Commercial Risks Entering the Iranian Market

Why Sanctions Make Investment in the Islamic Republic of Iran a High-Risk Proposition

Barak Seener

Jerusalem Center for Public Affairs

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Executive Summary

The Trump Administration's withdrawal on May 8, 2018, from the uncertainty accompanying the fate of the Joint Comprehensive Plan of Action (JCPOA) will cost the Iranian economy a heavy price. It has created wariness on the part of foreign investors, especially European investors, and prevented the Iranian market from significantly reaping the fruits of the deal. Prior to the withdrawal from the JCPOA, there were numerous preparations by foreign businesses and investors to enter the Iranian market, but only a marginal number of deals and investments materialized. Following the American withdrawal, major European companies began to move their business away from Iran and cut their trade with it. Even though the European Union is determined to stick to the deal, it will be very difficult for the EU to convince companies to prefer the Iranian market over the American market, once secondary sanctions are resumed. Russian and Chinese companies may try to fill the gap but may encounter difficulties. Although India has declared that it will abide only by UN sanctions, it appears that Indian companies will hesitate to ignore the American threat.

The Trump administration has created a "wind-down period" of at least 90 days for companies to minimize their damages and exit the Iranian market until sanctions are reimposed. The first batch of sanctions will be put back in place on August 6, 2018. These will include, among others, sanctions on the acquisition of U.S. dollar banknotes by Iran's government;

sanctions on Iran's trade in gold and other precious metals; sanctions on direct or indirect sale, supply, or transfer of aluminum, steel, coal, and graphite to Iran; and sanctions on Iran's automotive sector. There will also be a renewal of sanctions limiting the importation of rugs from Iran into the United States.

The second set of sanctions will be reinstated by November 4, 2018. These include, among others, sanctions on Iran's shipping sector; sanctions on Iran's petroleum exports; sanctions on the Central Bank of Iran, and broader sanctions on Iran's energy sector.

Sanctions on Iranian individuals that were lifted after the Iran deal will also be reinstated by November, and possibly earlier.

Since the JCPOA was implemented, non-nuclear sanctions have only increased and have been combined with financial restrictions, especially imposed by the United States and the Financial Action Task Force (FATF), preventing Iran from accessing the U.S. dollar. The inherent structural deficiencies of the centralized Iranian economy, which the Iranian Revolutionary Guards Corps (IRGC) has a stranglehold over, prevented Iran's rapid economic development that was anticipated following the agreement. This is despite Iran having better access to funds and the growth of its oil exports and revenues. These reasons, along with Iran's priority to fund its foreign adventures, have led foreign investors to consider the Iranian market increasingly unattractive.

The hope that the JCPOA would strengthen pragmatists within the regime and help them to promote reforms and improve the regime record on human rights failed to materialize. Similarly, the expectation that the JCPOA would lead to more moderate Iranian regional behavior was not met. In fact, the only real benefactors from the availability of new monetary resources coupled with the legitimacy granted by the deal to Iran to play a much greater role in the Middle East – mainly in Syria were the IRGC and especially their foreign activities arm – the Al-Quds Force.

This gap between expectations and reality is one of the major reasons for the wave of demonstrations and unrest that has emerged recently in Iran and led to the dramatic devaluation of the Iranian currency, the rial. Prior to President Trump's withdrawal from the JCPOA, Iran's economy was struggling with high unemployment – estimated at around 30 percent or higher among young people – and a debt-burdened banking system that may be close to insolvency. The Iranian rial has plunged against the U.S. dollar in recent months. The currency has lost more than 22 percent of its value over the past year, making imports more expensive. Naturally, the United States' reimposition of sanctions will make Iran's economic predicament more severe.

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So investing in Iran was not an attractive option even when the JCPOA was in place, but as President Trump moves forward against Iran, the U.S. secondary sanctions are going to make business with Iran unreasonable, and further exacerbate Iran's economic difficulties. This may lead to greater frustration and dissatisfaction among ordinary Iranians, cause more domestic unrest, and constrict Iran's ability to spread its influence in the Middle East.

This paper offers unique insights and surveys the risks and opportunities for foreign investors considering whether to enter the Iranian market.

Chapter 1

Sanctions

The Joint Comprehensive Plan of Action (JCPOA) declaratively was presented as a competent tool to prevent Iran from acquiring nuclear weapons by imposing a series of limitations on its nuclear activities in exchange for lifting nuclear-related sanctions while maintaining sanctions for terrorism, human rights abuses, and proliferation activities. Yet this plan paved the way for Iran to become a nuclear power. The JCPOA rolled back sanctions against the Iranian petroleum, petrochemical, oil, and natural gas sectors, and sought to restore financial ties to certain Iranian banks (including the Central Bank of Iran). The JCPOA achieved this through the suspension of the vast majority of U.S. extra-territorial sanctions imposed after 2012.

Before the JCPOA, nuclear sanctions were not only primary but secondary and tertiary sanctions that closed the U.S. market and financial sector to anyone dealing with Iran. The JCPOA lifted secondary sanctions on Iran, enabling foreign companies to engage with Iran. However, primary sanctions remained, preventing U.S. companies and their non-U.S affiliates from dealing with Iran. The difference between nuclear and non-nuclear sanctions is that the latter are limited measures taken against Iranian firms by preventing them from having bank accounts in the United States or dealing with U.S. subsidiaries, but they are not against Iran as a state. The non-nuclear sanctions are declaratory sanctions at best, as Iran does not keep assets in jurisdictions where primary sanctions exist.

As President Trump moves toward reimposing the nuclear secondary sanctions, it remains unclear whether Congress will place Iran under secondary sanctions for ballistic missiles development and other non-nuclear sanctions.

To protect the deal, the Obama administration created false distinctions by compartmentalizing different illicit activities. In the process, it undermined state laws and undercut branches of the U.S. government, such as the U.S. Treasury and the FATF, which consider the Iranian economy responsible for terrorist sponsorship that poses a risk to the international financial system.

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The JCPOA ignored Iranian violations in a bid to open up the Iranian economy to the international financial system and even potentially to the U.S. dollar. In the past, this led to a contradictory policy toward sanctioning the Iranian economy while lifting it on elements of the Islamic Revolutionary Guard Corps (IRGC), which dominates various industries and in turn funds terrorism. This placed businesses and investors in a precarious position, as the politicized nature of the nuclear deal causes its evolution and application to be unpredictable.

After the implementation of the JCPOA, Iran rapidly presented itself as an emerging market part of the Silk Route and a natural gateway between Europe and China. Iran is rich with natural resources and boasts a largely young, educated, and skilled population. The Iranian market appeared increasingly attractive to foreign investors as Iran aims to decentralize its economy with the goal of reducing national dependence on oil revenues. To this end, Iran created attractive tax and other fiscal and operational incentives aimed at drawing foreign capital into its various industries. When sanctions were lifted, dozens of MOUs (Memoranda of Understanding) were signed, and early contracts were awarded to potential investors. President Hassan Rouhani emphasized his economic reformist credentials to attract foreign investment. The French firm Total invested in Iran’s energy sector, European car makers identified the enormous potential for competing in Iran’s automobile market, and international hotel chains sought to build hotels to accommodate Iran's booming tourist industry. More than six million people visited Iran in the year ending March 2017, which was an increase of 50 percent on the previous year and three times the number in 2009.[1]

Access to the Iranian market, however, will be hampered as the Trump administration withdrew from the JCPOA and places further Iranian entities under sanctions. The Trump administration appeared conflicted toward the future of the JCPOA. At the United Nations, President Trump referred to the JCPOA as "one of the worst and most one-sided transactions" and "an embarrassment." In line with this sentiment, U.S. Ambassador to the United Nations Nikki Haley expressed that, "What I am saying is should he [President Trump] decide to decertify, he has grounds to stand on."[2] Similarly, the previous National Security Advisor Gen. H. R. McMaster, under President Trump, has stated that Iran "has already violated parts of the agreement" that are "under-enforced" and require "rigorous enforcement," as the agreement was not meant for "giving this regime cover to develop a nuclear capability."[3] McMaster expressed that, "the IAEA has identified and we've identified some of these breaches that Iran has then corrected."[4] However, the number of breaches showed that "they're not just walking up to the line on the agreement. They're crossing the line at times."

