

The Middle East and the New Era in the World Oil Market

Yossi Mann

Abstract

Between 2014 and 2016 the oil market underwent sharp fluctuations and the price of WTI oil dropped by 80%. This reflected the changes that were taking place in the oil industry such as the rise in the status of oil shale in US, improved pumping abilities, the end of economic sanctions against Iran, the removal of the threat to Iraqi oil caused by internal instability, the increased role played by speculators and banks in the determination of oil prices based on increasing interest rates and internal conflicts within OPEC. The objective of this article is to reexamine some of the assumptions which have influenced the policies of governments, investors and traders and aims to present the 2014 oil crisis as both a turning point in the oil market and as an event that has limited OPEC's power to determine oil prices. The article also seeks to analyze the factors that have led to the change in the oil market, the effects of the crisis on OPEC oil policy and to examine the implications of the decline in oil prices on social, political and economic aspects.

Keywords

Oil; Natural Gas; Middle East; OPEC; Saudi Arabia; Iran, Energy.

Author's contact: Dr. Yossi Mann, Department of Middle Eastern Studies, Bar Ilan University, Israel. Email: Yossimann1@gmail.com

Introduction

Between 2014 and 2016 the oil market underwent sharp fluctuations and the price of WTI oil dropped by 80%. This reflected the changes that were taking place in the oil industry such as the rise in the status of oil shale in US, improved pumping abilities, the end of economic sanctions against Iran, the removal of the threat to Iraqi oil caused by internal instability, the increased role played by speculators and banks in the determination of oil prices based on increasing interest rates and internal conflicts within OPEC. In addition the increasing number of electric vehicles being manufactured by companies like Tesla, Chevrolet and Nissan and the increasing use of gas in China, India and Europe, mainly in the UK, Germany, France and Italy, are evidence of the profound changes that have taken place in the energy market over the past few years. By 2023, according to analysts, the increased use of electric cars will cause a further fall in the demand for oil that will lead to a plunge in prices.

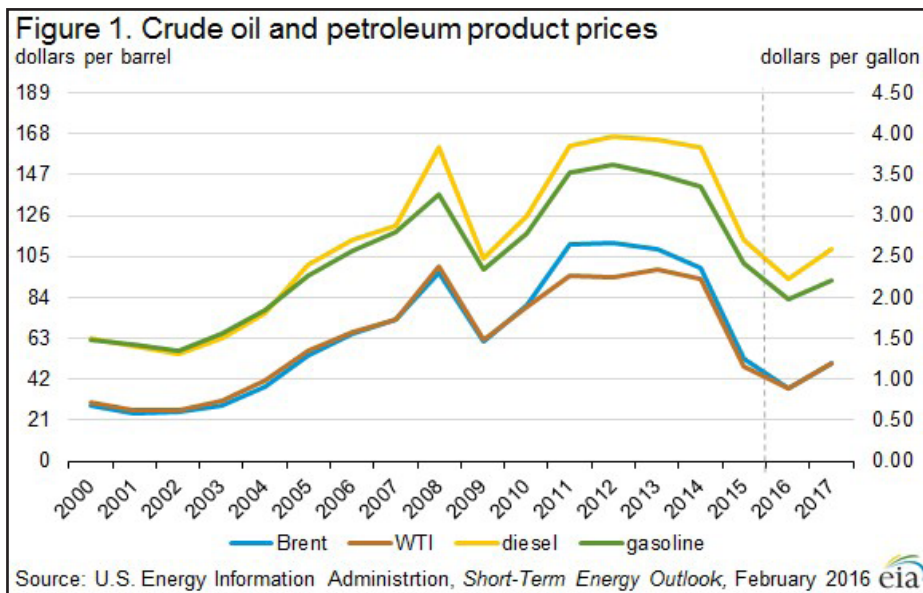
On the other hand the Russian involvement in the Middle East region during the past few years has created the potential for collaboration in the energy market which might stabilize the oil price. After years of conflict between OPEC and Russia that reached a climax after the last energy crisis in 2008 the two parties have decided to cooperate and agree to an oil policy that will be acceptable to both parties. Russia discovered that its relations with OPEC has helped it achieve political and economic goals and therefore sought an agreement with the organization that began in early 2016. All of the above factors have created uncertainty and raised question marks about the validity of the assumptions on which the oil industry has been based in past decades.

The objective of this article is to reexamine some of the assumptions which have influenced the policies of governments, investors and traders and aims to present the 2014 oil crisis as both a turning point in the oil market and as an event that has limited OPEC's power to determine oil prices. The article also seeks to analyze the factors that have led to the change in the oil market, the effects of the crisis on OPEC oil policy and to examine the implications of the decline in oil prices on social, political and economic aspects.

Although this article was initially written in December 2016 a month before OPEC decided to cut its production rates, which was a decision that caused the price of oil to rise significantly, the decision only had a significant impact on the market a few months after the announcement. The article’s conclusions thus are still relevant in regard to the article’s perspective about what makes the results even more powerful.

OPEC policy and internal challenges before the oil crisis of 2014

In an era in which the sources of information are diverse and easily available, a history research scholar needs to develop new skills. While, in the past, such a scholar’s main goal was to provide vast amounts of information, today, in the era of rapidly changing technology, the challenge is to organize the mountains of accumulated information by filtering it and pointing out the variances in conventional theories. In recent years policy makers, researchers and consumers have had a number of perceptions regarding the oil market some of which were decades old assumptions while others were formed in recent years based on the technological and geopolitical changes that have taken place. Many of those perceptions were undermined when the price of Brent oil fell from \$115 per barrel in April 2014 to \$27 in August 2015.¹



¹ “Spot Prices”, *U.S Energy Information Administration*, p. 1.

