Developments in the Global Oil Market: Strategic Effects on the Middle East

Shmuel Even and Eran Yashiv

This essay surveys basic data and recent developments in the global oil market, and focuses on their strategic implications for the Middle East.

Basic Data

Oil Prices

Global oil prices are notable for extreme swings over time. Table 1 provides a historical perspective, including the years following the oil embargo imposed by the Arab states on the West after the 1973 Yom Kippur War and the period following the Islamic Revolution in Iran in 1979. The table demonstrates that political considerations are among the factors that affect the oil market.

In the second half of 2014, there was a steep drop in oil prices. On July 1, 2014, oil (Brent crude) traded at record highs of $113 a barrel; by December 31, 2014, the price was $57 (at annual average, prices fell from $99 a barrel in 2014 to $52 a barrel in 2015). In mid January 2016, oil traded at all-time lows of less than $30 a barrel. However, since then, the price has recovered considerably, and since mid year has been fluctuating around $50 a barrel.

Table 1. Prices of Brent Crude Oil, 1979-2016[1] (in US dollars, current prices, and constant prices – 2015, annual average)

Year	Nominal price	Real price (2015 prices)
1970	1.8	11.0
1975	11.5	50.8
1980	36.8	105.9
1985	27.6	60.7
1990	23.7	43.0
1995	17.0	26.5
2000	28.5	39.2
2005	54.5	66.2
2010	79.5	86.4
2011	111.3	117.2
2012	111.7	115.3
2013	108.7	110.6
2014	99.0	99.1
2015	52.4	52.4
2016e	45	45

Source: British Petroleum[2]

Oil Reserves and Production in the Middle East

According to OPEC,[3] the Middle East is home to most of the world's proven oil reserves. The monarchies – Saudi Arabia, Kuwait, and the UAE – stand out among the oil producers, controlling 31 percent of the world's proven oil reserves, followed by Iran and Iraq with 21 percent.

Table 2. Major Middle East Producers: Proven Oil Reserves and Output, 2015

Producer	Proven reserves (millions of barrels)	Percentage of world reserves[4]	Output (millions of barrels a day)
Saudi Arabia	266.5	17.9	10.2
Iran	158.4	10.6	3.2
Iraq	142.5	9.6	3.5

Table 2. Major Middle East Producers, cont'd.

Producer	Proven reserves (millions of barrels)	Percentage of world reserves[4]	Output (millions of barrels a day)
Kuwait	101.5	6.8	2.9
UAE	97.8	6.5	3.0
Libya	48.4	3.2	0.4
Qatar	25.2	1.7	0.7
Algeria	12.2	0.8	1.2
Other Middle East states	15.3	1.0	1.5
Total	867.8	58.1	26.6

Source: OPEC Annual Statistical Bulletin 2016

Developments and Strategic Implications

The Drop in Oil Prices and Oil Market Politics

Low oil prices result from a simple supply and demand situation – a glut of supply compared to demand. While demand grew only at a moderate pace because of the global economic slowdown, particularly the slowdown of the Chinese market and low growth in Europe, the supply of oil grew more rapidly. On the supply side, particular significance lies in the increase in US production (thanks to improved technologies and shale oil extraction), and the increased output of some OPEC members, such as Saudi Arabia and Iraq. According to the OPEC bulletin of August 11, 2015, in order to supply the global market's demand for oil and liquid natural gas for a total of 92.7 million of barrels per day (MMBD), OPEC members should have produced only 29.2 MMBD,[5] but in practice, in July 2015, they produced 32.5 MMBD – 11.3 percent more than necessary. Joining this is the return of Iranian oil to the global market following the signing of the JCPOA.

Far more than a mere technical matter, oil supply levels are a strategic and political issue. The traditional explanation for the high output by Saudi Arabia and the UAE is that they prefer low oil prices in the present so as to lower the profitability in developing alternatives to oil and new oil sources that might compete with their own (and, in fact, the drop in oil prices has lowered US production). However, oil prices that are too low create major fiscal difficulties. A second and more concrete explanation is that these

states are engaged in a strategy to defend their market share, given that they lack trust in other oil producers. They contend that even were they to curb their output, other nations would increase theirs, so that prices would drop sharply, no matter what.