In contrast, Defense Secretary James Mattis placed pressure on President Trump to remain in the JCPOA in his testimony before the Senate Armed Services Committee, when he said: "At this point, absent indications to the contrary, it [the JCPOA] is something the president should consider staying in."[5] Chairman of the Joint Chiefs of Staffs Marine Gen. Joseph Dunford testified to the same committee that Iran "is not in material breach" of the JCPOA and that the agreement has "delayed the development of a nuclear capability by Iran."[6] These different voices within the Trump administration created the sense of uncertainty for foreign investors.

The Trump Administration's Approach to the JCPOA

On October 13, 2017, President Trump announced his refusal to re-certify the JCPOA based on the Iran Nuclear Review Act (INARA) and passed it onto Congress for a 60-day review on the grounds that the JCPOA is not consistent with U.S. national security interests. This was also in line with the Corker-Cotton initiative that applied new terms onto the JCPOA, enabling Congress to oversee the implementation of the JCPOA and snap nuclear sanctions back on Iran if it manufactures, deploys, or tests warhead-capable intercontinental ballistic missiles. President Trump supported the Corker-Cotton initiative and threatened to unilaterally terminate the nuclear deal if Congress fails to act. Both the decertification of the JCPOA and the Corker-Cotton initiative granted the Republican-majority in Congress the option to "snap back" the pre-2016 U.S. sanctions on Iran with a simple majority in both chambers within 60 days.

The U.S. Congress failed to respond to this challenge on January 12, 2018, leading President Trump to waive economic sanctions for 120 days for a final time and place the onus on the European Union by granting it "a last chance" to fix "terrible flaws" in the JCPOA. The Trump administration demanded that Iran allow "immediate inspections at all sites requested by international inspectors and for the 'sunset provisions' imposing limits on Iran's nuclear program never to expire."[7]

Against the backdrop of Iranian protests that began in Mashad on December 28, 2017, the United States connected human rights pursuant to Executive Orders (E.O.) 13553 and 13606, with the development of ballistic missiles and nuclear proliferation, pursuant to Executive Orders 13382, and the suppression of freedom of expression pursuant to Executive Order 13628. To this end, the Office of Foreign Assets Control (OFAC) "designated 14 individuals and entities in connection with serious human rights abuses and censorship in Iran, and support to designated Iranian weapons proliferators."[8] Individuals sanctioned included the head of Iran's judicial system – Sadeq Amoli Larijani, the Rajaee Shahr Prison, and its director Gholam Reza Ziaei, pursuant to U.S. Executive Order 13553, which targets human rights abuses by the Iranian government.

In response to President Trump labeling the JCPOA as one of the worst deals in history, Iranian President Hassan Rouhani, in a speech to Tehran's Islamic Consultative Assembly, threatened to back out of the JCPOA and revive Iran's nuclear program within hours if the United States continues to pile on sanctions.

The Trump administration's disdain for the JCPOA was evident when U.S. officials told allies that they should be prepared to join in reopening negotiations with Iran or expect that the United States would abandon the JCPOA. The reason for this is the JCPOA's sunset provisions, which end some of the international oversight in 15 years and over time diminish restrictions of Iran's nuclear program, enabling Iran to achieve an industrial-sized nuclear program, with near-zero nuclear breakout capability. This grants Iran a much easier covert sneak-out capability with an Intercontinental Ballistic Missile (ICBM), with a powerful economy fortified against the West's ability to use sanctions, and with increased regional hegemony. The deal temporarily pushed the Iranians further in terms of breakout, but over the medium term, Iran is going to emerge with everything it wants by faithfully complying with the deal. Former Secretary of State Rex Tillerson said, "The JCPOA fails to achieve the objective of a non-nuclear Iran. It only delays their goal of becoming a nuclear state."[9] While on the campaign trail, President Trump said that the JCPOA was the "worst deal ever negotiated."

The Trump administration's strategic reorientation away from Shiite Iran and toward the Sunni states and Israel due to the heightened threat that Iran poses contributed to the United States' decision to enforce secondary sanctions and penalize foreign companies that conduct business with Iran.

The issuance of further sanctions or stopping to waiver sanctions may lead to Iran abandoning the JCPOA. The U.S. State Department maintained the position that was complying with the JCPOA but was "unquestionably in default of the spirit" of the agreement. Rather than focus purely on the nuclear ambitions, the "spirit" referred to Iran serving as a destabilizing regional force in the Middle East via its terrorist proxies, along with its testing of ballistic missiles and human rights abuses.

Germany's domestic intelligence agency, the BfV, reported, "It is important to note that Iran continues to pursue an ambitious rocket and missile technology program which is not affected by the sanctions relief."[10] German intelligence reported[11] that Iran, with the aid of a Chinese company, is targeting German companies in its bid to advance its missile program. The report asserted that Iran "is actively seeking products and scientific know-how for the field of developing weapons of mass destruction as well as missile technology." Such products include "complex metal-producing machines." Germany's Federal Office for the Protection of the Constitution (BfV), found the JCPOA resulted in Iran maintaining the same level of attempts to gain technology for missiles capable of carrying warheads.[12] A report from the State of Hamburg stated that since the signing of the JCPOA, "there is no evidence of a complete about-face in Iran's atomic policies in 2016… Iran sought missile carrier technology necessary for its rocket program." The report noted that three German citizens were charged for delivering 51 special valves to an Iranian company that could be used by the Arak heavy water reactor, which is sanctioned to "develop plutonium for nuclear weapons."[13] On the proliferation of atomic, biological, and chemical weapons, the second report from Baden-Württemberg's state intelligence agency report states: "Regardless of the number of national and international sanctions and embargoes, countries like Iran, Pakistan, and North Korea are making efforts to optimize corresponding technology." This refers to, "products and scientific know-how for the field of developing weapons of mass destruction as well [as] missile technology."[14]

In June 2017, a separate intelligence report said that in 2016, "German companies located in Rhineland-Palatinate were contacted for illegal procurement attempts by [Pakistan, North Korea, and Iran]. The procurement attempts involved goods that were subject to authorization and approval on account of legal export restrictions and UN embargoes. These goods, for example, could be used for a state's nuclear and missile programs." An intelligence report from North Rhine-Westphalia[15] covering 2016 said it had detected 32 attempts to buy technology that were probably or definitely ballistic missile program or proliferation-related. This was a reduction from 2015 of 141 attempts to procure technology for Iran's missile program. Iran used a variety of front companies to acquire items,[16] often sending goods through Turkey, the United Arab Emirates, and China.

The German state of Hessen produced an intelligence report asserting that Iran, Pakistan, North Korea, and Sudan use research exchanges and "guest academics" for illegal activities related to nuclear and other weapons programs. "An example of this type of activity occurred in the sector of electronic technology in connection with the implementation of the enrichment of uranium."[17] An intelligence report, from the state of Saxony-Anhalt, said Iran works "unabated" on its missile program.[18]

Impact of Lifting Sanctions on the IRGC

Economic forecasts on the impact of sanctions relief on the Iranian economy before the announcement of the JCPOA was that Iran's economic growth would likely stabilize around 2.6 percent in FY2015/16 and then accelerate to about 4 percent in FY2016/17. In the second half of the decade, Iran's economic growth would likely average 3.5-4 percent.[19] Yet ironically, the JCPOA's economic rehabilitation of Iran contributed to its vulnerability. In the early 1990s, Iran's rapid growth in imports led to inflation as well as the regime's struggle to stay current on a quickly expanding foreign debt burden. There was risk for this to be repeated in the aftermath of a huge injection of new capital into Iran, preventing foreign investors from entering the Iranian market too quickly.[20]

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This effect will have a direct impact upon the IRGC,[21] which has permeated the entire Iranian economy through a complex array of companies, banks, investment vehicles, and pension funds. The IRGC dominates entire economic sectors, creating an enormous risk for foreign companies and investors as the JCPOA lifts sanctions from entire sectors dominated by the IRGC, while added terrorist designations and sanctions simultaneously target the entire IRGC. The IRGC's annual turnover is $10-$12 billion. This amounts to one-sixth of Iran's GDP. Senator Bob Corker, chair of the Senate Foreign Relations Committee, asserted, "They're [The IRGC] going to be the number one beneficiary of the sanctions lifting." Mohammad Reza Naqdi, head of the Iranian Armed Forces' Logistics Industrial Research

Center, and Ghalam Hossein Nozari, the deputy minister for oil, have both expressed that sanctions could be an opportunity to increase IRGC activity in the Iranian economy.