Researchers and people in the oil industry are continuously attempting to evaluate OPEC's status in the global oil market. The facts are that more than two thirds of the world oil reserves are in the organization's possession, 55 percent of the world's daily oil production is exported by OPEC member countries and that this is what makes OPEC so powerful and yet, despite this dominance; its influence on the market has lessened in the last decades² for several reasons. For example, the production capacity of several countries has been severely affected in recent years with Iraq, which was under economic sanctions for years, experiencing difficulties in increasing oil production due to a lack of foreign investment and Algeria, which has been experiencing a natural decrease in oil production in the last decade, having to carry out significant development work on its infrastructure in order to rehabilitate its industry. In addition, the economic sanctions placed on Iran have limited the development of its oil reserves and hindered its oil production rate while Nigeria's oil industry, like Algeria's, requires considerable investment into the infrastructure requiring Nigeria to borrow large amounts of money from some of the OECD members. The OPEC governments' traditional suspicion of public companies has also hindered cooperation and, in the long run, has sabotaged an increase in the production rate while the oil crisis that broke out in 1998 has exposed OPEC's poor ability to enforce the decisions made within the organization. As a result of these weaknesses and the sharp rise in demand for oil, the status of non-OPEC oil producers, particularly that of Russia, Norway, Mexico and Brazil, have improved at OPEC's expense.³

The divergent economic needs and production capabilities of the various OPEC member states have caused disputes within the organization over its production policy. Most researchers believe that inequality in population size, reserve capacity, the type of oil

2 Bassa Fattouh, "OPEC Pricing Power: The Need for a New Perspective," in *Oxford Institute for Energy Studies* (2007), pp. 7-13.

3 Harri Ramcharran, "Oil Production Responses to Price Changes: an Empirical Application of the Competitive Model to OPEC and non-OPEC Countries," *Energy Economics*, Vol. 24, Issue 2 (2002), pp.104-105; M. A. Adelman, "The Real Oil Problem," Published by Massachusetts Institute of Technology (2004), pp. 1-4; A. Spilimbergo, "Testing the Hypothesis of Collusive Behavior among OPEC Members," *Energy Economics* (May 2001), Vol. 23, Number 3, pp. 339-346; A.F. Alhajji, David Huettner, "OPEC and other Commodity Cartels: a Comparison," *Energy Policy*, Vol. 28 (2000), pp. 1151-1160.

each country has, per capita income, equity capital and foreign currency reserves have resulted in the member states having different interests which have engendered different policies for the oil market. Generally speaking, countries that have two out of the three following characteristics – a large population, low per capita income and a small reserve capacity – seek a pumping policy which ensures high oil prices whilst countries with large reserves, small populations and a high GNP seek a pragmatic oil policy. In recent years, for example, disagreements have deepened between countries that support high prices such as Iran, Venezuela, Nigeria and Algeria and those that seek a pragmatic oil policy, such as Saudi Arabia, Kuwait and the United Arab Emirates.⁴

OPEC's considerations are also influenced by matters not linked to the organization such as recession, alternative energy development, consumer government tax policies, OECD pressure, the rising importance of non-OPEC oil producers and significant technological advances that can reduce production costs, which all limit OPEC's power to control oil prices. The 1998 and 2008 slump in oil prices proved how difficult it is for OPEC to curb sharp drops caused by a decline in demand and this is the reason why the organization needs the assistance of non-OPEC states. It is therefore clear that, in addition to OPEC's internal debate, other powers also mold the oil market and influence OPEC's decisions.⁵

OPEC's limited ability to enforce decisions is also due to the organization's unique structure. Unlike other cartels, such as the coffee and diamond cartels, which have effective enforcement and penalization systems, the OPEC cartel has limited power and neither penalizes recalcitrant states nor systematically supervises member states' oil exports. Although OPEC did establish a supervisory committee after the 1986 crisis, its supervision, unlike that of the coffee cartel, is irregular and random. Furthermore, OPEC is not the supreme authority about the member states' pumping policies and

4 James D. Hamilton, "Understanding Crude Oil Prices," *NBER Working Paper No. 14492* (2008), pp. 22-26; Sel Dibooglu, Salim al-Gudhea, "All Time Cheaters Versus Cheaters in Distress: An Examination of Cheating and Oil Prices in OPEC," *Economic Systems*, Vol. 31, Issue 3 (September 2007), pp. 292-310.

5 M. A. Adelman, "The real oil problem," *Regulation* (Spring 2004), p.16.

actually deals more with coordinating matters than making policy. Ultimately, OPEC is unable to compensate countries that have been economically hit by production cut-backs and, as a result of this, economically weak countries are liable to cheat and produce more than the agreed amount of oil in order to increase their profits.⁶

Researchers who consider OPEC to have considerable influence over the oil market see Saudi Arabia as both the leader of the organization and the industry because of the country's high production capacity and enormous oil reserves. It is true that some research has shown Saudi Arabia to be an equal member in OPEC but this research was published in the 1970s and could therefore not foresee the country's future influence. While much of the research published in the 1980s and 1990s considers Saudi Arabia to be a powerful influential factor within OPEC this research also claims that the rise in status of non-OPEC states has limited Saudi Arabia's power and forced it to cooperate with those countries in order to ensure desired target prices. There are also researchers who claim that Saudi Arabia's great power limits the leeway of other OPEC members and that, in most cases, it is Saudi Arabia that sets target prices that reflect its own needs while the other OPEC member states are quick to toe the line. In December 2008, for example when oil prices reached an all-time low Saudi Arabia hastened to cut production without consulting its partners in OPEC.⁷

Four common assumptions about the oil market

While the structure of OPEC has led traders and researchers to believe that the organization has the ability to prevent sharp price decreases, they disagree about its influence in the market when prices are high and cause recession. They usually claim that the price of crude oil is mainly based on the needs and interests of the oil producing states, in particular the OPEC member states, and not merely on production cost.⁸ The fact that oil makes up 99% of

6 A. F. Alhajji, David Huettner, "OPEC and other Commodity Cartels: a Comparison," *Energy Policy*, Vol. 28 (2000), pp. 1151-1160.