An additional explanation – at least according to Tehran – is the use of oil by Saudi Arabia and the other Gulf states as a weapon against Iran.[6] In December 2014, President Hassan Rouhani claimed that the low global oil prices were the result of a political plot composed by local states; Majlis Speaker Ali Larijani added, "This time we will not forget which states planned the scheme to bring oil prices down."[7] Although Iran managed to increase its non-oil exports significantly (despite the sanctions regime, Iran exported more than 1 MMBD, mostly to East Asia), the drop in oil prices has affected the Iranian economy. This economic effect may have been one of the factors that drove the Tehran regime to reach the nuclear deal in the first place. In the post-sanctions era, low prices harm the regime's ability to meet public expectations and improve the standard of living. As part of the talks on freezing oil production, Iran has not been willing to limit its output to its current level while Saudi Arabia's production is in full swing, and Saudi Arabia is unwilling (as declared at the OPEC conference in April 2016) to limit its production until Iran commits to do the same.[8]

However, the sharp drop in oil prices that marked 2016 does not correspond to the economic interests of Saudi Arabia and the principalities, as the energy sector is the source of 80 percent of government revenue. The drop in oil prices makes it difficult for them to maintain their growth levels and the populations' high standard of living – a population that does not pay taxes – and this has implications for their stability. Given this situation and the increase in external pressure on Saudi Arabia, Khalid al-Falih, the nation's energy minister, said in August 2016 that his country would do whatever was necessary to help the crude oil market, in conjunction with OPEC and other oil producers, in order to stabilize prices.[9]

On November 30, 2016 OPEC announced that it agreed to cut production by around 1.2 million barrels a day to bring its ceiling to 32.7 million, effective January 1, 2017. The duration of the agreement is for 6 months, with the option to extend by another 6 months. Moreover, the agreement indicated a further 600,000 barrels a day of cuts to come from non-OPEC countries,

including a 300,000 cut from Russia. Most other countries agreed to a cut of around 4.5 percent from the reference level of production, which in most cases was the OPEC reported figure for October 2016. The main exception was Iran, which agreed to a ceiling of about 3.8 million, up 90,000 from the reported October production.

The inclusion of non-OPEC producers makes this a bigger cut than announced in Algiers in April 2016. Oil prices are bound to rise if there is participation from non-OPEC countries, compliance by OPEC members, and less uncertainty about Iran's production agreement. However, OPEC's ability in the long term to fulfill agreements to limit output is highly doubtful, given the deep mistrust among members of the organization.

Implications of the Drop in Prices for the Global Economy

The drop in oil prices presumably should have been a boost to global economic growth. In a survey conducted by the International Monetary Fund in July 2015,[10] IMF economists estimated that global growth would increase by half a percentage point as a result of lower oil prices, although other factors would offset that increase. For example, low oil prices are not fully passed on to the end consumers because of taxation policies. At a certain stage the financial markets were also affected, in part due to reduced revenues and value of the energy and the higher credit risk in the sector. In April 2016, the renowned economist Paul Krugman estimated that the expectations for accelerated growth as a consequence of lower oil prices were not in fact realized, at least not in the United States, because the damage to the energy sector offset the positive effects of lower oil prices on private consumption and on companies outside the energy sector.[11]

The drop in oil prices has implications for the cost, and at times also the feasibility, of developing alternate energy sources, such as natural gas, coal, renewable energy sources, and even nuclear energy. These alternative sources of energy affect the oil market, and in turn, are affected by it. For example, the cost of natural gas, which on July 1, 2014 was $4.5 per MBTU, dropped to $2.8 on January 1, 2015, and fell further to $1.7 on March 1, 2016. On November 21, 2016, the price stood at $2.95 per MBTU.[12] Nonetheless, each type of energy source has its own rules, involving parameters of development and transportation of the energy in their crude forms (e.g., natural gas is

usually moved through pipelines, which limits the realistic alternatives available to producers and consumers whenever there is a change in market prices), domestic political concerns, geopolitical and security worries, and environmental issues.[13]

To a certain extent, low prices in the energy markets are a contributing factor to low inflation rates, which affect the interest rate policies of economic blocs and the situation in the financial markets. In other words, essential changes in oil prices have a systemic effect.

Implications of Low Prices for Middle East States

As a result of the steep drop in the price of oil and its associated products since 2014, there has been a commensurately steep drop in the financial value of oil exports in the region's states (table 3). The changes in oil production and revenue in recent years in Iran were the result of the now-lifted sanctions, and in Libya a result of the civil war.