The IRGC stands to benefit irrespective of sanctions increasing or decreasing due to its monopoly of the Iranian economy as it dominates various sectors including oil and gas, petrochemicals, construction, and telecommunications, placing foreign businesses at risk.[22] If sanctions would have receded, the IRGC would have benefited from "lower insurance, shipping, and commission costs with the banks, and that will also have enabled the Guards to freely import spare parts, equipment, and technology from international companies." An example of this is the Bahman Group,[23] which the IRGC owns via its subsidiaries, as well as the Iran Tractor Manufacturing Group, which will both benefit from sanctions relief on the automotive industry. In contrast,[24] when foreign companies exited the Iranian market due to the application of sanctions, the IRGC was swift to take over most development phases in the South Pars offshore gas field.[25]

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The process of awarding contracts and regulatory changes is highly politicized in Iran. One major sector that stood to benefit from the unraveling of sanctions was construction, which is dominated by the IRGC. As foreign businesses entered the Iranian market, there was greater demand to modernize Iran's infrastructure. The IRGC conglomerate, Khatam-al Anbiya (KAA), which was sanctioned by the United States in 2007 as a proliferator of weapons of mass destruction,[26] would have been in a central position to receive public tenders for large projects. Construction can have civilian or military applications. In 2008, then-Deputy Director Abdolreza Abedzadeh said that 70 percent of KAA's business was military-related.[27] KAA will be responsible for the construction of aboveground and underground missile testing, production, storage, and launch facilities. The construction equipment required to build underground military facilities is the same as those needed for the Tehran metro line project and other KAA infrastructure projects.[28]

KAA and other large IRGC companies were favored by the bidding process. This resulted in them being the beneficiaries of large contracts. KAA is large enough to underbid private contractors. It can receive capital and hard currency through its connections to publicly owned banks for work that is completed at a relatively low standard. Rather than transfer the funds directly to terrorist proxies, the money could flow through the IRGC's construction arm, which can directly finance terrorism.[29] According to the U.S. Treasury, the IRGC uses KAA to "generate income and funds its operations." The IRGC could also receive access to fungible assets by converting its unfrozen assets and revenue in a foreign currency enabling IRGC officials and IRGC linked entities with the ability to move its money anywhere in the world.[30] This would prevent the efficacy of future snap-back sanctions.

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The $100 billion in Iranian overseas reserves that have been released to Iran have caused Iran's defense budget to increase by 145 percent. This has facilitated a process of military modernization, enabling the Iranian regime to conduct arms deals with Russia and China. Iran used part of the Obama administration's $1.7 billion cash payment over the course of January and February 2016 to financially sponsor terrorism, extend its sphere of influence across the Middle East by increasing its financial support to Hamas and Hizbullah, and coordinate more than 50,000 pro-regime foreign fighters from Iraq, Yemen, Lebanon, and Afghanistan. Chairman of the Joint Chiefs Gen. Joseph Dunford asserted that the more access the Iranian military has to money, "the more effective they'll be in spreading malign influence."[31] Iran has dramatically increased its financial support to Hizbullah from $200 million a year to $800 million a year. Similarly, Iran is providing Hamas $60–70 million per year. Gen. Joseph

Votel, commander of U.S. Central Command,[32] said that Iran has become "more aggressive in the days since the [nuclear] agreement."[33]

The case is often made that an improvement in Iran's economy due to sanctions relief would lead to the reduction of the threats to the political survival of the regime. Yet, due to religious and ideological reasons, the risk existed that IRGC would prevent companies entering the Iranian market and competing with it, not only for economic interests but to insulate the Islamic Republic from the Western culture that would accompany increasing foreign companies doing business in Iran. As Iran does not have a free market, the "Principlists" [right-wing conservatives, supporters of clerical rule] would attempt to calibrate entry of Western companies to facilitate IRGC efforts rather than compete with them. In December 2015, in an attempt to protect IRGC interests, Ebadollah Abdollahi, commander of the KAA, claimed that there was no need to involve foreign companies in oil and gas construction projects except for finance purposes. The IRGC claims to be capable of independently developing large infrastructure projects and that they do not require foreign investments.[34]

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Therefore, when Iran's oil ministry wanted to launch an oil project in December 2015 to attract foreign investment, Principlists demanded that the conference in London be closed down as they felt that the Majlis [Islamic Consultative Assembly or parliament] ought to have greater scrutiny over buy-back agreements. Rostam Qasemi, a former oil minister and senior IRGC commander, forced the cancellation of Iran's February oil conference in London. The IRGC claimed that the (Iranian Petroleum Contract) (IPC) would damage the country by shutting domestic contractors out of upstream projects and undermining Iran's sovereignty with 20-year contract terms.[35] To assuage these concerns, the Oil Ministry asserted that foreign companies interested in investing in Iran's oil and gas fields would need to partner with local exploration and production companies.[36] Among an initial list of eight firms[37] is IRGC conglomerate KAA, as well as previously sanctioned entities, including a subsidiary of the National

Iranian Oil Company (NIOC), the Industrial Development and Renovation Organization, and the SETAD, also known as "the Executive Headquarters of Imam's Directive" or EIKO, a government body under direct control of the Supreme Leader of Iran tasked in these activities.

Principlists opposed the $4.8 billion oil deal signed on July 3, 2017, between Total and Tehran, claiming that the contract undermined the resistance economy by ignoring domestic companies and doesn't take into account their abilities to handle various aspects of the projects. Gen. Ebadollah Abdollahi, commander of the IRGC contractor subsidiary KAA Construction Headquarters, said, "The first part of the contract [involves] 30 wells and two platforms," and that the "big 400-feet derricks at its disposal that can drill 11 kilometers… might have to sit idle."

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Principlists also claim that Iran loses out from the deal and that Total and other Western companies would have been the main beneficiaries. Their claim that the deal violated Iran's constitution and went against the wishes of the Supreme Leader is an example of how foreign companies are at risk as their assets can be appropriated at a political whim. Foreign companies may also suffer reputational risk as Principlist economist Masoud Darakhshan branded Total a "morally corrupt" company. This was affirmed by the *Raja News* website, which published a trove of documents demonstrating how in the course of a previous oil deal, Total had bribed Iranian officials to the tune of $60 million.

In contrast to Principlists, pragmatists such as oil minister Bijan Zangeneh praised the deal as a new opportunity for Iran to build the economy and Iran's oil and gas industry. Sources close to the Rouhani administration,[38] including pragmatists such as Ali Shams Ardakani, Deputy Chairman of Tehran's Chamber of Commerce, who is closely aligned with Rouhani, deny the claim that domestic companies could have done the work by themselves. Therefore, Iranian firms could benefit by joint ventures with foreign companies such as Total by enhancing the technological and management capacities of Iranian companies. Nevertheless, the Oil Ministry's Ali Kardor asserted that the contract would give more than 50 percent of the implementation work to domestic contractors. Zangeneh supported these comments, insisting that Iranian companies would be responsible for building platforms and laying down the pipes. Ali Kardor expressed, "We suggested 12 qualified companies to Total. Total chose PetroPars as its Iranian partner," a subsidiary of Naftiran Intertrade Company (NICO), which, in turn, is fully owned by the National Iranian Oil Company (NIOC). Working under the Iran Petroleum Contract (IPC) model, PetroPars is one of the eight sub-contractors permitted to work with foreign companies to develop oil and gas.

Principlists were critical of the contract that granted Total 50.1 percent of the shares. Furthermore, Principlists claimed foreign companies would receive between 50 to 70 percent of the profits. This was contradicted by Zangeneh, who said that Iran's High Economic Council estimated, based on current prices during the project's predicted 20-year lifetime, Iran would receive $84 billion. Total, on the other hand, would make around $12 billion —"meaning less than 15 percent." It is only possible to determine what Iran and Total's respective shares would have been when they concluded how much oil and gas can be recovered. This is contingent upon the technology, as well as project and production management, and how much will cover investments and expenses. In a similar vein, the IRGC feared the return of foreign automobile firms to the Iranian market, as it would undermine the local production of new car lines by foreign companies. Numerous automotive deals were aimed at joint production rather than car imports.[39] To this end, the IRGC could have taken measures preventing the return of foreign automobile companies to Iran.

