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Will the Organization of Gas Exporting Countries (OGEC) have the same power as OPEC?

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Abstract

Gas,as an important source of energy and as a clean fuel,is a very strategic commodity,perhaps this is why gas-owners are trying to maximize the potential use of this important energy source through the OGEC.the research attempts to answer a fundamental question,whether it is capable of becoming a monopoly power similar to OPEC?in response to this question,the similarities and structural differences between the two organizations have been examined and has been concluded that:although OGEC and OPEC,both in structure and in objectives,are very similar to each other.however,none these of similarities can turn OGEC into a powerful cartel like OPEC.there are many barriers that do not allow OGEC to make a powerful cartel.on the one hand,the oil and gas economy has fundamental differences with each other,for example,unlike oil,gas has a regional market,not a global one;because,the cost of transport is so high that its transmission is not costly in long distance.construction of pipelines also requires long negotiation between exporting and importing countries and beneficiary countries in the transit route of gas;therefore, the seller and the buyer must be sure that their sales or purchases are secured in more than a decade.although OGEC's members have seventy-five percent of the world's gas reserves,but the huge gas reserves will not guarantee the success in the global market.because,if the goal is to create a monopoly organization for gas exports,the organization cannot control the price and quantity of gas supplied in the global market without the ability to transport natural gas easily and efficientlyin addition, oil especially in transportation is a non-replaceable commodity,while there are alternative sources of gas for production units.on the other hand,OGEC's inability to maintain its independence from the OPEC,as well as,the heterogeneity of the member countries in their priority areas and their different production capacities,has caused serious problems in creating a cartel in the gas field..it seems that the formation of this organization was only the result of Russia's efforts to maintain the monopoly of the European gas market.apparently,Russia's serious attempts to cooperate with Algeria,the world's fourth largest gas exporter,as well as an important gas exporter to Europe,have been for this reason.

Key Words: OGEC,Monopoly,Geopolitics,Supply Pottential,L.N.G

Introduction

JEL Classification:

Nowadays that the gas has become one of the largest strategic commodities in the world, the holders of this energy source will also benefit from this potential to influence global trade. Because, given the growing importance of gas in the future, any country or group of countries that can take control of the gas market, will also have an impact on the international scene. On the other hand, since

currently the most important active energy cartel is OPEC (Organization of the Petroleum Exporting Countries), so it is natural that the idea of building any other energy union should be compared with the organization's issues; as from the outset, the theory of the establishment of a gas forum, instead of the Organization of the Gas Exporting Countries (OGEC), has been known as Gas OPEC. In fact, from the point of view of large energy consumers, OPEC's empowerment and rising oil prices have created the potential and incentive for the world's natural gas producers to build an OPEC model-based gas cartel. The ministers of the 15 major natural gas producing and exporting countries, took the first steps towards establishing the Gas Exporting Countries Forum (GECF) in March 2003 which only played a consultative and technical role; until the third meeting in December 24, 2008 of Gas Exporting Countries in Moscow and agreeing on the statute of organization of gas exporting countries with the participation of 14 major exporting countries including Iran, Russia, Algeria, Bolivia, Trinidad and Tobago, Qatar, Equatorial Guinea, Libya, Egypt, Nigeria, Venezuela, Oman, Kazakhstan, Norway (the first 11 countries are the main members and the next three are OGEC supervisory members)gave a new stance for natural gas in the global energy cocktail. Whether the organization of gas exporting countries can appear on the world stage with the same role as OPEC and, in terms of supply and demand, control production and allocate quotas among its members, more than and before the technical and technological factors, it refers to the structural features and goals of the organization,and also the field of geopolitics and geo-economics of the major producers and consumers of this energy source. Geopolitics (Mir Heidar,D.1998) and geo-economics, with the combination of geo-political, economic and power and the creation of interactions between them, and a different degree of effectiveness of each of these components, will play the most important role in the formation of the OGEC, its possible structures and importance and global functioning.

