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Tamer ElGindi

Oil and Natural Gas in GCC Countries

How do you analyze the present situation of oil and natural gas in GCC countries?

The Gulf Cooperation Council (GCC) consisting of Saudia Arabia, United Arab Emirates, Qatar, Kuwait, Bahrain, and Oman has one of the highest proven reserves of both oil and natural gas worldwide. Probably nowhere else has energy resources played a critical role in countries' development as has been the case with these countries. Since the very early exploration of oil and gas in these countries, the hydrocarbon sector played a tremendous role in shaping these countries' economies as evident in their exports and stream of government revenues. In fact, the share of hydrocarbon exports to total exports is enormous ranging from 46% in Bahrain to as high as 90% in Saudia Arabia, Qatar, and Kuwait.(1) Even more, the hydrocarbon sector contributes to total government revenues with shares ranging from 61% in Qatar to as high as 90% in Saudia Arabia.(2) Finally, the share of oil and gas to total GDP is approximately 50% in most countries with the exception of the more diversified economies of Bahrain and UAE, in which they represent 24% and 32%, respectively.(3) All that being said, we can safely say that these economies are highly dependent on these resources for their economies and therefore are very susceptible to any volatilities in the oil and gas markets; price being one important aspect of that.

Further, the economic boom that has accompanied these sectors led to rising income per capita levels in these countries and consequently to increased consumption and higher demand for different products thereby increasing energy intensity in several of these countries. In fact, some of these countries rank amongst the highest countries in term of energy consumption per capita worldwide. According to World Bank data on energy use (kg of oil equivalent per capita), Qatar in 2012 ranked as the number one country worldwide with the highest energy use while other GCC countries joined Qatar in the top list countries. With declining oil prices and decreases in governments' revenues, sustainability of such consumption patterns in GCC countries are highly questioned.

Given the vast resources of oil and gas these countries hold, governments in these countries have been also quite generous in terms of providing various products and social services for rather discounted prices for their citizens in specific, and residents at large. Free access to education, healthcare, cheap water and electricity, along with very

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cheap gasoline prices are some examples amongst several others being offered in such countries. Unfortunately, this has led to an increasing trend in consumption levels and consequently waste of valuable resources.(4)

Additionally, high revenues from these resources should have translated into more diversified economies and resilient economies. However, as the theory of natural resource curse articulates, a wealth of natural resources could lead to adverse effects in terms of sluggish economic growth rates, overdependence on natural resources, negligence of other potential sectors, and appreciation of local currency. Several of these outcomes are in fact quite visible in GCC countries. In fact, increased dependence on these finite resources has meant very little economic diversification (though there have been lately some efforts to overcome that in a number of countries), and therefore has produced very volatile economies in face of price changes. This is especially important given the recent decline in oil prices that has been ongoing throughout this last year (2015), and that is expected to continue in the next years with increased production of oil from shale oil, near saturation for oil storing capacity, and the anticipated deal with Iran that would eventually flood the market with even more oil supplies.

Looking at the distribution of proved reserves for both oil and gas, we can observe the following. As of 2014, Saudia Arabia ranked second worldwide with 267 thousand million barrels of proved reserves of oil (after Venezuela), while Qatar ranked third in natural gas with 24.5 trillion cubic meters of proved reserves after Iran and the Russian Federation, respectively. That being said however, the share of the Middle East for its proved reserves both in oil and natural gas has been declining throughout the last twenty years as seen in the following graphs.

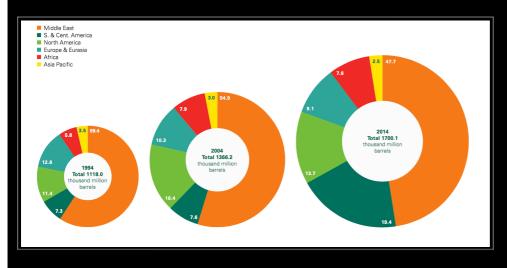
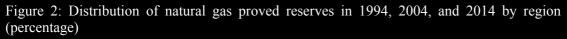
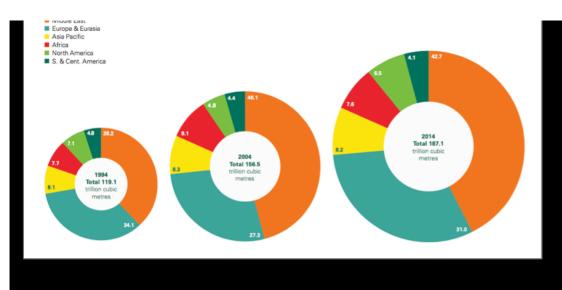


Figure 1: Distribution of oil proved reserves in 1994, 2004, and 2014 by region (percentage)



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In your opinion, how will the situation likely evolve over the next five years?