Arbitrary and Contradictory Applications of Sanctions

The JCPOA attempted to compartmentalize connected matters to insulate the nuclear issue. This led to a contradictory, incoherent, and arbitrary application of sanctions. While the Iranian economy is sanctioned due to the control of the IRGC, some companies that have IRGC links or facilitated their nuclear and ballistic missile program along with supporting the Assad regime were delisted from sanctions. These included companies[40] and subsidiaries[41] controlled by the Supreme Leader, most of Iran's aviation industry, state-owned shipping firms, and companies where the IRGC has a significant ownership interest.[42]

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By focusing only on Iran's nuclear activities, the JCPOA delisted many IRGC businesses that were involved in the procurement of material for Iran's nuclear and ballistic missile programs. The European Union will go further by lifting all of its economic sanctions on Iran, which were all established only on nuclear grounds, including on the Quds Force commander Gen. Qassem Soleimani. In testimony to the Senate Foreign Relations Committee, Mark Dubowitz noted that sanctions were to have been unravelled as "the JCPOA stipulates that of the nearly 650 entities that have been designated by the U.S. Treasury for their role in Iran's nuclear and missile programs or for being owned or controlled by the government of Iran, more than 67 percent will be delisted from Treasury's blacklists within 6-12 months. This includes the CBI and most major Iranian financial institutions, which are controlled by the IRGC. After eight years, only 25 percent of the entities that have been designated by Treasury over the past decade will remain sanctioned." In all, about 90[43] current and former IRGC officials, entities such as the IRGC itself, and firms that conducted transactions for the Guards were to be taken off nuclear sanctions lists either by the United States, the European Union, or the United Nations.

Sanctions and Iran

The Obama administration claimed that it was removing sanctions for entities complying with sanctions of the nuclear program and not sanctions relating to terrorism, despite perpetrators of both being related. KAA, with links to the IRGC, has been involved in a range of terrorist activities, yet it was only designated for proliferation and human rights abuse. On October 13, 2017, OFAC designated the IRGC for its activities in support of the IRGC-Quds Force (IRGC-QF), for providing support to some terrorist groups, including Hizbullah and Hamas, as well as to the Taliban.[44] Treasury Secretary Steven T. Mnuchin stated, "We are designating the IRGC for providing support to the IRGC-QF, the key Iranian entity enabling Syrian President Bashar al-Assad's relentless campaign of brutal violence against his own people, as well as the lethal activities of Hizbullah, Hamas, and other terrorist groups. We urge the private sector to recognize that the IRGC permeates much of the Iranian economy, and those who transact with IRGC-controlled companies do so at great risk."[45]

The Obama administration arbitrarily created different rubrics to penalize the Iranian regime in a targeted manner, while selectively placing the IRGC in categories such as ballistic missiles, nuclear proliferation, terrorism, and human rights violations. The Trump administration is cognizant of the spillover between these rubrics.

This linkage, in the past, has created business risk, as there has been insufficient designation for the KAA, causing most banks to refuse to deal with them.

Former Treasury Under-Secretary Adam Szubin stated, "In the time since we finalized the JCPOA, Iran has complied with all of the nuclear-related commitments made by its negotiators."[46] Yet Iran remains problematic in regard to its terrorist sponsorship and human rights violations.[47] The Obama administration had asserted "the JCPOA did not affect our non-nuclear sanctions." To this end, the Obama administration arbitrarily created different rubrics to penalize the Iranian regime in a targeted manner, while selectively placing the IRGC in categories such as ballistic missiles, nuclear proliferation, terrorism, and human rights violations. The Trump administration is cognizant of the spillover between these rubrics. A company engaged in developing ballistic missiles may also engage in the nuclear program.

The Obama administration claimed that the integrity of sanctions remained intact and the then-unraveling of certain sanctions was just a tactical loosening, focusing only on the nuclear issue, and thus the JCPOA siloes or isolates the policy issues. The problem remains that Iran's nuclear aspiration and sponsorship of terrorism is part of a continuum of the regime's nature. In this regard, the JCPOA was similar to previous U.S. arms control agreements that sought to compartmentalize issues in a spurious manner that differentiates between types of behavior rather than recognizing that threats emanate from the very essence of the regime. As opposed to the United States' siloed approach to sanctions,[48] Iran has mastered the art of making asymmetrical demands to advance an asymmetrical strategy. If demands are made for Iran to comply with sanctions for terrorism, Iran will proceed to link it to another area. Using this strategy, Iran managed to get sanctions lifted against Soleimani's terrorism, which it related to the nuclear deal. As a result, Iran managed to punch through a spectrum of sanctions even if they have been designated for other illicit activities other than the nuclear issue. The signal[49] that financial institutions and international businesses received was that President Obama was not enthusiastic to implement sanctions and wanted Iran to remain compliant with the deal.[50]

Compartmentalizing sanctions caused secondary sanctions to collapse, as they cannot be imposed. The fact that the Obama administration allowed Boeing to sell airplane parts to Iran set a precedent for the broader unraveling of sanctions. Laws on the books that sanctioned Iran conflicted with reality on the ground, as the U.S. Congress refused to take the lead in foreign policy to enforce sanctions, due to its culture of deference to the White House. Thus, Congress shapes foreign policy but does not create it.[51]

All the while, sanctions leveled against the IRGC in Europe have unraveled all at once. The United Service has an eight-year moratorium before sanctions expire on the bulk of IRGC targets. UN sanctions and SWIFT sanctions have disappeared, allowing Iranian banks to resume cross-border transactions with foreign banks.[52]

As opposed to the Obama administration, which isolated the nuclear issue from terrorism, human rights abuse, and the development of ballistic missile program, the Trump administration recognizes the interconnectedness of these issues. On April 19, 2017,[53] former Secretary of State Tillerson expressed, "A comprehensive Iran policy requires that we address all of the threats posed by Iran, and it is clear there are many… Whether it be assassination attempts, support of weapons of mass destruction, deploying destabilizing militias, Iran spends its treasure and time disrupting peace." The JCPOA, "…completely ignored all of the other serious threats that Iran poses."[54]

Opening Up the Iranian Economy

The JCPOA undermined the U.S. Treasury's credibility as an enforcer of sanctions. Treasury officials considered former Secretary of State Kerry's encouraging European corporations and banks to enter Iran as undermining sanctions and creating risk for businesses. This lobbying for Iran on the part of the State Department[55] not only contradicted sanctions but went above and beyond the JCPOA. In opposition to the State Department,[56] the Treasury Department, in a letter to Senator Marco Rubio expressed, "Iran is a high-risk jurisdiction and has been designated as such by the international standard-setting body on anti-money laundering and counterterrorist financing." The letter continued,[57] "Until Iran has addressed other concerns we have with its behavior outside the nuclear file, the U.S. financial system (including the branches of U.S. financial institutions abroad) will remain off-limits to Iran and U.S. persons will not [be] able to provide financial services or products to Iran without explicit authorization."[58]

However, under pressure from the Obama administration, the U.S. Treasury declared, without justifying, that the JCPOA "does not impact the November 2011 finding by the Department of the Treasury's Financial Crimes Enforcement Network (FinCEN) that Iran is a Jurisdiction of Primary Money Laundering Concern."[59] Similarly, the 2014 State Department report on terrorism advanced that Iran's sponsorship of terrorism remains "undiminished." To this end, U.S. Treasury sanctions focused on Iran's support for terrorism and human rights abuses. The Treasury placed secondary sanctions upon IRGC companies outside of U.S. jurisdiction. More than 200 companies and individuals linked to Iran remain designated over illicit conduct. However, by compartmentalizing IRGC activities via secondary sanctions, it was possible for the Obama administration to create openings in the Iranian economy and delist other IRGC companies by claiming the nuclear program was no longer illicit. Ambiguity was created for businesses seeking to engage these entities, which as a result, led to increased risk.

By opening up sectors of the Iranian economy, which is dominated by the IRGC, to the international financial system, the JCPOA went against the grain of the U.S. Treasury, invoking Section 311 of the PATRIOT Act that in November 2011 designated the entire "Islamic Republic of Iran as a jurisdiction of primary money laundering concern."