Similarities between OPEC and the Organization of Gas Exporting Countries

Similarity with declared goals:

When OPEC was founded at the Baghdad Conference by Iran,Iraq,Saudi Arabia,Kuwait and Venezuela,the major oil companies ,known as the Seven Sisters,dominated the global oil markets,and a wave of nationalization of the oil industry during the 1960s and 1970s was in place in many OPEC countries now.Perhaps for this reason,one of the most important goals announced by OPEC was to coordinate oil policies to ensure fair revenues for oil producers. In the field of gas,the target mentioned with the objectives of the OGEC has many similarities.let us o recall the words of the Trinidad Minister of Oil-Erik Wlliams- at the 5th Ministerial Conference of the Organization of Gas Exporting Countries,which said:"We are committed to providing fair prices for gas consumers and producers."(Ebrahimi,I.2009)

Structural Features:

With The precision in the structure of OGEC it is determined that the organization has slowly formed a structure similar to OPEC.At OGEC,like OPEC,the highest point is the Ministerial Conference,which is similar to the OPEC Conference.also the OGEC Executive Board,composed of representatives of the member states,is similar to the OPEC Operating Staff,whose job is to lead the Secretary-General and set up the work schedule for the OPEC Conference.although OGEC,due to its newness,still does not have the necessary coherence,and meanwhile,the decisions of Ministerial Conference are less focused on Market Issues.

Geopolitics and geo-economics of natural gas

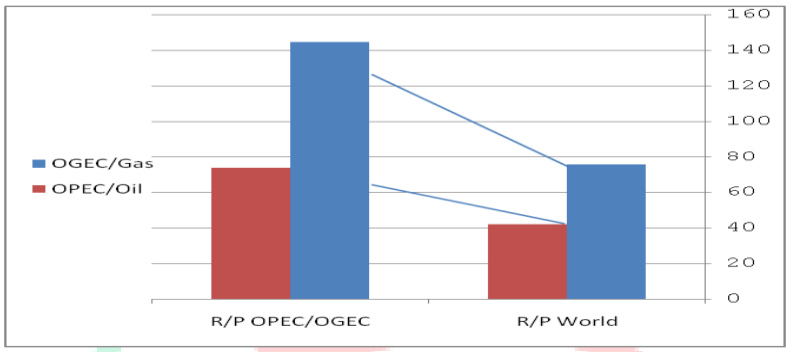
Natural gas&oil reserves and Market Power:

"Natural gas has many features that make it superior to other energy sources. One of these indicators is the large amount of proven gas reserves. The volume of natural gas reserves in the world has almost tripled over the past three decades. On January 1, 2007, world gas reserves to taled 181.46 trillion cubic meters, with a 2.1 trillion cubic meters growth (about 1 percent) compared to 2003. Accordingly, the world currently has enough gas to produce with current rates for 63.3 years, which is not suitable condition compared to that of oil reserves (about 43 years). At the beginning of the third century, this figure was 62 years for gas and 44 years for oil, indicating a decline in world oil reserves and an increase in gas reserves relative to their production over the past six years. "(Yazdani, E, A. Toyserkani, M. Jafari, L.2009). The higher share of OGEC from world reserves suggests that:OGEC's production potential will grow further in the future.

Russia, the world's largest gas reserve, has the same position as Saudi Arabia in the global gas market. Also, Middle Eastern countries with about 40 percent of proven natural gas reserves, such as oil, play an important role in the gas market. In the Middle East, the dominance of the five Gulf coastal states and OPEC members, including Iran, Qatar, Saudi Arabia, the United Arab Emirates and Kuwait over natural

gas reserves is more than their dominance over the oil. They account for 37.5 percent of the total gas reserves, which are about 68.4 trillion cubic meters, while they have 60 percent of the world's definite global oil reserves. Of course, the gas in the Persian Gulf region is concentrated in almost non-similar countries with oil-rich countries. In Central Eurasia, Russia, along with Kazakhstan, Turkmenistan and Uzbekistan have more than 30 percent of the world proven gas reserves, by joining Iran and Qatar, 60 percent of the world's total gas reserves are possessed by six countries in two adjacent regions of the Middle East and Central Asia. It will reach 70% by joining Africa, Algeria, Egypt, Libya and Nigeria, plus Saudi Arabia. (Chart 1).

