil prices at acceptable levels using existing mechanisms, it can survive as an important international economic

organization and it can also increase its economic leverage over the market through getting new members. If oil prices increase gradually and rationally under the influence of market fundamentals, OPEC members can make best of that but sudden and sharp rises of oil prices caused by non-fundamental factors may have negative impacts on the economy of the members. It is self-evident that many OPEC members and even non-OPEC producers expect the organization to defend fair and rational oil prices.

Adopting more active and planned behavior and policies by OPEC can improve the position of the organization in the global oil markets. Therefore, OPEC should reinforce loyalty of its members to the cause of the organization and prepare the ground for more extensive cooperation with non-OPEC producers. It is also wise that OPEC member states spend some portion of their surplus oil revenues on creating new production capacity so that the organization can react to the market fluctuations with more flexibility.

Endnotes

- 1- Member of Scientific Board, Economics Faculty, Tabriz University, Oskooe50@gmail.com
- 2 - M.A. in Economics, Member of Young Researchers Club, F.Ebghaee@gmail.com
- 3 - Enav, 2000
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- 6 - Mash'al, 2003
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- 8 - Al atbie, 1997
- 9 - Marques, 1985
- 10 - OPEC website
- 11 - There is no specification of the choice in OPEC statute.
- 12 - OPEC website
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- 16 -
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- 18 - Oil Price Developments, 2006

Oil Giants Will be Back in Iran

Source: Reuters

Iran's vast gas reserves will remain largely untapped so long as Western companies are scared off by political tensions and U.S. sanctions stop Tehran from getting the technology it needs to develop them alone.

European and Asian energy companies had been lining up to invest in Iran's gas industry, with the lure of the world's second-largest reserves counter-acting pressure from the United States to stay away.

But European companies, deterred by heightened tension over Iran's nuclear programme, have now shelved immediate plans for multi-billion-dollar liquefied natural gas (LNG) export projects, although they still yearn for Iran's gas riches.

"Iran now has no access to foreign majors' technology for any of its LNG projects, and will find it impossible to import equipment and develop expertise on its own under the current sanctions," Samuel Cizuk, Middle East energy analyst at Global Insight, said.

"The narrow group of international companies that have experience of managing the construction of a liquefaction plant makes it close to impossible for Iran to precede on its own," Cizuk said.

Iran has not yet exported any LNG but says it will be able to produce 77 million tonnes a year by 2014, more than double the amount the world's leading exporter, Qatar, is producing after nearly two decades of steady investment.

Companies including Total, Royal Dutch Shell, Spain's Repsol, and Norway's Statoil, have invested

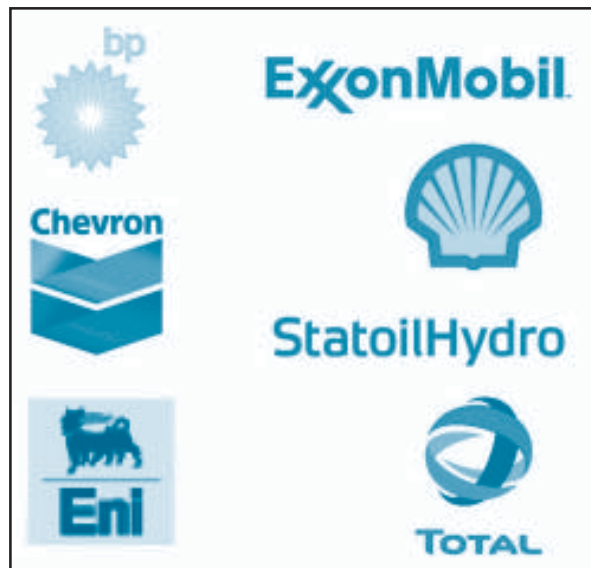
billions in Iran's oil and gas sector, defying the threat of sanctions from the United States.

Without LNG plants, Iran could pump some gas by pipeline to neighbours. But they are small markets compared with the global hunger for LNG.

Analysts say the only large-scale pipeline project, which would pump gas across Pakistan to India, is fraught with security concerns and pricing disputes.

It is doubtful the European Union would support Tehran's suggestion it could hook up to the proposed Nabucco pipeline to bring gas from Central Asia to Europe.

That leaves LNG as Iran's only big export route, but it is unlikely to get obtain the predominantly U.S. technology it needs to cool gas into liquid until Washington lifts its ban on U.S. companies doing business with the Islamic Republic.





ability to do the job and they would face problems in getting the necessary equipment, most of which is made in the United States or Europe.

China National Offshore Oil Corp (CNOOC), driving China's own nascent LNG industry, is interested in developing

Iranian Oil Minister Gholamhossein Nozari said last week the country was prepared to develop its giant South Pars gas field without Total but analysts doubt it can do anything while U.S. sanctions remain in place.

"That would be tough to do, not least because most of the technology is American and also subject to the boycott," Niall Trimble, a gas specialist at the Energy Contract Company in London, said.

"It depends largely on the U.S. boycott. If the Iranians decide to be more conciliatory towards the United States and the United States decides to lift the boycott, then its game on."

European energy giants will be back with new projects when the tension dies down.

"It's a temporary setback. They would definitely come back if things changed in a year or two's time. You don't ignore reserves of that scale," Trimble said.

"They are buying themselves some time by switching to another project," Ross Millan, a Middle East and Africa Energy analyst at Wood Mackenzie, said.

"They still want to be there for the long haul."

In the meantime other energy-hungry companies could try to step in, but doubts remain over their

the North Pars LNG projects but also seems unwilling or unable to do it without a Western partner, Cizuk said.

Total's Malaysian partner Petronas has repeatedly delayed its final decision on investing in the Pars LNG project. Its chief executive said last month the scheme was no longer viable, blaming spiralling costs.

Suspicion Russian gas export monopoly Gazprom might corner the Iranian gas export market, while Europeans needing alternatives to Russian gas look on, will have been reawakened by Chief Executive Alexei Miller's talks with Iranian President Mahmoud Ahmadinejad about business opportunities.

But analysts say Gazprom, the world's largest gas producer, lacks the ability to build the LNG facilities Iran wants without international oil company (IOC) involvement.

"Gazprom does not have the know-how to develop LNG export projects without IOC help," said Jonathan Stern, director of gas research and Gazprom specialist at the Oxford Institute of Energy Studies.

"The extent to which such projects could be developed without U.S. equipment -- which is sanctioned -- is also not clear."