7 Nick Snow, "Aramco Official Outlines Plans to Boost Production," *Oil & Gas Journal*, Vol. 103, Issue 26 (July 11, 2005), pp. 22-24; Pamela Ann Smith, "OPEC Faces a Difficult Year," *Middle East Magazine*, Issue 396 (2009), pp. 56-58.

8 Adelman, p. 16.

Iraq's total exports, 83% of Saudi Arabia's and 63% of Iran's,⁹ has reinforced the notion that countries that rely on oil try to influence prices in order to meet their budget requirements. As a result, those involved in the oil market have usually assumed that the minimum price of oil changes according to the budgetary objectives of the leading oil producing countries.¹⁰

The first assumption has engendered a second assumption. According to OPEC reports, the organization controlled 81% of proven world oil reserves until 2014, with the rest being in the hands of Russia, Canada, Mexico, Brazil, Kazakhstan and Norway, all of whose economies lean heavily on oil prices. According to the first assumption, a decline in the price of oil below the target upon which those countries have planned their budgets would impair their ability to implement the economic policies they decided upon when setting their annual budgets. Many people therefore believed that the common interest of the countries that economically relied on oil, and in particular those who were members of OPEC, was to strive for agreement and effective cooperation in order to reduce production so as to raise prices in such a way that they would satisfy the needs of all of the oil-producing countries. Indeed, the lack of a positive correlation between oil prices and budgetary needs could, in extreme cases, even undermine a country's political equilibrium due to the fact that substantial amounts of money that come from oil profits are allocated to welfare in order to buy political stability. This assumption was put to the test in several cases where oil prices collapsed, such as during the sub-prime crisis in 2008 which caused the slump of WTI oil prices from \$147 in August 2008 to \$33 in November 2008. The OPEC states reacted to this by deciding to coordinate their pumping rates in order to minimize damage to their economies. That same policy was enforced in 1998 when the OPEC countries experienced a severe economic crisis following the economic crash in East Asian oil prices which decreased from \$20.5 per barrel in November 1997

9 "Saudi Arabia Country Analysis Brief," *U.S. Energy Information Administration* (September 10, 2014), p. 2; "Iraq Country Analysis Brief," *U.S. Energy Information Administration* (April 28, 2016), p. 2; "Iran country Analysis Brief," *U.S. Energy Information Administration*, (June 19, 2015), p. 2.

10 Bassam Fattouh, "OPEC Pricing Power," *Oxford Institute for Energy Studies* (March 2007), p. 6.

to \$10.5 in December 1998. The OPEC states reacted to this by acting together to adjust pumping rates in order to ensure that long-term prices would not go below \$10 per barrel.¹¹

The third assumption was that, ever since it came into existence, the oil market has always been associated with geopolitics. The fact that the Middle East plays an important role in the world oil trade has caused those concerned to come to the conclusion that there is a constant correlation between the need to produce and transport oil in a stable manner and the fact that the oil producing countries face constant political and security problems.

A historical examination of the link between the price of oil and political stability in the Middle East shows that a number of events, such as the Suez Crisis, the Six-Day War, the Yom Kippur War, the Iran- Iraq War and the occupation of Iraq by the Americans in 2003,¹² have had a geopolitical influence on the industry and that there is a direct link between regional events, such as the Arab-Israeli conflict, and the price of oil. In recent years, however, domestic events such as fundamentalist terrorism, the Arab Spring and the Iranian Nuclear Program have also caused problems for the oil industry and led to reduced production in various Middle Eastern states. All these factors have strengthened the widespread assumption that geopolitics has a significant effect on the price of oil and that, even though they do not necessarily affect daily production, they are considered to have potential implications for regional stability.

The technological revolution has brought about a significant improvement in the ability of the United States to produce oil and has resulted in an academic and political discourse regarding the impact of their new productivity on American involvement in the Middle East based on the assumption that the United States is closer than ever to achieving energy independence. Indeed, the technological revolution in oil production has had a great influence on how the oil industry has been operating in recent years.

11 Robert Mabro, "The Oil Prices Crisis of 1998," *Oxford Institute for Energy Studies* (September 10, 1998), pp. 1-3.

12 Daniel Yargin, "Ensuring Energy Security," *Foreign Affairs*, Volume 85, No. 2 (April 2000) pp.72-75; Pual Stevens, "The Arab Uprising and the International Oil Market," *Chatham House* (February 7, 2012), pp. 5-8.

Researchers such as Adelman have preferred to concentrate on the future of oil producing technology and its costs¹³ rather than on forecasting an end to the oil era and on theoretical axioms such as Hubbert's Peak Theory, which seeks to determine when history's most precious resource will be depleted. Adelman believes that the more technology progresses and production costs decrease, the more proven reserves will increase, as will the number of sites where fossil fuel production is possible. Indeed, low interest in oil in the United States between 2009 and 2015,¹⁴ and the high oil prices of 2009 enabled technology corporations to make use of the high profits they made from energy companies between 2002 and 2008,¹⁵ and the enormous capital invested in them, to make important improvements in existing oil field production facilities and to increase the daily production from 5.2 million barrels a day in 2011 to 9.5 million in July 2015.¹⁶

The energy revolution that was taking place in the United States created much discussion about not being dependent on oil imports in general, but particularly not from the Middle East.¹⁷ Apart from the benefits coming from the oil industry's contribution to the American economy by creating around 135,000 jobs,¹⁸ many believed that it was the changes in the American energy market that explained the United States' cooler relations with the main oil producing countries such as Saudi Arabia, the biggest oil producer, and Egypt, an important bridge for the transportation of goods from east to west.¹⁹ The assumption made in recent years, therefore, is that the energy revolution in the United States has accelerated the end of American

13 Adelman, p.18; Peter R. Rose, "M. King Hubbert and 'Peak oil' from a Distance of 40 years: Lessons Learned," *History of Petroleum Geology Forum* (May 31, 2015), p. 3.