Table 3. Principal Middle East Oil Producers – Oil Export Value (in billions of dollars)

Producer	2012	2013	2014	2015
Saudi Arabia	337.5	321.8	284.4	158.0
Iran	101.5	61.9	53.7	27.3
Iraq	94.1	89.4	83.6	54.4
Kuwait	112.9	108.5	97.6	48.8
Libya	60.1	44.4	10.4	5.0
Price of barrel of OPEC oil in US dollars	109.5	105.9	96.3	49.5

Source: OPEC Annual Statistical Bulletin 2016

An April 2016 IMF survey of Middle East states estimated that in the Gulf oil monarchies (the GCC nations), real growth would drop from 3.3 percent in 2015 to 1.8 percent in 2016, and that in 2017 growth would reach 2.3 percent. By contrast, the survey estimated that in Iran, because of the lifting of sanctions, growth would increase from zero in 2015 to 4 percent in 2016 and 3.7 percent in 2017. According to the IMF, while the large oil exporters have ambitious plans to cut their budget deficits resulting from

the loss of oil revenue, they still need more significant spending cuts. The survey noted that economic growth in the Middle East is threatened by security crises and the waves of refugees fleeing war-ravaged regions.[14]

Implications of the Low Oil Prices for Saudi Arabia

As a result of reduced oil revenues and excess spending, the kingdom's 2015 and 2016 budgets show large deficits. In 2015, the kingdom spent $260 billion (in the Saudi riyal equivalent) compared to the $229.3 billion budgeted. Real income reached $162 billion, compared to the $190.7 stipulated by the budget. Therefore, the deficit of $38.6 billion forecasted in the 2015 budget swelled to $98 billion (about 15 percent of the GDP) – about two and a half times more than planned. The forecasted deficit for the 2016 budget is $87 billion, assuming that the expenditures will remain at $224 billion and revenue will in fact reach $137 billion.[15]

The large deficits are financed by financial reserves, the sale of assets, and even loans. The Saudis know full well that this cannot be sustained in the long term. Even if this particular crisis ends tomorrow, a similar period of low income will recur at some point. They have therefore started to implement an ambitious multiyear plan, called "Saudi Vision 2030," which includes developing the local economy and creating new revenue streams independent of oil, as well as enhancing efficiency. Among the sectors mentioned for development are manufacturing, mining, tourism, healthcare, and financial services. Regarding efficiency improvement, the budget has already been cut (as evidenced by the 2016 budget, compared to the previous year's), including cuts to oil, electricity, and water subsidies. The plan also affects the security sector. At present, a minor portion of weapons acquisitions for the military comes from the local industry. The long term goal is for half of the acquisitions to come from Saudi manufacturing. Furthermore, depending on the security situation, Saudi Arabia will have to rein in its defense spending, which in 2015 was estimated at $85 billion (13 percent of the GDP), in part because of the fighting in Yemen.

The interim goal of the plan, the 2020 benchmark, is to create new budget sources by tremendous increases in revenue outside the oil sector, enhanced efficiency, and taxation, so that even in years of lower income from oil the kingdom will not have to face huge deficits, as is the case today.

However, this goal is far from assured, as it seems that Saudi Arabia will find it difficult to reduce its dependence on oil to a meaningful extent based on so short a timetable.[16]

Implications of the Drop in Oil Prices for Middle East Oil Importers

While low prices of oil would ostensibly ease the situation of the oil importers, in the Middle East the picture is more complex because of the great dependence of some of the Arab oil importers on the oil exporters in several areas: salary payment for workers from the Gulf (nations such as Egypt, Jordan, and others export manpower to the Gulf), trade between the oil importers and oil exporters, and financial aid and investments from the oil exporters to the Arab oil importers. Table 4 presents the remittances of workers from other nations to their home countries in the Middle East. For example, remittances from the Gulf represent most of the funds sent by Egyptians and Jordanians working abroad to their home states.