Given the current global energy market, vast amount of reserves several of these countries have, and current overdependence on fossil fuels in almost every aspects of our lives, we would not expect any drastic changes in the near future. As illustrated in the following two graphs, several of the GCC countries continue to represent a major hydrocarbon producer and holder of reserves.

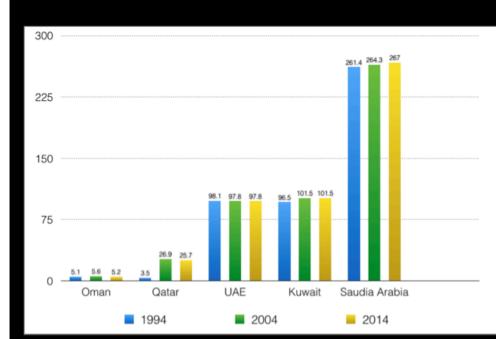
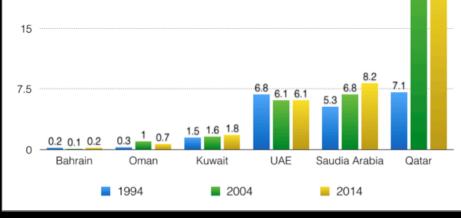


Figure 3: Total Proved Oil Reserves (Thousand Million Barrels)

Source: BP Statistical Review of World Energy (June 2015)

Figure 4: Total Proved Natural Gas Reserves (Trillion Cubic Meters)

30		
22.5		24.5



Source: BP Statistical Review of World Energy (June 2015)

Therefore, GCC countries will continue to play a pivotal role in both oil and gas production. However, that being said, I would argue that they potentially would at least begin to seriously rethink their overdependence on hydrocarbons as a major source of their revenues and try to engage in more concerted efforts to move towards more economic diversification. Though several of these countries currently have such plans (see for example Qatar National Vision 2030, and Abu Dhabi Economic Vision 2030), I believe that these plans will be taken more seriously in the near future due to two major reasons. First, several advanced countries are gradually abandoning fossil fuels in favor of renewables given huge cost reductions that are available today. A recent article by columnist Thomas L. Friedman in the New York Times indicates that solar prices have decreased in the last six years by 80% while wind energy is down by 60% percent according to Hal Harvey, C.E.O. of Energy Innovation, a policy research group.(5)

Second, and very importantly, we are currently facing a huge environmental threat given all the science and data that are confirming potential devastating effects of increases in global temperatures due to global warming. In fact, the recent meetings of the annual Conference of Parties (COP21) that took place in Paris indicated that there is a general consensus of a dire need to act swiftly in terms of climate change through reduction of carbon emissions by divesting from fossil fuels and increasing investments in renewable energy.

What are the structural long-term perspectives?

Having indicated that there would probably not be any significant changes in the short term, the long term perspectives are quite different. Two major factors stand out to be critically important: 1) a continuous decline in oil prices, and 2) a continuous and concerted efforts by a large number of countries to cut on their carbon emissions due to increasing global temperatures.

1) Decline in Oil Prices:

As indicated earlier, several GCC countries have embarked on national plans that puts a

nigh emphasis on economic diversification, of which Qatar and Abu Dhabi are two

vivid examples. Against this background, GCC countries have not been that successful yet in terms of diversifying their economies with probably the exception of the small emirate of Dubai. Given the current decline in oil prices, there is today more than ever, a need to seriously reconsider economic diversification. Throughout the last year (December 2014-December 2015), oil prices have been declining reaching low values with the price of a barrel of oil reaching below \$30 for some types of oil. This in turn VPS hostin means a cutback in government revenues for GCC countries and a weaker fiscal stance in general. In addition, several GCC countries (for example: UAE and Bahrain) have 1 CPU - 20GB begun to embark on various measures in order to strengthen their fiscal positions. SSD - \$5 1-Therefore, they started cutting subsidies for various products such as fuel, food, click install electricity, and water in an effort to boost government revenues amid low oil prices.