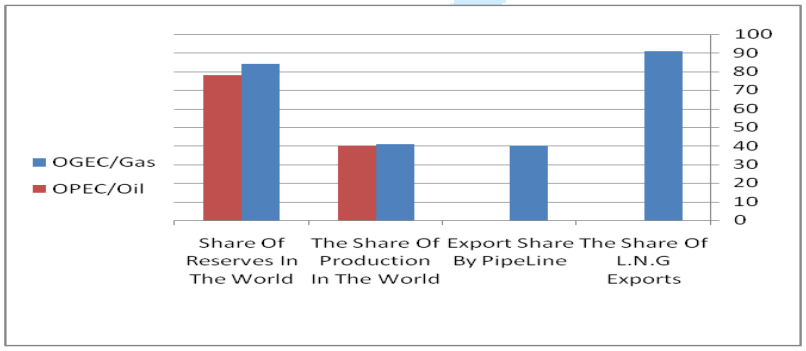
Chart 1: Comparison of Market Power of OPEC and OGEC



Reference: Ebrahimi, I.2009

Also,OGEC has a larger market share in terms of gas reserves and trade than OPEC.the reserves ratio to the production of the OGEC is higher than OPEC,both in pure form and in relation to the reserve-to-production ratio of the world(Chart 2).of course,it should be noted that:in some markets,the dependence on oil imports is far greater than the dependence on gas imports,which would undermine the market power of the OGEC(relying on its contribution to the reserves and trade of L.N.G).However,at present,Oil has a global market,but gas has regional market.

Chart 2: Comparsion of Reservse / Production Ratios for OPEC and OGEC

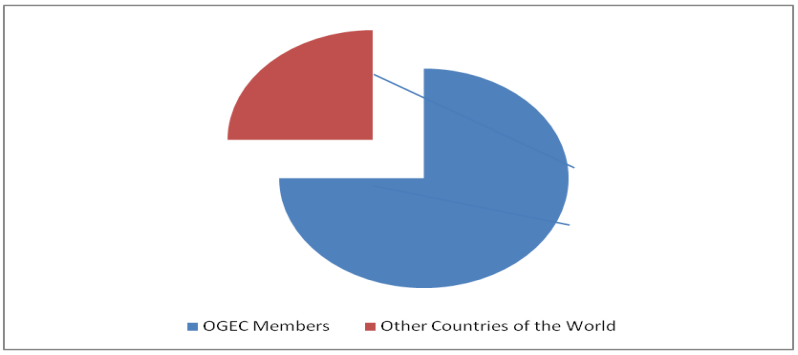


Reference:Ebrahimi,I.2009.

Natural gas production and supply potential:

Since the beginning of the 1970s, natural gas production like its reserves has grown steadily; so that its commercial production reached from about one trillion cubic meters in 1970 to 2.42 trillion cubic meters in 2000. The natural gas production figure in 2007 was more than 2865 billion cubic meters of which 21.3 percent was allocated to Russia. As a result, the country has the largest natural gas production like its reserves in the world. Seven Persian Gulf states and the Caspian Sea including Russia, Iran, Qatar, Saudi Arabia, the UAE, Turkmenistan and Kazakhstan, produce a trillion cubic meters of natural gas in 2007 (more than a third of global gas production), with a capacity of 90 years of gas extraction at a rate of current production, while this figure will be 33 years for Norway as the most important representative of the Western countries among the twenty big gas producing countries in the world(Chart 3).

Chart 3: Compare OGEC's Gas Reserves with Other Countries in the World



Reference:Younes Ara,A.2009.

According to the Energy Information Administration (E.I.A) estimates, global natural gas production will reach from current 2,865 billion cubic meters to 4624 billion cubic meters in 2030, which its average annual growth rate is 9.1 percent. Meanwhile, "the increase of production in the industrialized countries and the member of Organization for Economic Cooperation and Development (OECD) will account for only 10 percent of global production growth, with 90 percent of the global growth of gas production is under control of developing and non-OECD countries " .Due to the concentration of major gas reserves in several countries, the export of this product to the major energy markets is of particular importance. In this regard, Russia, like two indices of natural gas reserves and production, is at the top with 26.7% of global gas exports in 2006(Younes A, A.2009).