Table 4. Remittances by Foreign Workers to their Home Countries in the Middle East (in millions of dollars)

States receiving remittances / States providing employment	Egypt	Jordan	Lebanon	Syria	West Bank and Gaza
Saudi Arabia	7,587	1,468	1,447	474	364
Kuwait	3,213	198	63	79	12
UAE	1,873	716	232	30	40
Qatar	1,057	207	54	8	11
Others	691	141	30	59	13
Total Gulf	14,421	2,730	1,826	650	440
World total	19,710	3,788	7,163	1,623	2,206

Source: World Bank, April 2016[17]

At this time, it is difficult to chart a clear balance between savings due to the lower cost of oil imports, whose effects are fairly immediate, with the damage to the Arab oil importers due to adjustments that will occur in the

oil producing countries for as long as the low prices persist. According to the World Bank, as of 2015 there were still no signs of essential change in the remittances by foreign workers to their home countries – they resembled the figures of 2014 – but the continued low prices were expected to spur a lower level of remittances.

Egypt, for example, is a net oil importer (i.e., it imports more oil than it exports) at a scope of $3.7 billion (for the 2014-2015 fiscal year), so that the drop in oil prices contributed to savings in energy on Egyptian soil.[18] However, a persistent situation is liable to affect Egypt's important sources of revenue to a greater extent. First, Egypt relies on foreign currency remittances of some $20 billion annually from Egyptian labor in other countries, with more than 70 percent from Egyptian labor in the Gulf (table 4). Second, a significant part of Egyptian goods for export is aimed at Arab markets, first and foremost Saudi Arabia (accounting for 9 percent of all Egyptian exports),[19] and trade is liable to shrink, the longer the low prices continue. The state of the oil market is also liable to affect revenue from transit fees placed on cargo ships in the Suez Canal, which was expanded last year; in fact, early reports indicate that revenue from the newly widened canal has not increased as was expected. Third, Egypt receives billions of dollars in investments and aid from Saudi Arabia and the principalities, most of which is politically motivated. This aid certainly played a part in Egypt's acquiescence to Riyadh's demand that the Red Sea islands of Tiran and Sanafir be returned to Saudi sovereign control.[20] Thus, it seems that ongoing low oil prices will have a negative effect on the Egyptian economy.

Jordan, a net oil importer, has a similar situation. Although it now enjoys lower oil prices, should the low prices continue, the country will receive less foreign currency in remittances from Jordanian laborers in the Gulf, the source of the lion's share of remittances sent home from abroad; furthermore, the Gulf states are liable to cut trade and grants on which Jordan greatly depends. The Palestinians in the West Bank and Gaza Strip receive a few hundreds of millions of dollars from Palestinian laborers in the Gulf,[21] as well as aid from the Gulf states.

Effect on Israel

Despite the discovery of impressive natural gas reserves, Israel remains an oil importer. Most of the oil comes from areas of the former Soviet Union by means of the Baku-Tbilisi-Ceyhan pipeline, which links the Caspian Sea with the Mediterranean after passing through Georgia and Turkey.[22] According to a 2013 estimate, Israel imports 276,000 barrels of oil a day.[23] The effect of the slump in oil prices on Israel is mixed. On the one hand, as an importer, Israel enjoys the lower prices, which helps growth and increases the public's purchasing power. On the other hand, Israel is currently occupied with developing its Mediterranean natural gas fields for export, and a drop in energy prices does not help this effort, as gas prices are related to oil prices. The issue of Israeli gas exports touches on other matters as well: domestic political aspects, external political aspects (Israel's relations with nearby states to or through whom Israel may one day export), natural gas discoveries by neighboring countries, security questions, and relations with those who invested, explored, discovered, and produce the gas.

Conclusions

While the current ebb in oil prices is not an extraordinary event in a greater historical context, it is particularly significant given its coincidence with the upheaval in the Middle East. In tackling the issue, Saudi Arabia and the Gulf principalities have chosen a strategy that combines a restrained use of financial reserves with budget cuts, in an attempt to minimize the damage to the public's standard of living and reduce the possibility of public resentment. IMF economists feel that the cuts to the budget deficits in Saudi Arabia and the other oil exporters are insufficient, and that these states will have to take more aggressive action. In addition, and for the sake of the long term, Saudi Arabia has already embarked on an ambitious program designed to break its absolute dependency on oil. These objectives are difficult to obtain, not only economically and practically, but also politically, and attempts to carry them out carry risks to internal stability, particularly given the activity of external (most of all, Iranian) and domestic subversive elements. A continuing state of low oil prices might likewise pose an economic and political challenge to states such as Egypt, Jordan, and others, whose economies are intertwined

with the economy of the Gulf states. By contrast, the low oil prices have a primarily positive effect on the Israeli economy.