14 Cristiana Belu Mănescu, Galo Nuño, "Quantitative effects of the shale oil revolution," *European Central Bank* (September 15, 2015), p. 10.

15 Amy Wayers Jaffe, "The International Oil Companies," *Baker Institute* (November 2007), pp. 18-19.

16 "Weekly U.S Field Production of Crude Oil," *U.S Energy Administration* (August 2017), p. 1.

17 Anthony Cordesman, "American Strategy and Critical Challenge in U.S Energy Import Dependence," *CSIS* (May 4, 2015), pp. 19-20.

18 Stephen P.A. Brown, "The Shale Gas and tight Oil Boom US State Economic Gains and Vulnerabilities," Council Foreign Relations (October 2013),

http://www.ncuareport.org/ncuareport/june_2015?pg=6#pg6 (accessed: October 2, 2017).

19 Kirsten Westphal, Marco Overhaus and Guido Steinberg, "The US Shale Revolution and the Arab Gulf States," *SWP Research Paper* (November 2014), pp. 14-20.

dependence on energy imports and brought about a dramatic change in America's foreign policy, particularly in the Middle East.²⁰

The oil crisis of 2014 and the new assumptions about the behavior of the oil market

The 2015 oil crisis led to a reexamination of the old assumptions about how the oil industry should be run. Based on their expectations that these old assumptions were still valid, many people, including politicians and traders, sustained heavy financial losses until they learned that the market conditions had changed and that the old assumptions were no longer valid.²¹ More than anything else, people now realized that OPEC's ability to regulate the production rate effectively and thereby influence the price of oil was now much more complicated than in the past. Even before the crisis, many had already realized that the OPEC leaders' declarations of intention after summit conferences were difficult to implement and that this was causing the financial markets to lower their expectations about positive results coming from the oil ministers' decisions.²² For example, between 2014 and 2016 there were a number of OPEC conferences in various world capitals at which the member states sought a formula that would be acceptable to all the members of the organization and would ensure effective coordination and production cutbacks that would lead to a target price that would satisfy the needs of all OPEC member countries. Until November 2016 each conference ended with a decision not to decide but by the June 2016 conference in Qatar, it seemed that the majority of members were in agreement to cut production. The disagreement regarding who should cut production, however, resulted in yet another failed conference.²³

The attempt made by Saudi Arabia and Russia, the world's leading oil producers in April 2016 to impose a binding policy via a summit agreement signed by the world's leading oil producers soon proved

20 Simone Foxman, "Stung by Oil, Distressed-Debt Traders See Worst Losses Since '08," *Bloomberg News* (November 24, 2015), pp. 1-2.

21 Ibid.

22 Patti Domm, "OPEC comments show lost relevance ahead of meeting," *CNBC News* (November 23, 2015), pp. 1-3.

23 Basma Attasi, "OPEC meeting ends without deal on oil production freeze," *Aljazeera* (April 18, 2016), pp. 2-4.

to be of no avail when they realized that, while they were agreeing to limit their own production, countries such as Iran and Iraq were completely rejecting any cutback.²⁴ A few months later, in the summer of 2016, Saudi Arabia raised its production to a new record rate of 10.6 million barrels a day, thereby demonstrating the lack of relevance of its talks with Russia a few months earlier. In addition to this OPEC's decision in late November 2016 to limit production in an effort to raise the low price of crude oil did not include Iran which was exempted from the decision because of its exceptional situation of having been under sanctions for a number of years.²⁵ This exemption is clear evidence of OPEC's inability to establish a common policy even in times when the price of oil is low.

The 2015 oil crisis exposed all the defects of OPEC, the organization that had earned the dubious nickname "the clumsy cartel,"²⁶ and a number of problems that had been developing over the years turned the tables on them and changed assumptions about the organization's ability to survive the current crisis. For example, the sanctions imposed by the West on Iran to make it suspend its uranium enrichment program was, in the short term, detrimental to Iranian oil production but it also had a severe impact on OPEC.²⁷ Indeed, according to estimates, the economic sanctions did in fact cause Iran to reduce oil production from three million barrels a day to one million barrels between 2011 and 2013 and the chunk of the market that Iran lost in China, Japan and South Korea was taken over by others, such as Saudi Arabia, the United Arab Emirates and Iraq. When the sanctions were lifted, however, the Islamic Republic demanded its share of the Asian market back.²⁸ Iran also lost significant business in Southern Europe when a number of OPEC members, mainly Saudi Arabia, Kuwait, Iraq

24 Stephen Bierman, "Russia, Saudi Arabia Reach Oil-Freeze Consensus, Interfax Says," *Bloomberg News* (April 12, 2016), <https://www.bloomberg.com/news/articles/2016-04-12/russia-saudi-arabia-reach-oil-freeze-consensus-interfax-says> (accessed: October 2, 2017).

25 "Saudi signals it may hit new oil output record ahead of freeze talks – sources," *Reuters* (August 17, 2016). <http://uk.reuters.com/article/us-saudi-oil-output-exclusive/exclusive-saudi-signals-it-may-hit-new-oil-output-record-ahead-of-freeze-talks-sources-idUKKCN10S1FU> (accessed: October 2, 2017).

26 Adelman, p. 16.

27 "Iran country Analysis Brief," *EIA* (June 19, 2015), <https://www.eia.gov/beta/international/analysis.cfm?iso=IRN> (accessed: October 2, 2017).

28 "Saudi Arabia maintained crude oil market share in Asia in the first half of 2015," *EIA* (September 9, 2015), <https://www.eia.gov/todayinenergy/detail.php?id=22852> (accessed: October 2, 2017).

and Russia (which has oil of a similar quality to that of the Islamic Republic) took over its business in Greece, Spain and Italy.²⁹ Here too, Iran was battling to regain the market it had lost.