By opening up sectors of the Iranian economy, which is dominated by the IRGC, to the international financial system, the JCPOA went against the grain of the U.S. Treasury, invoking Section 311 of the PATRIOT Act that in November 2011 designated the entire "Islamic Republic of Iran[60] as a jurisdiction of primary money laundering concern."[61] The U.S. Treasury cited Iran's "support for terrorism," "pursuit of weapons of mass destruction," including its financing of nuclear and ballistic missile programs, and the use of "deceptive financial practices to disguise illicit conduct and evade sanctions." As a result, the U.S. Treasury[62] targeted Iran's Central Bank (CBI), and made it clear that the entire country's financial system posed "illicit finance risks for the global financial system." Yet the JCPOA removed the CBI from Treasury sanctions,[63] permitting foreign financial institutions to transact with it provided that no party to the transaction remains under U.S. sanctions, that the transaction did not impinge upon the U.S. financial system, and that the trade that takes place is permissible under the JCPOA. This executive action was extremely arbitrary[64] and could be reversed by a future administration, which the Trump administration did. The JCPOA is not a treaty, as the White House lacks the authority to override Congressional law and permanently lift sanctions.[65] Therefore, if a foreign financial institution wants to engage with the CBI, under the previous conditions of reprieve, it was high risk.

The JCPOA contravened other laws such as the Iran Threat Reduction and Syria Human Rights Act, signed into law by President Obama in 2012. The Iran Threat Reduction and Syria Human Rights Act specifies that foreign subsidiaries of U.S. firms could do business with Iran only if Iran is removed from the State Department's list of terror sponsors and the President certifies that Iran has permanently ceased the pursuit of weapons of mass destruction. Therefore, as opposed to the JCPOA, the Iran Threat Reduction and Syria Human Rights Act does not make an artificial distinction between nuclear proliferation and terrorism but merges the two.

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The compartmentalization of sanctions naturally entailed overlooking Iran's sponsorship of terrorism, development of ballistic missiles, and human rights violations. The Obama administration refused to impose terrorism sanctions against the IRGC, by either designating it under Executive Order 13224 or by declaring the entity to be a Foreign Terrorist Organization. Similarly, the JCPOA undermined the Iran, North Korea, and Syria Nonproliferation Act (INKSNA), which links Iran's ballistic missile program to the nuclear program and mandates that the State Department must apply sanctions if those countries attempt to procure missile technologies or weapons of mass destruction. The Government Accountability Office (GAO) report asserted that the State Department only sent the 2011 report in December 2014 and as such, failed to comply with INKSNA's requirement that it report to Congress every six months on whether Iran, North Korea, or Syria attempted to acquire these materials.[66]

Just as it is unrealistic to isolate Iran's illicit activities, it is impossible to control to which end unfrozen assets will be used by the Iranian regime.

While the JCPOA made a distinction between the nuclear program and sponsorship of terrorism, the unfreezing of Iranian assets undoubtedly funded terrorism, which served to undermine the distinct rubrics the JCPOA had created. Former Secretary Kerry admitted,

> I think that some of it will end up in the hands of the IRGC or other entities, some of which are labeled terrorists. You know, to some degree, I'm not going to sit here and tell you that every component of that can be prevented. But I can tell you this: Right now, we are not seeing the early delivery of funds going to that kind of endeavor at this point in time.[67]

Foreign Policy Tensions with U.S. State Laws

Another hurdle the Obama administration had to overcome was that the JCPOA contradicted previous local state laws. The U.S. federal government, at odds with U.S. state governments, increased the risk for businesses eyeing the Iranian market. On April 8, 2016, the State Department's lead coordinator for the Iran nuclear implementation, Stephen Mull, sent letters to the governors of all 50 states, as well as some local officials, requesting them to reconsider any laws on the books that called for divesting state funds, such as pensions, from businesses interacting with Iran's economy, or laws that would deny contracts to companies that do business with Iran. Thirty states and the District of Columbia have some form of Iran divestment legislation or policy.[68] Starting about a decade ago, individual states began passing legislation requiring state pension funds to divest from companies that engaged in specific sanctionable activities and made investments in the Iranian energy sector. As opposed to the JCPOA's compartmentalization of sanctions, many state laws linked the sanctions of Iran's pursuit of weapons of mass destruction with its support for terrorism.[69] Many of these measures contain termination clauses linked to Iran's removal from the state sponsors of terrorism list or similar certifications that Iran is no longer engaged in support of international terrorism. The JCPOA, in

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paragraph 25, commited the federal government to, "actively encourage officials at the state or local level to take into account the changes in the U.S. policy reflected in the lifting of sanctions under this JCPOA and to refrain from actions inconsistent with this change in policy." This contradicts the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010[70], among other measures, which affirms the authority of states to impose sanctions or divest from Iran if they wish to do so.[71]

Caught Between the United States and the European Union

U.S. and European interests on Iran have diverged and since its withdrawal from the JCPOA, it is unlikely that the Trump administration is willing to negotiate specific exemptions for European interests.

The German government broadcaster, *Deutsche Welle*, published an analysis-plus-opinion piece on its website that rejected two proposed U.S. approaches to altering the JCPOA – withdrawal and decertification. Its strategic calculus was that "Europe has no interest in any further upheaval in the Middle East. Cancellation of the nuclear deal could have the undesired effect of reviving other armament plans, including nuclear arms. It would also fan the flames of violence, and with it, the number of refugees. Without the nuclear deal, Iran would have no reason to restrain itself politically and could likely embark on an even more aggressive course. And were Iran to resume its nuclear program, this could awaken other regional states' interest in pursuing nuclear weapons. It would take years to put an end to such an arms race if indeed that were even possible. And that means, given the Iran nuclear deal, American and European interests are clearly diverging." In contrast, the Trump administration believes that the JCPOA enabled Iran to provide a nuclear umbrella to its terrorist proxies and destabilizing activities. The JCPOA's sunset clause would lead to a poly-nuclear Middle East, as Sunni states engage in a nuclear arms race with Iran.

The Trump administration and European Union did not closely coordinate sanctions policies. While the United States has imposed new sanctions on

Iranian firms over missile tests, the European Union failed to follow suit. Since the JCPOA was concluded, the value of trade between the EU and Iran has grown from $9.2 billion in 2015 to $25 billion in 2017.[72]

In the first quarter of 2017, Iran exported $3.38 billion worth of goods to the European Union. This was a six-fold rise compared with the preceding year's corresponding period. Germany, Italy, and South Korea plan to invest billions of dollars in developing solar energy in Iran. Trade between Iran and Germany climbed 26 percent in 2016 to $2.6 billion. Germany intends to increase this to $5 billion by 2018. Europe's energy commissioner accompanied more than 50 European firms in a business forum in Tehran, yet these firms[73] would not risk going beyond initial MOU's, as they feared being excluded from the U.S. market. Furthermore, it is unlikely that the European Union will seek to conduct a separate deal with Iran independently due to the size of the U.S. market. This prompted the French foreign ministry to express, "We need to adapt our national mechanisms and update European mechanisms" against U.S. extraterritorial sanctions. The European Union adopted Council Regulation 2271/96, also known as a blocking statute, in response to U.S. secondary sanctions on Cuba (and, to a lesser extent, Iran). This legislation could offer protection to EU companies currently engaged in Iran by not recognizing sanctions on EU territory and prohibiting EU individuals or companies from complying with U.S. secondary sanctions. Council Regulation 2271/96 also includes a clawback clause allowing for the recovery of any damages suffered as a result of secondary sanctions in EU courts. It is unlikely that this would be imposed as it would diplomatically place EU states directly at odds with the United States over its sovereign immunity.

To date there has been no enforcement of Council Regulation 2271/96: only limited actions have been taken because of the legislation.

To date there has been no enforcement of Council Regulation 2271/96: only limited actions have been taken because of the legislation. Yet the legislative implementation of Council Regulation 2271/96 by individual European states is a lengthy process that can incur risk as some states have not adopted any implementation legislation, while those that have do not have any consensus among them as to whether the regulation's stipulations that adopted measures be "effective, proportional, and dissuasive" constitute a criminal or administrative offense. Another mechanism that exists for the EU[74] to bypass U.S. sanctions against Iran, causing the suspension of the World Trade Organization (WTO) mandate, is the dispute settlement procedure that the European Union used against the United States under the auspices of the WTO. This led the United States and European Union to agree that certain provisions of the U.S. Helms-Burton Act would not affect third-country nationals seeking to engage Cuba. The European Union believes that a thaw in relations with Iran may contribute to ending the war in Syria and prevent more refugees from flowing into Europe. Yet, within the European Union's own ranks, there is a division between "old" and "new" Europe. "New Europe," including Hungary and Poland, support anti-Iranian measures, which are feared by "Old Europe." The EU's ability to advance blocking regulations will be further undermined as Theresa May, Emmanuel Macron, and Angela Merkel will each have to make independent decisions on whether to create a new Iran deal without the United States and in turn forfeit access into the U.S. financial market, or align itself with the Trump administration's withdrawal from the JCPOA.