Table 1: Proven Reserves, Production and Exports of Natural Gas in Terms of Country and Region, 2007 (Billion Cubic Meters); the Reserves are Calculated in Trillion Cubic Meters

country / region	reserves			Production			Export		
	Reserves rate	percent	Life of reserves(year)	Production rate	percent	Compared to 2006	Export rate	percent	Compared to 2006
Russia	47.65	26.3	77.8	612.1	21.3	2.4	216.8	26.7	4.2
Iran	28.13	15.5	*	105	3.7	4.1	4.73	0.6	33
Qatar	25.36	14	*	49.5	1.7	8.1	3.4	3.4	14
Saudi Arabia	7.07	3.9	96	73.7	2.6	3.5	0	0	0
UAE	6.06	3.3	*	47.4	1.6	0.9	7.5	0.93	-7.3
US	5.93	3.3	11.3	524.1	18.5	2.3	22.1	2.72	-8.9
Nigeria	5.21	2.9	*	28.2	1	25.9	12	1.47	-4.8
Algeria	4.50	2.5	53.3	84.5	2.9	-4.3	64.2	7.9	7.8
Venezuela	4.32	2.4	*	28.7	1	-1	0	0	0
Iraq	3.17	1.7	*	3.5	0.12	1	0	0	0
Kazakhstan	3	1.7	*	23.9	0.8	2.7	7	0.87	2
Turkmenistan	2.86	1.6	46	62.2	2.2	5.9	42	5.17	3.2
Norway	2.80	1.6	33	87.6	3	3.1	78.3	9.65	9.65
Indonesia	2.63	1.5	35.6	74	2.6	0.3	37.5	6.4	2.3
Malaysia	2.48	1.4	41.2	60.2	2.1	0.4	31.1	3.83	8.7
China	2.40	1.3	41.8	58.6	2	17.2	2.7	0.33	-3
Egypt	1.94	1.1	43.3	44.8	1.6	29.3	8	0.99	360
Uzbekistan	1.78	1	33.7	55.4	1.9	0.8	9.7	1.2	5.2
Kuwait	1.78	1	*	12.9	0.4	4.9	0	0	0
Canada	1.67	0.9	8.9	187	6.5	0.6	104.2	12.84	2.1
Middle east	73.47	40.5	*	335.9	11.7	5.8	66.43	8.19	8.6
Eurasia	57.05	31.4	68.3	834.2	29.11	1.1	290	35.7	4.5
North America	7.98	4.4	10.6	754.4	2.3	26.5	126.3	15.57	0
Latin America	6.88	3.8	47.6	144.5	5	4.7	31.22	3.85	5.3
Europe	5.105	2.8	16.12	316.6	11..4	1	161.6	19.93	2.1
Africa	14.18	7.8	78.6	108.5	6.3	9.5	100	12.33	20.3
Asia-pacific	14.82	8.2	39.3	377.1	13.1	4	1.1	12.45	5.4
Total world	181.46	100	63.3	2865.3	100	3	811	100	4.8

Tip) * Over a hundred years
References: EIA (14 Jan 2008); International Natural Gas Reserves and Resources, available at:http://www.eia.doe.gov/emeu/international/gasreserves.html

Different supply systems and global gas market:

The natural gas commercial market internationally has so far been based on gas pipelines either in L.N.G form or by ship. Due to the high costs required in the LNG industry and the need for a high initial investment in this sector, many efforts have been made to reduce the initial investment in production and transfer plans of this product; so that LNG production costs dropped about 40 percent from 1985 to 2007, which 30 percent of this amount was during the past decade. In addition, the countries that need L.N.G are motivated to build L.N.G terminals in order to receive their demand, as well as those who plan for an infinite growth of energy and often are among the industrialized countries(Yazdani,E, A.Toyserkani,M. Jafari, L.2009). "The global level of trade in L.N.G, which had reached an unprecedented growth rate of 10% in 2000, has been continued at a rate of 5-6% by 2007. And its growth rate was 3.5 times faster than the growth of pipeline gas transfer. In 1995, of about 388 billion cubic meters of gas trade in the world, 78 percent of it was transported through pipelines and 22 percent was LNG; while in 2005 this rate reached to 74 percent for traditional transportation and 26 Percent for LNG. Production of L.N.G is projected to increase from 7.193 billion cubic meters in 2015, and global demand for this product will grow by 177 percent by 2020. At present, the Asia Pacific region, with more than 75 percent of L.N.G trade, is the most important area in terms of its future review."(Yazdani,E, A.Toyserkani, M.Jafari,L.2009). In 2007, 549.67 billion cubic meters of exports were made through pipelines and Russia with 147.53 billion cubic meters, had the largest share in traditional exports, and the United States with 108.90 billion cubic meters of imports, was the largest importer of natural gas through pipeline. The United States, with first ranking in global natural gas trading, provides 97 percent of the importing natural gas from both Canada and Mexico."(Yazdani,E, A.Toyserkani, M.Jafari,L.2009). In 2010, the International Energy Agency (IEA), while confirming the abundance of gas, provided the following insight: "When the abundance of gas is gradually beginning to decrease, although we estimate that this gas abundance is longer than what many exporters expect or believe to be under pressure by their main customers in order to regulate gas prices, gas prices will likely be under heavy pressure through oil prices, and as long as the abundance of gas continues, our analysis is that this abundance will continue for several years, the pressure will be high on moving faster away from oil-related indicators(Ebrahini,I.2009). Although it seems that due to the heterogeneity of the members of OGEC,as well as the structural differences between the oil and gas economy,the realization of this forecast requires a very long time. L3 Theory:In all of Europe,there can be one identical price for gas,and this price will be apart from the price of petroleum products. Since the gas pricing system based on the base price in Europe, in particular Northwest, is more concerned, and this will be improved by supplying additional LNGs in this part of Europe and increasing pipelines, the pricing system among the European countries will be more desirable. While theoretically, assuming all other factors being equal, the difference of the base price in different parts of Europe can only be due to the cost of transport. However, in order to achieve a European gas price system, the following should be taken into account: Firstly, the lack of coordination in the base prices of gas among European countries. Although the base price correlation coefficient in Western European countries is good in 2010, but in other parts of Europe, the base pricing system is less advanced or under development. Secondly, despite the fact that Italy transfers gas to Croatia from early 2011, the connection of a pipeline to Hungary and Romania, the transfer of LNG through the pipeline to Greece and then to southern and central European countries through Greece, this question is still not answered "how can gas flow in these countries stimulate the creation of an appropriate gas price in Europe"? Thirdly, answering the question of whether EU national regimes will create barriers to base gas prices with a consistent correlation coefficient throughout Europe? Although there is no certainty that these regimes can influence the development of pricing based on the base price and the relationship between prices (at basic prices) in different countries. Fourthly, considering the fact that the change in gas prices in Europe (from oil- based prices to gas base prices) requires attention to various components of price regulation, including the sensitivities of global markets and the role of dealers in these markets. Attempts to manipulate the market prices, non-payment of debts by importers who have long-term contracts with exporters) and the increase of litigation resulting from it exposed the conversion of the gas pricing system from petroleum to a base price system with serious problems. In the decade of 2010, large projects such as the second phase of the

"Shah Deniz" gas field in Azerbaijan aimed at supplying gas to the continent of Europe (especially pipeline projects designed to transport gas from the Caspian region and the Middle East) are faced with the probability of pricing based on the base price. In late 2010, gas vendors began to negotiate with potential buyers. Although these negotiations were conducted confidentially, but evidences suggest that European gas buyers tend to sign long-term contracts according to base prices, not on oil-based prices. If such evidence was correct, this would be an important sign for the future of gas pricing in Europe, and this could be a big difficulty to purchase gas from Turkmenistan, where other foreign customers such as Russia, China and Iran buy gas in a price related to oil prices.

Result

The Structural Differences Between Oil and Gas Economy:

In addition to the differences between oil and gas,in terms of distribution of resources,the degree of dependence and their share in different markets,the fundamental differences that prevent the adoption of the same export policies for these two products are:

Gas,unlike oil,is sold on a long-term basis,and the one-off sales and daily sales decisions in the gas market are not common; that's because gas production and its extraction requires a lot of capital which is often provided by a bank or a group of banks.thus,the fourth group,in addition to the manufacture,buyer and contractor , enter the project of gas exports(Takin,M.2007). Also,Construction of pipelines requires long negotiations between exporting&importing countries and beneficiary countries in the transit route of gas. Therefore,the seller and the buyer must be sure that their sales or purchases are secured in more than a decade.