OPEC's inability to reach an agreement about which countries should make cuts in order to give Iran back its share is a mere reflection of the fact that, already as far back as the 1980s, the organization had been unable to impose organizational discipline and divide the quotas in a way that satisfied all its members; nor was it able to ensure that all members stick to the production rates they had committed themselves to. Unstable political relations and the ethnic tensions between the Shiite rulers in Iran and the Saudi Wahhabis, which culminated in the execution of an important Shiite preacher in the Eastern Province of Saudi Arabia in early 2016, have made it even more difficult to reach an agreement.³⁰

Moreover, every country that was asked to cut production when Iran came back had its own problems, which made it hard to reach an agreement on the distribution of quotas. The Iraqi government, for example, claimed that reducing production for the sake of Iran was not possible after the years in which it had suffered from its own security problems, the severe economic damage caused by the collapse of Saddam Hussein's regime and the internal conflict between various different factions in the country.³¹

Libya, which also underwent years of political crisis, gradually re-entered the oil market in 2016 after years of sharp decline in production to 250,000 barrels a day and this also led to a flooding of the market caused by the lack of coordination with the other OPEC members. Like Iraq, Libyan leaders claimed that the country's bleak economic situation demanded that they take care of their national interests before taking on any commitment to the OPEC states. As a result, OPEC oil production rose to 33.12 million barrels a day in July 2016, which was well above the target of 30 million barrels that the organization had set in order to reduce the production level to ensure a target price that would reflect the aspirations of all the member countries of the cartel. The major drawback of the OPEC deal for Iraq is that it might lead to limitations

29 "Iran country Analysis Brief," *EIA* (June 19, 2015), pp. 1-2.

30 "Saudi-Iran split dashes chance of OPEC deal to curb oil glut," *Reuters* (January 5, 2016), pp. 1-2.

31 "OPEC production estimates," *Platts* (February 2, 2015), p. 1.

being set upon its market share at a time when the government of Iraq is hoping that the production cut will help the country generate enough revenue to help pay for its costly 2-year-old fight against the Islamic State group. Iraq can also neither count on the self-governing Kurds in the country's north nor international oil companies to help it cut crude production as they had promised to do at an OPEC meeting in November 2016. This means that it will be complicated for Iraq to fulfill its promises about all the cuts it has undertaken to make and might cause other OPEC members to look for more market share rather than implementing the cut production policy.³²

The internal conflict in OPEC has worsened as a result of the strengthening of the American oil industry. According to the Baker Hughes energy agency, there were now about 1600 active oil rigs in the United States as a result of technological changes in oil production across country.³³ This sharp rise was due both to a decrease in American oil imports from the OPEC states from 120 million barrels a month in 2011 to 96 million in 2014 and increased competition for the world's largest oil market.³⁴ Moreover, increased production led to yet another flooding of the market with oil at a time when countries such as Iran, Iraq and, to a certain extent, Libya were coming back into the market.

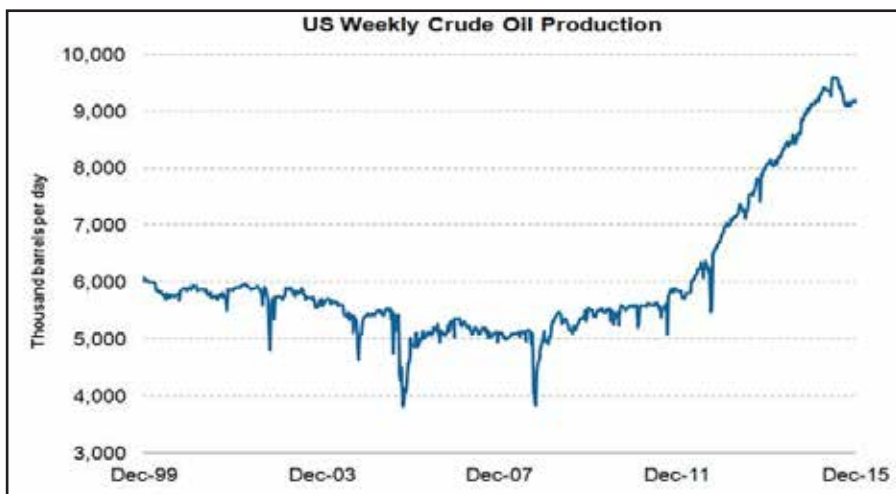
The subsequent drop in oil prices, although it severely affected the oil industry in the United States, was a warning signal for OPEC and brought about the closure of about one thousand oil rigs. The price drop also revealed the relatively low production costs in the USA and America's ability to recover quickly and return to full operation

32 "OPEC Crude oil output," *Platts* (August 3, 2016), https://www.platts.com/news-feature/2016/oil/opec-guide/prod_targets (accessed: October 2, 2017); Sam Wilkin, "Iraq Can't Count on Kurds or Oil Companies to Meet OPEC Cuts," *Bloomberg News* (December 7, 2016). <https://www.bloomberg.com/news/articles/2016-12-07/iraq-can-t-count-on-kurds-or-oil-companies-for-help-on-opec-cuts> (accessed: October 2, 2017); Inan Salahadeen, "Iraq hopes OPEC deal will help cover its massive war costs," *Associated Press* (December 1, 2016) <https://www.apnews.com/a33d20325079451a93704e6c7edfdb66> (accessed: October 2, 2017); Silvia Amaro, "An OPEC deal to cut output could disappoint markets," *CNBC* (November 24, 2016) <https://www.cnn.com/2016/11/24/an-opec-deal-to-cut-output-could-disappoint-markets.html> (accessed: October 2, 2017).

33 "Rig Count Overview and Summary Count," *Baker Hughes* ([no date]), <http://phx.corporate-ir.net/phoenix.zhtml?c=79687&p=irol-rigcountsoverview> (accessed: October 2, 2017).