Yet, within the European Union's own ranks, there is a division between "old" and "new" Europe.

Even during the Obama administration, it was a challenge for the United States and European Union to closely coordinate sanctions policies toward Iran.

The JCPOA has granted Iran greater access to European goods, due to it having facilitated imports from the European Union through a relaxation of the bloc's banking restrictions, which increased the authorization thresholds for "non-sanctioned trade" ten-fold, from €40,000 to €400,000. On October 18, 2015,[75] EU Council Regulation 1861 removed most of the nuclear sanctions targeting Iran's energy, mining, financial, and shipping sectors, enabling EU individuals, companies, and their overseas subsidiaries to transfer funds, open Iranian bank accounts, conduct joint ventures, and offer insurance and reinsurance to Iranian individuals. Nonetheless, European businesses are in a precarious position of navigating between both the U.S. and EU rules. EU firms are still compliant to many U.S. laws. If EU companies have U.S. personnel on their boards or they have branches of their company in the United States, they are still susceptible to U.S. sanctions.

Adam Szubin, then acting Under Secretary of Treasury for Terrorism and Financial Intelligence, misleadingly testified, "To be clear: when the JCPOA goes into effect, there will be no immediate relief from UN, EU, or U.S. sanctions." Yet[76] various sanctions were not homogenous and unraveled at different paces.

The U.S. list of sanctions is different from that of the European Union. This is a nightmare for banks, as HSBC in the United States has different rules from HSBC in London. Foreign firms will had to act with caution in opening ties with Iranian companies, even as EU sanctions unravel. EU and U.S. policies diverged at points, leaving some room for uncertainty, causing businesses to be caught in the crosshairs. In February 2016, Bank Mellat of Iran won a court case in London and is due $4 billion compensation for unlawful UK-imposed sanctions, as there was not sufficient evidence to show the bank's involvement in the country's nuclear program. This is an indication of the difference in mentality between the United States and Europe. There is not a common banking regulation for engaging with Iran.[77] If banks are subjected to complex sanctions rules, then a bank may not finance a company's deal or make a transfer.

The IRGC Cooperative Foundation, the IRGC investment arm, was designated by the U.S. Treasury as a proliferator of weapons of mass destruction. While the United States will not delist sanctions on the IRGC Cooperation Foundation, the European Union plans to delist it in eight years. The portfolio of IRGC Cooperative Foundation controls more than 20 percent of the value of the Tehran Stock Exchange.

The European Union will lift sanctions against IRGC-linked Bank Saderat Iran (BSI) in eight years. In contrast, the United States's approach to the JCPOA was that it would continue sanctioning BSI for providing financial services to the IRGC. Adam Szubin asserted, "A foreign bank that conducts or facilitates a significant financial transaction with Iran's Mahan Air, the IRGC-controlled construction firm KAA, or Bank Saderat will risk losing its access to the U.S. financial system, and this is not affected by the nuclear deal." On May 24, 2018, U.S. Department of the Treasury's Office of Foreign Assets Control (OFAC) designated nine individuals and entities procuring export-controlled, U.S.-origin goods for sanctioned Iranian airlines including Mahan Air, Caspian Air, Meraj Air, and Pouya Air. Treasury Secretary Steven T. Mnuchin said that "In so doing, they extend a lifeline to the IRGC-QF and enable the Iranian regime to transport weapons, fighters, and money to its proxies, including Hizbullah, and to prop up the brutal Assad regime."

The United States'[78] approach to the JCPOA was that it would continue to sanction the IRGC's construction arm KAA, controlling at least 812 affiliated companies worth billions of dollars and considered by the United States, "proliferators of WMD." The European Union will delist[79] most IRGC entities such as the elite Quds force, which carries out overseas operations, and Guards' air force and missile command in eight years' time. Yet these entities will remain then under U.S. sanction for "terrorism support activities" or as "proliferators of weapons of mass destruction."

While EU sanctions have been lifted, U.S. sanctions complicated international dealings with Iran. U.S. sanctions relief was for non-U.S. persons to conduct business with Iran's financial, banking, energy, petrochemical, shipping, shipbuilding, and automotive sectors. The problem arose for an international company with U.S. board members, a company listed on the U.S. stock exchange, an international company that has a partnership with a U.S. company or an international company with assets in the United States, which would be hindered from entering the Iranian market. Furthermore, for U.S. firms that sought to enter Iran, every impending project had to be confirmed by OFAC. Asian and Russian firms don't have any of the problems faced by western firms. Thus, firms seeking to enter the Iranian market have to not only contend with accessing the U.S. financial system but will also have to compete with Asian firms that have an advantage in being unhindered in pursuing contracts in Iran.

The Organic Nature of Illicit Activities

Identifying that it is impossible to compartmentalize Iran's illicit activities, the Trump administration has embraced a holistic and maximalist approach demanding that Iran end its "malign behaviors" in the Middle East in return for waiving all economic sanctions and re-establishing full diplomatic ties. On May 21, 2018, in his first major foreign policy speech, U.S. Secretary of State, Mike Pompeo, stated 12 demands that included that Iran withdraw from Syria and Yemen, halt uranium enrichment, admit the true scope of its former military dimensions of its nuclear program to the IAEA, cease supporting Middle East terrorist groups, including Houthis, Taliban, Hizbullah, Hamas and Palestinian Islamic Jihad, release U.S. and allied hostages and halt development of nuclear-capable missiles.[80]

In contrast, the Obama administration failed to adopt Iran's asymmetric strategy of linking its acceding to aspects of the JCPOA with broader issues that threaten international security. As a result, the Obama administration failed to recognize the organic interplay of Iran's illicit activities. Yet there is a natural spillover from the IRGC's economic and military endeavors.[81] There is little chance that IRGC- and the Supreme Leader's SETAD-related companies/entities will not return to their illicit activities, which would have prompted snapback sanctions in the future. The U.S. Treasury has repeatedly noted that the IRGC's economic empire "ultimately benefits the IRGC and its dangerous activities."[82] IRGC wealth offers the Guards a network of companies, enterprises, banks, offices, holdings, and joint ventures that can execute the regime's procurement efforts in its quest for advanced weaponry and sensitive technology. The U.S. Treasury declared,[83] "The IRGC continues to be a primary focus of U.S. and international sanctions against Iran because of the central role it plays in Iran's missile and nuclear programs, its support for terrorism, as well as its involvement in serious human rights abuses." The U.S. Treasury[84] has asserted the centrality of the KAA to IRGC operations, as the IRGC uses KAA to "generate income and funds its operations." Revenues from IRGC's economic activities fund military activities,[85] financially support Iran's terrorist proxies, and finance

There is a natural spillover from the IRGC's economic and military endeavors.

the IRGC's procurement and development of the nuclear and ballistic missile programs.

In early 2007, the U.S. Treasury under Executive Order 13382 designated 23 Iranian and Iranian-allied foreign financial institutions as "proliferation supporting entities" for supporting Iran's nuclear and ballistic missile programs. At least eight of these financial institutions also provided banking services to Iran's Islamic Revolutionary Guard Corps (IRGC), a group designated in 2007 for both terrorism and proliferation. The Treasury also sanctioned[86] Bank Saderat as a "terrorism-supporting entity" under Executive Order 13224 for facilitating fund transfers[87] to Hizbullah, Hamas, Palestinian Islamic Jihad, and other terrorist organizations. Bank Saderat has been used by the Iranian regime to channel funds to terrorist organizations, including Hizbullah, Hamas, PFLP-GC, and Palestinian Islamic Jihad. Jonathan Ruhe notes that Bank Saderat's illicit activities[88] have extended from financing terrorism to facilitating Iran's nuclear program. For this reason, Bank Saderat was designated[89] by the European Court of Justice in July 2010 for providing "financial services for entities procuring on behalf of Iran's nuclear and ballistic missile programs." Iran's bank (Melli)[90] has facilitated Iran's proliferation and terrorism by "providing 'banking services' to the IRGC and the Qods Force," as well as "banking services to entities involved in Iran's nuclear and ballistic missile programs" and has "facilitated numerous purchases of sensitive materials for Iran's nuclear and missile programs." Bank Melli has also transferred funds[91] from Iran to finance terrorist attacks in South America. Unfortunately, the JCPOA ignores the links between[92] terrorism and proliferation by delisting sanctions from Iranian banks such as Melli and Saderat.[93]

Bank Melli has also transferred funds from Iran to finance terrorist attacks in South America. Unfortunately, the JCPOA ignores the links between terrorism and proliferation by delisting sanctions from Iranian banks such as Melli and Saderat.