The market for L.N.G. is not global,since the cost of transportation is so high that its transmission is not costly at long distances.on the other hand,the very heavy costs f liquidation of gas and its conversion to gas and its competition with pipeline gas,along with its high cost of transpotation,limited the gas market to certain regions,and its inter-regional trade it is difficult.

Unlike oil,global gas prices are not clear and prices are not sensitive to the political and economic symptoms of L.N.G. manufactures.meanwhile,the high volume of investment in the gas trade requires a high level of relations between buyers and sellers.while in the global oil market,the relationship between buyers and sellers is not necessarily close and long-term.

Oil and gas are produced with similar processes,but they differ in terms of consumption.petroleum products are mainly used in transportation and despite the efforts made to produce plant fuel and other alternative fuels,there is still no substitute for proximity to these products in the medium term.

As already mentioned,the high cost of creating a gas pipeline makes it almost impossible to transport it over long distances and limits the gas market at the regional level,and we know that with no efficient transportation ,OGEC cannot control the price and supply of gas in the global market. In addition,Failure to utilize the full capacity of gas tramsmission through the pipeline will result in the investment being wasted if the volume of gas exports is reduced. So, it seems that the development of L.N.G trade is the best basis for building a powerful gas cartel. Because L.N.G has feature that distinguish it from gas,as if to know technology advances,storage and transportation makes it possible for small shipments.However,transportation of gas in the form of L.N.G.is also faced with numerous problems,including:physical necessities(in order to be able to use L.N.G. as a solution to the problem of gas transportation,it must be able to overcome the cost of constructing liquidation terminals and coverting them back to gas),financial constraints(in recent years,L.N.G. has been sold on long-term contracts,since the process of production is highly costly.however,L.N.G. sales with short-term contracts have recently increased.therefore,if the market relies on long-term contracts,creating an organization that can govern the laes and regulations for members in the gas market seems far off),safety constraints(despite the technological advances in the safety of L.N.G. shipments,there are still concerns about the destructive effects of explosion in each of the L.N.G. chains)and production capacity expansion limits.

Other barriers to creating a monopoly organization in gas exports:

Unformity of the economic power of the member states to create and increase the infrastructure of L.N.G.production and transmission.So that even some major gas-rich countries like Iran do not have the ability to expand their L.N.G infrastructure.

Currently,there is no incentive to adjust gas production conditions.since gas exports are based on

a capital industry,and thus,generating production capacity and not using it are not economically feasible.

The efforts of gas exporting countries to form a monopoly group have always been the subject of intense consumer disagreement.and even many exports have reported the possibility of EU trade sanctions against OGEC (Mehri Porgoo, V.2007).

Conclusion

Gas is a strategic commodity in the world, and gas holders can use this to influence the political and economic equations of the world in their favor. Extending the technology of converting the extracted natural gas to portable liquid gas creates a huge opportunity for gas as an appropriate global tool to create a good market around the world. This situation will increase the effectiveness coefficient of the major countries of the world's gas reserves, especially Iran and Russia, on world politics. Meanwhile, the creation of the OGEC will turn the two powers of Iran and Russia into two major players at the international level, which will make it impossible to ignore the role of Tehran and Moscow in solving the global political and strategic problems via the West. At present,the number of nine OPEC members alone account for forty-three percent of the world's total gas reserves and this has caused the independence of OGEC from OPEC with a fundamental problem.on the other hand,with no efficient transportation,OGEC cannot control the price and supply of gas in the global market.this is while even some major gas-rich countries ike Iran do not have the ability to expand their L.N.G. infrastructure. All of these factors,together with other factors,such as:inconsistency and heterogeneity in the member countries and the structural differences in the oil and gas economy,as well as the new structure of the OGEC,have caused the organization of gas exporting countries,at least in the short term,not to play the role of OPEC in the market to play.so, OGEC, like OPEC, will not be a real monopoly. Ultimately, Russia with Iran and some members of the OGEC and the republics of Central Asia, will be able to create a very limited cartel in order to have the most production, exports and reserves over the next few decades.

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