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Iran attacks Saudi Arabia

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On 14 September, drones and/or missiles hit the Abqaiq processing facility in Saudi Arabia, the world's largest oil processing plant. In addition, fires engulfed the Khurais oil field after it was also hit. While there is uncertainty about where the attack came from, it is widely agreed that Iran was behind it. Iran, whose economy is suffering badly from the effects of sanctions as well as massive mismanagement, has used proxies in Iraq, Syria, Lebanon and Yemen against its enemies: Saudi Arabia, Israel and the US. The attacks on Saudi Arabia are among the most dramatic and economically significant in this war.

Direct production losses resulting from these attacks have been estimated at between five and six million barrels a day (mb/d), worth between \$250 and \$300 million a day, or \$7.5 billion and \$9 billion a month. This represents 50 percent or more of Saudi production. (See Table 1) It is not clear how long it will take the national oil company, Aramco, to repair the damage: certainly weeks, possibly months. Nevertheless, the Saudi government has since promised to restore production levels to near average by the end of September. The attack caused international oil prices to jump initially by almost 20 percent before falling back to a level 10 percent higher than they had been before the attack. Saudi Arabia accounts for 10 percent of world production, and as a result five percent of world supply has been withdrawn. Saudi Arabia has said that it can cover the shortfall from its stocks but it has reduced its crude oil stocks to the lowest levels in 10 years. The US also indicated that it would use its strategic oil reserve to maintain stability in international oil markets if necessary.

The indirect effect may include a delay in the sale of shares in the national oil company, Saudi Arabian Oil Company (Aramco). Saudi Arabian officials are

considering delaying Aramco's initial public offering (IPO). The value of the IPO was valued at \$2 trillion, but it may now be worth \$1.5 billion. Aramco has been preparing for a two-stage IPO, in which it had hoped initially sell a small number of shares to investors on the Saudi stock exchange and then list shares internationally.³ The listing has long been dogged by questions over valuation and the venue for an international stock market debut. These attacks present Aramco with a much bigger hurdle in its attempt to go public.⁴

Since 2016, Crown Prince Mohammed bin Salman has been trying to implement the ambitious Vision 2030, designed to promote economic diversification and reduced reliance on oil, a more business-friendly and investor-friendly environment, bureaucratic reforms including privatization, and transformation of the population's "youth bulge" into an economic asset. One of the centerpieces of the move away from oil was the planned public offering of five percent of ARAMCO, and turning the remaining 95 percent into the world's largest sovereign wealth fund.⁵

The attack was the first challenge for Prince Abdulaziz bin Salman who, a week before the attacks, was appointed oil minister. He is a son of King Salman, and an older half-brother of Crown Prince Mohammed bin Salman and the first member of the royal family to be appointed to this office. He replaced Khalid al-Falih, who was widely respected in the industry and by the markets. Al Falih had persuaded Russia to agree to production cuts that helped prop up prices since 2017. The prince inherits from Falih the chairmanship of the OPEC -Russia committee to monitor oil markets between biannual OPEC meetings. Unlike his predecessor, he has not been made chairman of Saudi Aramco, the world's largest oil producer.⁶

The rise in oil prices, if maintained, will have a deflationary effect on the world economy that is currently experiencing a down-turn, made worse by the current tensions over trade between China and the US. Although the US has become the world's largest oil producer, it remains exposed to international oil market trends. This is because it continues to import petroleum products and because it is affected by the state of the world economy.

The attack poses very serious problems for Saudi Arabia's security. The kingdom spent about \$68 billion on its armed forces in 2018 and has, for many years had one of the largest defense budgets in the world. Despite this it had no means of defense against these and other attacks. Saudi Arabia is now very exposed, as it may prove hard to thwart new oil-related attacks by Iran and its proxies. It is far from clear if preventative military measures by a U.S.-led coalition against Iranian missile batteries would be effective. Iranian proxies and Iranian military installations are located along the Saudi border with Iraq and Yemen. Distances are short and oil installations of the Arab Gulf states could be threatened if conflict breaks out. Identifying and eliminating major threats from missiles, armed drones, and cyber-attacks to oil facilities may also prove difficult.⁷

This is not the first Iranian attack against Saudi Arabia. In 2012, an Iranian cyberattack on Aramco damaged thousands of computers; at the time, it was considered to be one of the most extensive hacks of a single business anywhere. The so-called Shamoon virus forced Aramco to turn off Aramco's internal Internet system for a week. Since then, the kingdom has faced sporadic cyberattacks on its oil facilities. In January, 2017, a cyber assault at the National Industrialization Company, a privately owned Saudi petrochemical company, wiped the organization's hard drives clean. In August, 2017, a hacking operation on a Saudi petrochemical plant was reportedly designed to sabotage the facility and cause an explosion. Iran has also attacked and threatened US assets in the region. Earlier this year, Iranian-backed proxies disrupted international oil tankers in the Gulf, bombed an ExxonMobil operations center in Southern Iraq, targeted a key Saudi pipeline, and attacked a strategically important oil storage hub in the United Arab Emirates.