34 "US Imports from OPEC Countries of Crude oil and Petroleum Product," *EIA* (September 29, 2017), <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MTTIMXX1&f=M> (accessed: October 1, 2017).

once prices rose.³⁵ This means that, even if the OPEC member states managed to implement the agreement to cut production rates in order to adjust prices to what they considered to be an acceptable target price, such a price increase would mainly assist the United States to reinstate their oil rig activity, at the expense of the OPEC states. Indeed, the new technology being used in the USA has given them the ability to operate oil wells that are flexible to opening and closing according to a base price of \$45 and to returning to full operation much more rapidly than in the past. OPEC will henceforth find it difficult to set prices via reduced production because the Americans have set a ceiling price which, if increased, will lead to them increasing the number of oil rigs they are operating which will, in turn, increase oil supply and thereby ultimately reduce OPEC's share of the market. The great revolution that has taken place in oil pricing, therefore, is the fact that it is now much harder for OPEC to set target prices than in the past, and causing them to now understand that this is not only due to their internal organizational problems but also to the new structure of the American market.³⁶



³⁵ "Drilling Productivity Report," *EIA* (August 15, 2016), p. 1; Catherine Ngai, Ernest Scheyder, "Leaner and meaner: U.S. shale greater threat to OPEC after oil price war," Reuters, (November 30, 2016), <http://in.reuters.com/article/opec-meeting-usa-shale/leaner-and-meaner-u-s-shale-greater-threat-to-opec-after-oil-price-war-idINKBN13P0FI> (accessed: October 3, 2017).

³⁶ Joe Carrole, "Shale Explorers Pump Oil on the Cheap from Slumbering U.S. Wells," *World Oil Magazine* (January 7, 2016), <https://www.bloomberg.com/news/articles/2016-01-06/shale-explorers-pull-oil-on-the-cheap-from-slumbering-u-s-wells> (accessed: October 2, 2017).

Although OPEC's situation has worsened since the rise of America's status in the market, the American oil industry is not the only reason for the crisis. Over the years, some people have believed that OPEC has had the most influence on oil prices while others have claimed that it was the American interest rate policies that have had the most impact on the behavior of consumers and speculators in matters of oil.³⁷ Indeed, low interest rates have created the need to find investment sources that yield better returns than those they can obtain from the banks while increased interest rates have led several traders with holdings in oil, wheat and metal, for example, to reduce their inventories in order to avoid paying interest on the rising cost of storage. In April 2014, for example, a number of leading banks such as Goldman Sachs, Credit Suisse, Morgan Stanley and Deutsche Bank announced a reduction of their exposure to commodities trading.³⁸ While, in the past, the OPEC states had issued a variety of statements in order to make traders purchase either commodities related to oil products or actual commodities, now OPEC's influence on market liquidity became limited as a result of the rising interest rates, thereby proving to OPEC that its world status had weakened and that speculators were now exerting greater influence on prices which, in turn, were themselves being influenced by interest rate policies.

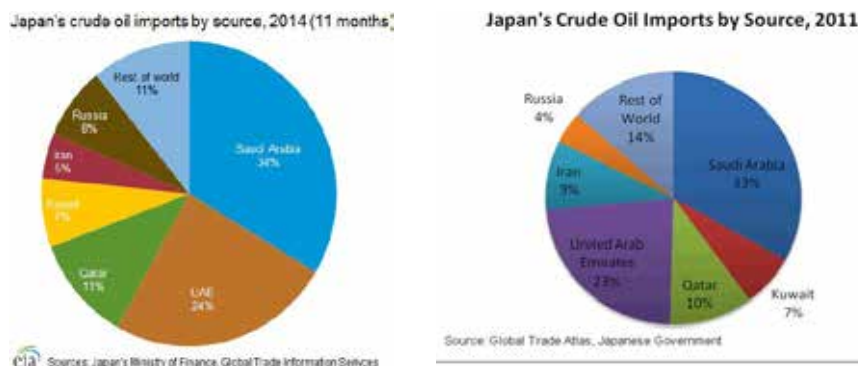
The new situation in the oil market, which was marked by decreased United States imports, new interest rates policies and the internal conflicts within OPEC, has compelled the OPEC states to change their policies in the past few years. Rather than striving to seek a target price, they have begun to compete against one another over market prices, particularly in the Asian market. Their quest for a price that would suit their needs has given way to trying to conquer markets by offering discounts.³⁹ The main struggle has taken place between the three

37 Jeffrey A. Frankel, "Estimated Effects of Speculation and Interest Rates in a "Carry Trade" Model of Commodity Prices," *Understanding International Commodity Price Fluctuations* (March 21, 2013), pp. 2-6.

38 Ambereen Choudhury, "Goldman Sachs Stands Firm as Banks Exit Commodity Trading," *Bloomberg News* (April 23, 2014), <http://www.bloomberg.com/news/articles/2014-04-22/goldman-sachs-stands-firm-as-banks-exit-commodity-trading> (accessed: September 26, 2017).

39 Clyde Russell, "Is Saudi Arabia back in the oil market share game?," *Reuters* (August 2, 2016), <https://www.reuters.com/article/us-column-russell-crude-saudi-idUSKCN10C1U7> (accessed: September 28, 2017); Sam Wilkin, "Saudi-Iran Rivalry Heats Up as OPEC Seeks to Stabilize Price," (August 10, 2016), p. 2.

most important players in the Middle Eastern oil market since time immemorial: Saudi Arabia, Iran and Iraq, who have been competing over the markets in China, South Korea, Japan and another rising power, India. The struggle has intensified due to the fact that, whereas Iran had been out of the game during the 2011-2014 sanctions, when the sanctions were lifted and the prices crashed they now wanted to reestablish their position in the marketplace at any cost by offering discounts. In November 2014 Saudi Arabia announced that it would offer the unprecedented discount of \$1.90 to its clients in Asia for “Arabian Light” oil, thereby engendering a crash in price and enormous competition between the main OPEC oil exporters.⁴⁰ As a result of the Saudi announcement, Iran also offered the same discount to its clients in East Asia but an OPEC decision to cut production might, however, still set limits on the rivalry over market share between the members of the organization and minimize the use of discounts offered to clients.⁴¹



Source: *U.S. Energy Administration Information (January 2016)*.