There is a natural spillover between terrorism and human rights abuse. The State Department's Country Report on Terrorism covering the period of 2014 describes how in the fight against ISIS, the IRGC-QF has mobilized

Shiite militias in Syria and Iraq, including *Kataib Hizbullah*, which is a designated terrorist organization. These Iranian proxies committed "serious human rights abuses against primarily Sunni civilians." Similarly, in its bid to compartmentalize sanctions,[94] the Obama administration ignored Iran's human rights violations, as the JCPOA failed to address the matter. Indeed, since the JCPOA concluded, the Obama administration never designated any individuals or entities for human rights abuses.

> ***There is a natural spillover between terrorism and human rights abuse.***

Human rights abuses are coupled with terrorist activities that have not only been limited to the IRGC. SETAD executive Behrouz Dolatzadeh was arrested and charged by Czech authorities in Prague in February 2012 with attempting to buy 3,500 U.S.-made M-4 assault rifles for Iran's military.[95]

The SETAD's illicit activities have not stopped at terrorist activities but have extended to nuclear proliferation, missile proliferation, and money laundering. A SETAD-owned German company, MCS Technologies,[96] was used unsuccessfully to export dual-use technologies such as carbon fiber, which could produce components for long-range missiles and centrifuges to Iran.[97]

Overlooking Ballistic Missile Program

Daniel Coats, the director of U.S. National Intelligence, informed the Senate Intelligence Committee that, "Iran's ballistic missiles are inherently capable of delivering WMD, and Tehran already has the largest inventory of ballistic missiles in the Middle East." Coats asserted, "Iran is pursuing[98] capabilities to meet its nuclear energy and technology goals and to give it the capability to build missile-deliverable nuclear weapons if it chooses to do so." He further emphasized[99] that Iran "would choose ballistic missiles as its preferred method of delivering nuclear weapons if it builds them." The United States assesses[100] that it would take Iran one year to build a functional nuclear missile if it chooses. This assessment was echoed by Iran's new defense minister, Gen. Amir Hatami, who declared, "In combat fields, especially in missiles, we have a specific plan to boost Iran's missile power," which would enhance "the combat capabilities of Iran's ballistic and cruise missiles." He further stated that Iran would seek to export weapons "to prevent war and conflict."[101]

The Obama administration created separate artificial rubrics between Iran's nuclear program, which was sanctioned, and its missile program that the JCPOA does not address coherently. A ballistic missile nuclear delivery system would determine Iran's commitment to the nuclear deal, yet the Obama administration chose to fudge the issue of ballistic missiles and decouple it from the nuclear issue despite it being central to Iran's nuclear program. President Obama achieved this by creating loopholes via ambiguous and confusing language in many specific provisions, enabling Iran to advance its missile and nuclear programs. Annex B of the JCPOA that addresses ballistic missiles does not forbid Iran from engaging in ballistic missile activity. Its key paragraph states, "Iran is called upon not to undertake any activity related to ballistic missiles designed to be capable of delivering nuclear weapons" for eight years. Similarly, Resolution 2231 fails to "prohibit," "demand" or "decide," but merely "calls upon" Iran to comply with Annex B's ballistic-missile limits. This includes launches using such ballistic missile technology." Iran only has to deny[102] that its missiles are "designed" for nuclear payloads even when they claim that they can develop ballistic missiles that are offensive and strategic with a range of 2,000 kilometers. The ambiguity of Resolution 2231 rescinds Resolution 1929, which unequivocally banned Iran from conducting any missile activity. This ambiguity led President Obama, in a bid to preserve the JCPOA at any cost, to frame Iran's missile tests as obeying the "letter" of its landmark nuclear agreement with the West, but not the "spirit" of it. Similarly, Ben Rhodes,[103] former deputy National Security Adviser for strategic communications, told reporters that Iran's missile tests were not part of the nuclear agreement. Most experts, however, consider missiles that can deliver a nuclear weapon to be part of a country's nuclear program.[104]

The Obama administration chose to fudge the issue of ballistic missiles and decouple it from the nuclear issue despite it being central to Iran's nuclear program.

This ambiguity has led to differing interpretations by Iran and the United States regarding ballistic missiles, which can lead to increased tensions between the two states. According to the Iranian news outlet *Fars*, "Iran says it has not accepted or endorsed the annex, adding that none of its ballistic missiles has been designed to carry nuclear payloads, and thus, its ballistic missile program is no way related to the paragraph." In contrast to President Obama, President Trump[105] considers Iran's position as a violation of both the spirit and the letter of the agreement. To maintain the pretense that Iran is abiding by the JCPOA, in light of Iran conducting missile tests, rather than describing these tests as a violation of the JCPOA and UN Resolution 2231, the United States, United Kingdom, France, and Germany described the tests as, "inconsistent with" the resolution. While the Obama administration failed to redress Iran for conducting missile tests, the United States has penalized individuals and companies involved in Iran's ballistic missile program. At the same time, there are still numerous companies contributing to the ballistic missile program and owned or controlled by the IRGC and the Iranian Ministry of Defense as well as high-ranking Iranian officials involved in the program have not been sanctioned.

To preserve the JCPOA, the Obama administration overlooked Iran's ballistic missile program.

To preserve the JCPOA, the Obama administration overlooked Iran's ballistic missile program. Amir Ali Hajizadeh, commander of the Iranian Revolutionary Guard Corps' Aerospace and Missile Force, said, "At this time, the Americans are telling [us]: Don't talk about missile affairs, and if you conduct a test or maneuver, don't mention it."[106] The JCPOA covers Iran from any negative consequences from violating the UNSCR. Ground Force Commander Brig. Gen. Ahmad Reza Pourdastan was unafraid of repercussions when he stated that war games, including "specialized missile drilling," would take place in both the western and eastern parts of the country. *Fars* noted that "an increasing number of Iranians are demanding the country's Armed Forces stage ballistic missile drills," to reinforce[107] Iran's interpretation of UN Resolution 2231, which was unanimously adopted by the Security Council. As a result, the United States ignored the IRGC firing two ballistic missiles that included one with graffiti saying, "Israel should be wiped off the earth." Brig. Gen. Amir Ali Hajizadeh asserted, "Iran's missile program will not stop under any circumstances." Similarly, Foreign Ministry spokesman Hossein Jaberi Ansari[108] said, "The Islamic Republic of Iran will not compromise over its security and defensive power and will continue its completely defensive and legitimate missile program."[109]

To this end, Iran has conducted a number of ballistic-missile tests, including the following:

- May 9, 2016, Iran conducted a missile test.

- Jan 29, 2017, Iran launched the Khorramshahr medium-range ballistic missile, which flew 600 miles from a test site outside Semnan, about 140 miles east of Tehran, before exploding. This was met by the Trump administration's response on February 3, 2017, to extend sanctions to 25 individuals and entities associated with either the missile program or the IRGC's Quds Force.

- March 5, 2017, Iran launched the Fateh–110 short-range ballistic missile in the Strait of Hormuz and sent boats close to the *USNS Invincible*.

- May 2, 2017, Iran failed in its attempt to launch a cruise missile in the Strait of Hormuz. On June 15, 2017, the U.S. Senate passed the Countering Iran's Destabilizing Activities Act (CIDA) of 2017 that was signed into law by President Trump. CIDA prevents any foreign individual or entity doing business with an Iranian counterpart pre-designated by the U.S. administration for being associated with Iran's ballistic missile program. On October 26, 2017, the U.S. House of Representatives overwhelmingly voted nearly unanimously for the "Iran Ballistic Missiles and International Sanctions Enforcement Act," which would impose new sanctions on Iran's ballistic missile program or the foreign entities that support it.