Iran, which has been largely excluded from international oil markets, feels that it has nothing to lose, hence its threats to tankers in the Gulf prior to this attack. It is suffering rapid inflation and very high levels of unemployment, especially among the young. The IMF has stated that Iran's GDP declined by 3.9 percent in 2018 and will fall by six percent in 2019. This represents an 11 percent fall in per capita income over two years. In 2018, inflation was just over 31 percent and in 2019 it is forecast at 37 percent. The forecasts for 2019 are much worse than those issued by the IMF in 2018. This is largely due to the re-imposition sanctions that resulted in oil exports falling from 2.3 mb/d in July 2018 to 0.4 mb/d in July 2019. In response to the attacks, the US plans to strengthen sanctions against Iran. 13

The unemployment rate, measured as the proportion of the jobless population of those above 10 years, stood at 12% in the last Iranian year March 2018-19, a 0.1% rise over the previous year. The total number of unemployed was 3,260,796. The unemployment rate for men was 10.4% while that for women was 18.9%. In early 2019 the unemployment rate among young Iranians reached 27 percent and percent among university graduates, over 40 percent.

Table 1, below, provides the background to the current situation in the oil market. In recent years, OPEC and Russia have tried to restrain production in order to raise prices. As the largest producer in the group, Saudi Arabia played a significant role in cutting output. Pressure from the US administration, slowing Chinese demand growth moderated this, and prices declined in early 2019. The other major factor behind the low level of prices is that fact in that recent years US production has risen so sharply. The table also shows how in 2018 Iranian production was constrained both due to mismanagement in the oil sector and because of the collapse of export markets as a result of sanctions.

Table 1: Oil prices, production and oil export revenues, 2010-2019

	OPEC Basket price (\$/barrel)	US production (mb/d)	Saudi Arabia production (mb/d)	Iran Production (mb/d)	Saudi Arabia Oil export revenues (\$ billion)	Iran Oil export revenues (\$ billion)
2010	77.45	5.5	8.2	3.5	215	72
2011	107.46	5.7	9.3	3.6	318	115
2012	109.45	6.5	9.8	3.8	338	102
2013	105.87	7.5	9.6	3.6	322	62
2014	96.29	8.8	9.7	3.1	285	54
2015	49.49	9.4	10.2	3.2	153	27
2016	40.76	8.8	10.5	3.7	136	41
2017	52.43	9.4	10.0	3.9	170	53
2018	69.78	11.0	10.3	3.5	194	60
Q1 2019	62.98	12.0	10.2	2.7	51*	8*
Q2 2019	67.89	12.2	9.8	2.4	51*	8*

Source: OPEC and US Energy Information Agency (EIA). Based on EIA Forecasts for first half of 2019

The attack underlines, once again, the danger of relying on Middle East oil. Iran is likely to suffer from attempts to reduce this reliance, if and when it reenters the international oil market. Rising tensions in the region will make foreigners even more wary of business dealings with Iran and this will add to the economic, social and political tension in the region.

The other outcome is that the US-Saudi relationship has come under greater stress. US policy towards Iran is far from clear. Washington said that it is ready to act and then put the onus on the Saudis. The Saudis would have to call, and pay, for military action. The implication is that the US does not want to respond.

Iran is playing a strong hand out of weakness if not desperation, but also because it believes that neither Saudi Arabia nor the US are willing to respond. Israel is the only country responding to what it sees are Iranian threats from Syria, Iraq and Lebanon, but Iran has now raised the ante to a very dangerous level.

¹ Rania El Gamal, Stephen Kalin, "Saudi Arabia to restore oil output fully by end of September: energy minister," Reuters, September 17, 2019.

² Mark DeCambre, "Why the Saudi oil attack is a 'big deal' that could be a 'game changer' in stock markets and crude prices," Marketwatch, September 16, 2019.

³ Summer Said, David Hodari, and Rory Jones. "Saudi Aramco's Path to the World's Largest IPO," The Wall Street Journal, September 10, 2019.

⁴ Summer Said, Rory Jones, and Benoit Faucon, "Saudi Oil Attacks to Be Felt From China to California," The Wall Street Journal, September 16, 2019.

⁵ Joseph Dubroff, "Saudi Arabia's Vision 2030 Economic Reforms in Light of Recently Assertive Foreign Policy Choices," Iqtisadi, (Vol. 8, No. 10) November 25, 2018.

⁶ Stanley Reed, "Job One for Saudis' New Energy Chief: Picking Up the Pieces," *The New York Times*, September 17, 2019.

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⁸ Reuters, "Saudi Arabia says cyber attack aimed to disrupt oil, gas flow," Market News, December 9, 2012.

⁹ Robin Wright. "In Saudi Arabia, World Oil Supplies Are in Flames," New Yorker, September 16, 2019; Nicole Perlroth and Clifford Krauss, "A Cyber Attack in Saudi Arabia Had a Deadly Goal. Experts Fear Another Try." The New York Times, March 15, 2018.

¹⁰ See note 7; Amy Jaffe, "Oil Sabotage Might Seem Like Small Potatoes, But Underlying Geopolitical Problems Are Not," Council on Foreign Relations, Blog, May 14, 2019; and Amy Jaffe, "Iran, the Strait of Hormuz, and Hard Power," Council on Foreign Relations, Blog, June 19, 2019.

¹¹ The International Monetary Fund, World Economic Report April 2019.

¹² International Energy Agency, "Oil Market Report," August 9, 2019.

¹³ Financial Tribune, "Iran: 3.2m Unemployed in Fiscal 2018-19," April 14, 2019.

¹⁴ Ian Talley and Vivian Salama, "How the Saudi Oil Attack Could Ripple Through the Global Economy," The Wall Street Journal, September 18, 2019.

¹⁵ Ahmad Alavi, "Iran's Official Figures Indicate Alarming Unemployment Rate Later This Year," Radio Farda, January 9, 2019.