The technological revolution became the crowning glory of the American oil industry and the innovation in production capability engendered a plethora of theories about the significance of increased

40 Dmitry Zhdannikov, “Saudi slashes January oil prices for Asia, U.S,” *Reuters* (December 4, 2016), <http://www.reuters.com/article/us-saudi-oil/saudi-slashes-january-oil-prices-for-asia-u-s-idUSKCN0JJ03N20141205> (accessed: October 3, 2017).

41 Anthony DiPaola, “Iran Matches Saudi Oil Discounts in Bear Market for Crude,” *Bloomberg News* (October 10, 2014), <https://www.bloomberg.com/news/articles/2014-10-10/iran-matches-saudi-oil-discounts-as-price-war-more-likely> (accessed: October 2, 2017); Tom Christopher, “The OPEC deal is done. Here’s what to expect from oil markets next,” *CNBC* (November 30, 2016), <https://www.cnbc.com/2016/11/30/the-opec-deal-is-done-heres-what-to-expect-from-oil-markets-next.html> (accessed: October 1, 2017).

pumping in the United States. For example, many believed that decreased dependence on Middle Eastern oil was one of the main reasons for the political coolness displayed by the Obama administration towards the leading oil producing countries in the Middle East, and mainly towards Saudi Arabia. In the Middle East itself there were also assessments made regarding the meaning of the loss of American dependence on the local oil. An analysis of the data, however, shows that the above assessments were premature since, even at the peak of oil production in the United States, which is estimated to have reached 9 million barrels a day, import figures stood at 6.9 million barrels.⁴² Even though this was much lower than the amount that America imported ten years earlier, it nevertheless shows that American dependence on foreign oil is not over. Moreover, it seems that the United States has had to limit oil production due to the sharp drop in price and this has exposed the weakness of its energy independence when there is a low price environment. Finally, an examination of the data shows that, although America's dependence on the Middle East has not come to an end, it has changed. In January 2014 Saudi Arabia which, for decades, was America's most important oil provider, exported 45 million barrels of oil a month and in June 2015 32 million while Iraq, which exported 7.7 million barrels to America in 2014, exported 13 million in June 2015.⁴³ It thus appears that the assumption that the United States is about to change its policies towards the Middle East because of its independence in energy turns out to have been too hasty a conclusion and that the important finding is that America has increased its dependence on Iraqi oil at the expense of Iraq's historical ally, Saudi Arabia.

It is this rise in Iraq's importance as an oil exporter that brings the discussion between the link between geopolitics and economics back to the forefront. After years of devastating damage to its oil industry, Iraq has now become an important player in the global oil market

42 "Weekly U.S Import of Crude Oil," *EIA* (September 27, 2017), <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=WCRIMUS2&f=W> (accessed: October 2, 2017).

43 "US Imports from Saudi Arabia of Crude Oil," *EIA* (September 27, 2017), https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=W_EPCO_IMO_NUS-NSA_MBBLD&f=W (accessed: September 30, 2017); "US Imports from Iraq of Crude Oil," *EIA* (September 29, 2017), <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MTTIMIZ1&f=M> (accessed: September 30, 2017).

and is not only competing with Iran and Saudi Arabia over the crude oil market but is being wooed by energy companies from all over the world that see huge investment opportunities in Kurdistan. For instance, the Iraqi export sales of crude oil increased to 3.3 million barrels a day in 2014 which was 700,000 barrels more than the year before. Although political issues, such as Iraq's relations with Turkey and the strained relations it has with Iran, are causing transportation problems, the data shows that there has been a steady growth in Iraqi oil production.⁴⁴ This case of export under severe geopolitical conditions is not unique to the Iraqi domestic market since it also exists in areas under the control of the Islamic State, ISIS. ISIS has proven that it is also a player in the domestic oil market, and that it is willing to sell oil to various factors in order to sustain its economy.⁴⁵

The relationship that exists between political situations and the energy market should therefore be reexamined in terms of the impact this has on the price. The claim that risk is a factor that influences the oil market cannot be sustained long-term in sophisticated markets that have the power to examine their daily oil flow. In these days of satellites, fast communications and advanced production technology, only a true disruption of oil production can cause devastating damage to the market, such as was the case of Libya in recent years. Likewise, the threat to the stability of the oil market because of a lack of clear correlation with production cannot impact the price for long. Moreover, the more the market experiences events that can be considered to be risks, the more the term "risk" takes on a new meaning, becomes more threatening and tends toward doing real damage to supplies. Should there, however, be no such damage the influence on prices in the long, and even in the short term, will be very limited.

The next challenge: The natural gas industry

In 2000, Saudi Arabia's mythological oil minister, Sheikh Ahmad Zaki al-Yamani, predicted that within 30 years the amount of oil being produced would reach an unprecedented peak and the number of

44 "Iraq Country Analysis," *EIA* (April 28, 2016), <https://www.eia.gov/beta/international/analysis.cfm?iso=IRQ> (accessed: October 2, 2017).

45 Valérie Marcel, "ISIS and the Dangers of Black Market Oil," *Chatham House* (July 21, 2014), <https://www.chathamhouse.org/expert/comment/15203> (accessed: October 2, 2017).

buyers would drop significantly. In a review he gave to the press he declared that “The Stone Age came to an end, not because of a lack of stones, and the oil age will come to an end not because of a lack of oil”.⁴⁶ Indeed, the oil crisis of 2014, which took place during a period of an unprecedented supply of oil, was not caused by the lack of the “black gold”, but by the growing use of cleaner and cheaper alternatives such as natural gas. According to the IEA agency, the biggest beneficiary of the global energy market change in 2014 has been the natural gas industry which, according to their estimation, would become the world’s major energy source in 2040.⁴⁷ Several factors have turned natural gas into such an important player in the energy market. The first has been cleaner energy sourced from coal and oil but the price of gas, especially as recorded in the wake of the 2014 crisis, has also been very low in the past decade and thus has been able to compete against the more expensive alternatives of oil and coal.⁴⁸