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Further, there are now serious talks among GCC countries to implement various types of taxes such as income taxes or a value added tax (VAT) that might be in operation within two to three years. Historically, all GCC countries (though with varying degrees) have provided their citizens with cheap oil prices as well as relatively cheap services such as electricity and water in favor of keeping their compliance and passivity, what Historian James Gelvin calls "benefits for compliance".(6) As long as they could afford to do so, they definitely did it. However, it seems that this generous social contract might not last forever. In fact, several GCC countries (for example: Saudia Arabia and Qatar) have already announced budget deficits for the coming year. Thus, recognizing the vulnerability of their fiscal positions amid declining oil prices, GCC countries seem keen to introduce various measures in order to boost their revenues either by imposing new taxes or curtailing subsidies. Thus, it remains to be seen in the coming years how this might backfire in terms of frustration among citizens due to higher prices that would probably affect almost every aspect of their lives, and how this might affect the current social contract.

2) Climate Change:

The second major development has to do with the current push towards renewables that is currently taking place in different parts of the world and will continue to do so in the future. For instance, the European Union seems very eager to diversify its energy base and decrease its dependence on fossil fuels by integrating more renewables with an ambitious target of achieving 20% renewable energy by 2020 with countries having their own national targets that range from 10% in Malta to as high as 49% in Sweden. This share of renewable energy is supposed to increase to 27% of final energy by the year 2030.(7)

The recent COP21 meetings in Paris also showed a more dedicated United States that is eager to take a leading role along with China to push for more serious efforts in order to cut carbon emissions. This in turn will result in less reliance on fossil fuels from GCC countries in the longer term. Therefore, there is a dire necessity for GCC countries to plan ahead and to begin taking serious steps towards integrating renewable energy into

their energy base thereby gradually decreasing their dependence on hydrocarbons.

Contrary to popular (Arab) myth that the US is totally dependent on oil coming from the Middle East, the US itself has been increasing its production and has seen its proved reserves increase for both oil and natural gas in recent years. Moreover, its production of shale oil in the last years has further strengthened its position. Therefore, it is becoming less and less reliant on oil from the Middle East. Probably the major region that is currently dependent on oil and gas from the Middle East is Asia with Japan, China, India, and South Korea being among the highest importers. Nonetheless, given a general weakening economic outlook for some of these countries, in particular China, this might also mean reduction in their imports of oil and gas. Finally, the recent COP21 meetings also indicated that China and India in specific seemed to be eager to join US efforts in diversifying away from fossil fuels by investing more into renewables. In fact, India unveiled during these meetings its ambitious target of creating a global solar alliance of over 120 countries that will work to provide clean and renewable energy.

To conclude, it seems that the good old days for GCC countries are not there to last. With declining oil prices (that are expected to continue declining), along with an international community eager to cut carbon emissions by diversifying away from hydrocarbons and moving more towards renewables, it seems that GCC countries — unless they seriously begin rethinking their economies by adopting more economic diversification and investing in renewables especially solar energy given their relative comparative advantage due to their geographical location—might face severe repercussions given their declining government revenues and subsequent cuts in government expenditure. One wonders whether the Arab Spring that initially took place in Tunisia, Egypt and several other Arab countries might travel to Gulf countries in the years to come.

Notes:

- (1) Source: Author's calculation based on http://atlas.media.mit.edu/en/
- (2) http://www.arab-hdr.org/publications/other/ahdrps/ENGFattouhKatiriV2.pdf
- (3) http://www.arab-hdr.org/publications/other/ahdrps/ENGFattouhKatiriV2.pdf
- (4) As a matter of fact, GCC countries have the highest consumption levels per capita for water and electricity consumption worldwide.
- (5) <u>http://www.nytimes.com/2015/12/16/opinion/paris-climate-accord-is-a-big-big-deal.html?</u> <u>r=0</u>
- (6) Gelvin, James L. (2012). The Arab Uprisings: What Everyone Needs to Know. New York: Oxford University Press.
- (7) https://ec.europa.eu/energy/en/topics/renewable-energy

Tamer ElGindi is Assistant Professor of Public Policy, Environment, and Sustainability in the Department of International Affairs at Qatar University. His research interests span a wide variety of topics including income (and wealth) inequalities, neoliberal globalization, natural resources, and sustainability. He could be reached at <<u>telgindi@qu.edu.qa</u>>.

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