Notes

1 The pre-1985 figures refer to Arabian Light oil, similar to Brent.
2 *BP Statistical Review of World Energy 2016*, until 2015; the 2016 figures are estimates.
3 The Organization of Petroleum Exporting Companies (OPEC), which includes the large Arab oil producers, and Iran and Venezuela.
4 According to OPEC, the estimate of proven oil reserves in the world, as of 2015, stood at 1,493 billion barrels. According to the BP annual bulletin, that number for the same period was 1,698 billion barrels, with the reserves of the Middle East (including North Africa) comprising 51 percent.
5 On the basis of the supply of oil outside of OPEC of a total of 57.5 MMBD and the LNG production of OPEC of a total of 6 MMBD.
6 This policy by Saudi Arabia and the principalities likewise causes significant damage to Russia, whose activities in Syria are anathema.
7 The weekly journal of the Revolutionary Guards, "Iran has Many Options for Harming Saudi Arabia," MEMRI, January 1, 2015, http://www.memri.org.il/cgi-webaxy/sal/sal.pl?lang=he&ID=875141_memri&act=show&dbid=articles&dataid=3778#_ftn2.
8 Summer Said, "Saudi Energy Minister Says Kingdom Willing to Help Rebalance Oil Market," *Wall Street Journal*, August 11, 2016.
9 See note 7.
10 "Global Implications of Lower Oil Prices," International Monetary Fund, July 2015.
11 Paul Krugman, "Is Cheap Oil Contractionary? The Conscience of a Liberal," *New York Times*, April 2016, http://krugman.blogs.nytimes.com/2016/04/13/is-cheap-oil-contractionary.
12 Data from "Natural Gas Historical Data" at investing.com, November 21, 2016, http://il.investing.com/commodities/natural-gas-historical-data.
13 For example, relatively speaking, natural gas is conveniently priced and its positive contribution to air quality is high, but trade in this commodity is greatly affected by the geopolitical situation, because most of it depends on pipelines. Coal has advantages in terms of energy security, because it can be imported from nations that do not export oil (thereby varying a nation's energy sources) and is easy to store. Developing nuclear energy involves risks and strategic significances that extend far beyond a country's need for energy. And while renewable energy has

many advantages, its use is still limited by natural conditions and considerations of economic feasibility.

14 "Regional Economic Outlook Update, Middle East and Central Asia Department," International Monetary Fund, April 2016, http://www.imf.org/external/pubs/ft/reo/2016/mcd/mreo0416.htm.

15 Mahmoud Habboush, "A Breakdown of the 2016 Saudi Budget and Its Implications," *Bloomberg*, December 29, 2015, http://www.bloomberg.com/news/articles/2015-12-28/a-breakdown-of-the-2016-saudi-budget-and-its-implications.

16 Shmuel Even and Yoel Guzansky, "Saudi Arabia's Vision 2030: Reducing the Dependency on Oil," *INSS Insight* No. 819, May 6, 2016, http://www.inss.org.il/uploadImages/systemFiles/No.%20819%20-%20Shmulik%20and%20Yoel%20for%20web.pdf.

17 "Migration and Remittances Data," World Bank (updated as of April 2016), http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data.

18 Ahmed el-Sayed al-Naggar, "Declining Oil Prices and the Economies of Egypt, the Arabs and the World," *Ahram Online*, February 3, 2016, http://english.ahram.org.eg/NewsContentP/4/186253/Opinion/Declining-oil-prices-and-the-economies-of-Egypt,-t.aspx.

19 CIA, *World Fact Book*, August 2016.

20 Zvi Bar'el, "What Egypt's Handover of the Red Sea Islands to Saudi Arabia Means for Israel," *Haaretz*, April 12, 2016, http://www.haaretz.com/israel-news/.premium-1.713919.

21 Ibid, according to IMF estimates from 2012.

22 Website of the Ministry of National Infrastructures, Energy and Water Resources, http://energy.gov.il/Subjects/Fuel/Pages/GxmsMniFuelEconomyInIsrael.aspx.

23 CIA, *World Fact Book,* https://www.cia.gov/library/publications/the-world-factbook/geos/is.html.