The revolution in the natural gas market coincided with that of the oil market between the years 2009-2014 and also emerged in the United States in the form of the Shale Gas industry which made it possible for the US to significantly increase gas production in its territory and to become an energy power alongside Saudi Arabia and Russia. Indeed, the rise of the US as a factor in the global gas market may further intensify the struggle with Russia, which has a quarter of the world’s gas reserves, for markets that were previously under the influence of the Kremlin. Russia’s image in the global gas market as a country that uses energy to promote political goals, may also cause many countries to prefer long-term deals with the US.⁴⁹

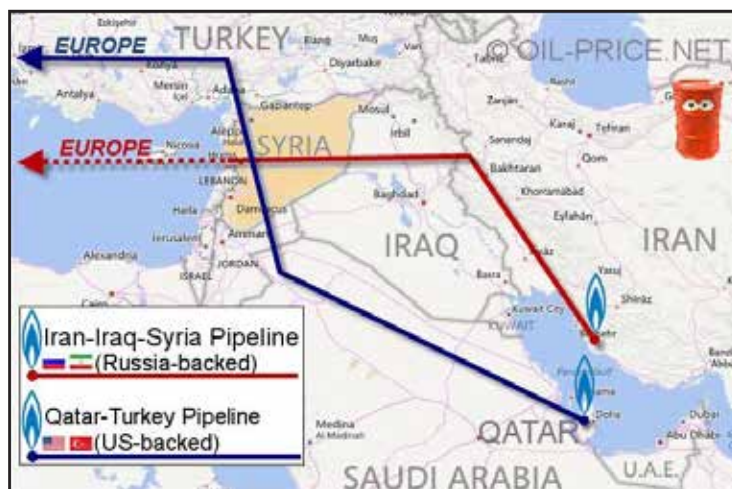
46 “Sheikh Yamani predicts price crash as age of oil ends,” *The Telegraph* (June 25, 2000). <http://www.telegraph.co.uk/news/uknews/1344832/Sheikh-Yamani-predicts-price-crash-as-age-of-oil-ends.html> (accessed: September 22, 2017).

47 “World Energy Outlook 2016 sees broad transformations in the global energy landscape,” *World Energy Outlook 2016*, International Energy Agency (November 2016) <https://www.iea.org/newsroom/news/2016/november/world-energy-outlook-2016.html> (accessed: October 2, 2017).

48 James Conca, “Natural Gas — Not Renewables — Is Replacing Nuclear Power,” *Forbes* (May 16, 2016) <https://www.forbes.com/sites/jamesconca/2016/05/16/natural-gas-is-replacing-nuclear-power-not-renewables/#56f98851cdb6> (accessed: October 2, 2017).

49 “Are we entering a golden age of gas?,” *World Energy Outlook 2011 Special Report Factsheet*, International Energy Agency (2011) http://www.worldenergyoutlook.org/media/weowebbsite/2011/WE02011_GoldenAgeofGasReport.pdf (accessed: September 23, 2017).

The year 2013 intensified the challenge to Russia's place in the global gas market since the removal of the economic sanctions placed on Iran has made it an important player in the gas market. Like the United States Iran also has great potential in this market both because it holds the second largest gas reserves in the world and because its strategic location enables it to supply energy to China, India and even Europe, due to its recent tightening of relations with Turkey. The struggle for control of the Asian gas market will be not only against Russia but also against the emerging superpower in the energy industry over the last few decades: Qatar. Qatar holds 15 percent of the world's natural gas reserves and has become the world's most important player in the global liquid gas market, even allowing itself access to distant markets such as Poland and China.⁵⁰ It is possible that Russia's role in 2013 in Syria and the region is, as a whole, a move that is intended to keep the European markets away from the two big competitors who can, as various articles in recent years have proposed they should do, easily transport the gas in their territory to Europe via northern Syria. In any event, it seems that the gas market of 2013 has been experiencing challenges similar to those of the oil market in the past, namely attempts being made to control the markets and coordinate prices as OPEC did at that time.



⁵⁰ Jim Krane and Steven Wright, "Qatar 'rises above' its region: Geopolitics and the rejection of the GCC gas market," *Kuwait Programme on Development, Governance and Globalization in the Gulf States*, No. 35, London School of Economics and Political Science (March 2014), p. 9.

Summary and conclusions

A hundred years after oil became an important international commodity in the wake of World War I when it began to be used extensively in ships, vehicles and airplanes, it seems that mankind is beginning to think differently about the most tradable commodity in the world. For the first time since then the leaders of the Middle East feel that their power to determine the price of oil has become very limited and, as a result, they now have to make significant changes in their economic policies. Indeed, one the new assumptions is that the oil-producing countries in the Middle East will have to rethink their domestic policies in order to create a diversified economy that is not only dependent on oil. To develop the economic diversification at a time of low oil prices that will make it possible for them to compete in the markets of Asia and the West will demand structural changes and ideological flexibility. In the past they only talked about the need to diversify but now it has become an inevitable necessity that demands the introduction of decisive social and economic changes – and very soon. This will demand a deep examination of issues such as the status of women and their possible employment in the domestic economy in order to reduce dependence on foreign manpower. It will also both require the oil states to be transparent about their economies in order to enable them to list companies on the international stock-exchange, and to legislate laws that address the issues of international trade and, above all, encourage companies to operate in their domestic markets. All these factors could significantly change not only the economic system as we know it in the Middle East but also the traditional relationship between the rulers and citizens in the oil-producing countries.

About the author

Dr. Yossi Mann is the Head of the Department of Middle Eastern studies in Bar-Ilan University and a researcher in the Institute of Policy and Strategy in IDC. Over the past few years, he has focused on the commodities market and on the renewable energy industry in EU countries. He now deals mainly with issues related to the oil and gas industries in the Middle East. He spend long period of time at the Universities of Gdansk and Szczecin in Poland and has also attended Oxford University for post-doctoral research.