On July 18, 2017, the Trump administration imposed new sanctions on 18 Iranian individuals, groups, and networks for aiding the IRGC and supporting the country's ballistic missile program. This included sanctioning six companies associated with Iran's Shahid Hemmat Industrial Group, which the U.S. Treasury Department said is "central to Iran's ballistic missile program." The sanctions prohibit U.S. persons from engaging in transactions with the sanctioned companies and warn that financial institutions that deal with them, "risk exposure to sanctions that could sever their access to the U.S. financial system."[110]

On July 28, 2017, the U.S. Treasury Department placed new sanctions on Iran in response to Iran launching a Simorgh missile capable of carrying a satellite into space. The Simorgh missile employs similar propulsion technology to an intercontinental ballistic missile, which is capable of delivering a nuclear warhead. The United States said that the launch "represents a threatening step by Iran" because it uses "technologies that are closely related to those of an intercontinental ballistic missile." The U.S denunciation of Iran was joined by UN ambassadors from the United Kingdom, France, and Germany who expressed that Iran's satellite launch was "threatening and provocative" and defied UN Security Council Resolution 2231 which warns "not to undertake any activity related to ballistic missiles designed to be capable of delivering nuclear weapons, including launches using such ballistic missile technology."

Ambiguous Sanctions, Unknown Future Applications

During the period of the JCPOA's implementation, the U.S. Office for Foreign Assets Control (OFAC) had to clear each U.S. company seeking to do business in Iran, unless the U.S. entity offered exemptions, such as Boeing, which completed an agreement selling planes to Iran. But more broadly, no timeline existed for U.S. companies to enter the Iranian market, as it depended on OFAC's speed and efficiency. Multilateral U.S. and EU sanctions could have snapped back rapidly and "new measures could also be imposed if Iran were to violate its commitments and renege on the deal." Companies[111] would subsequently have had 180 days to settle any outstanding financial payments and cease business activities. While U.S. companies were prevented from entering the Iranian market, the Obama administration considered making it easier for Iran to bypass sanctions. This would have led businesses seeking to enter the Iranian market to get caught in the crosshairs of various processes and ambiguous positions. An example of this is the visa waiver law, which may tempt businesses to engage in the Iranian market, as Chairman of the House Foreign Affairs Committee Rep. Ed Royce commented that, the Obama administration had "gutted a new law to strengthen the visa waiver program." Yet the new law does not make clear whether Western businessmen doing business in Iran will receive a visa to enter the United States to conduct business in the United States.

The future of sanctions were unknown as the same U.S. officials often made contradictory statements. The JCPOA stated that "U.S. statutory sanctions focused on Iran's support for terrorism, human rights abuses, and missile activities will remain in effect," and these will be enforced against certain members and actions of the Guards.[112] Similarly, in July and August 2015, senior U.S. Treasury officials said in testimony to the Senate that they would continue to enforce sanctions targeting the IRGC. At the same time, Adam Szubin[113] contradicted this by saying, "There are companies who have done… arm's length transactions with the IRGC over time that we've designated for conducting business for the IRGC, we have companies like that that are due to receive relief at various phases under the deal."[114]

The future of sanctions were unknown as the same U.S. officials often made contradictory statements.

The potential for providing such caveats for companies was eliminated by the "Countering America's Adversaries through Sanctions Act," signed into law by President Trump on Aug 2, 2017. The law designated the entire IRGC as a terrorist entity under Executive Order 13224 and froze all assets connected to the IRGC. Originally, only the Quds force section of the IRGC was designated as foreign terrorists under Executive Order 13224. Previously, the IRGC had been sanctioned under Executive Order 13382 for only nuclear and ballistic proliferation activities. The IRGC had separately been designated for human rights violations under Executive Order 13553.[115]

These separate designations were the result of the Obama administration seeking to protect the JCPOA as an end in and of itself, rather than enhancing security. In turn, it made the application of sanctions unknown. Thus, Kerry expressed violations of "the arms embargo is not tied to snapback. It is tied to a separate set of obligations. So they are not in material breach of the nuclear agreement for violating the arms piece of it." To insulate the JCPOA and defend its siloed approach for focusing on the nuclear issue, Kerry continued, "There is a specific U.N. resolution outside of this agreement that prohibits them from sending weapons to Hizbullah. There is a separate and specific UN resolution that prohibits them from sending weapons to the Shi'a militia in Iraq." As both the interpretation and application of sanctions[116] were politically motivated rather than strictly legal, it was uncertain whether in the future the U.S. Treasury would designate Iranian and foreign financial institutions as "proliferation supporting entities."

As both the interpretation and application of sanctions were politically motivated rather than strictly legal, it was uncertain whether in the future the U.S. Treasury would designate Iranian and foreign financial institutions as "proliferation supporting entities."

The "Countering America's Adversaries Through Sanctions Act," has a more seamless approach toward the IRGC, with a consistent application of sanctions for human rights violations in Iran and ballistic missile or weapons of mass destruction programs. It also prevents the sale or transfer to Iran, the IRGC, and affiliated foreign persons of military equipment or the provision of related technical or financial assistance.

The "Countering America's Adversaries Through Sanctions Act" also prohibits American individuals or entities from establishing financial, business, services, or other affiliations with any individuals directly or indirectly associated to the IRGC. This is more extensive than previous sanctions against the IRGC that enabled foreign companies to engage to a degree with IRGC connected companies.

Sectoral sanctions were put into place by the Iran Freedom and Counter-Proliferation Act in 2014. Taking them off makes it difficult for foreign businesses to operate in those sectors, as one may do business with the IRGC, which dominates that sector. Designating the entire IRGC as a terrorist entity is likely to lead to a rift between the United States and European states seeking to enter the Iranian market, which necessarily entails engaging the IRGC.

Civil Aviation

Despite the IRGC being sanctioned, the Trump administration initially allowed deals to be made between U.S. companies and Iran's civil aviation sector, which is dominated by the IRGC. In the aftermath of President Trump's withdrawal from the JCPOA, licenses for Boeing and Airbus to export commercial planes, related parts, and services to Iran will be revoked after a 90-day period.

Past sanctions prevented Iran from purchasing new western-made aircraft to update its rapidly aging fleet. Out of a fleet[117] of 250 commercial planes with 41,218 seats and six cargo planes, 200 Iranian planes are inoperable and require spare parts. Iran's aged fleet is made up of old Boeings, old leased Airbus planes, and Russian-manufactured aircraft. The existing fleet operates at a low capacity, due to Iran civil aviation authorities' poor safety regulations and maintenance, making people afraid to take flights. For decades,[118] Iranian airlines conducted illicit transactions and operated in the black market when sourcing and repairing their planes, contributing to their lack of safety. Iranian airliners spend 25 percent of their earnings on aircraft maintenance on average, while the global average is only 6 percent. Thus, Iran plans to buy 400 passenger planes by 2025.[119] Even this acquisition will not accommodate Iran's population of nearly 80 million, which would require 6,300 airplanes.

Mahan Air, Iran's second-largest carrier, is an example of how Iranian airliners conducted illicit transactions. Two months before the JCPOA was signed, Mahan Air used an Iraqi front company to acquire nine Airbus jets. In 2011, Under Secretary for Terrorism and Financial Intelligence

David Cohen[120] designated Mahan Air for its "close coordination with the IRGC-QF – secretly ferrying operatives, weapons and funds on its flights – [which] reveals yet another facet of the IRGC's extensive infiltration of Iran's commercial sector to facilitate its support for terrorism." Mahan Air was also sanctioned[121] for transporting weapons and personnel to Syria. The U.S. Treasury designation notes that Iran Air passenger aircraft has been used to ship missiles and rockets.[122]

In certain instances, the U.S. Treasury noted that despite sanctions being dropped against Iran Air as part of the JCPOA, "IRGC officers occasionally take control over Iran Air flights carrying special IRGC-related cargo. The IRGC is also known to disguise and manifest such shipments as medicine and generic spare parts, and IRGC officers have discouraged Iran Air pilots from inspecting potentially dangerous IRGC-related cargo being carried aboard a commercial Iran Air aircraft, including to Syria." Farzin Nadimi noted[123] that Iran had sent IRGC forces and weapons to shore up the Assad regime via Mahan Air, as well as the IRGC's "own cover airlines, including Pouya Air and Qeshm Fars Air, Iran Air, and Mahan Air and service companies to provide logistical assistance and boost revenue." The U.S. Treasury designated Iran Air[124] in 2011, partially due to its transport of "potentially dangerous Islamic Revolutionary Guard Corps (IRGC)-related cargo" and "missile or rocket components" to Syria. In June 2017, Iran Air flew known weapons resupply routes to Syria three times. On August 23, 2017, U.S. Congressional leaders were shown photographs of Iran Air violating the JCPOA by transporting militant soldiers to Syria on commercial airline flights.[125]

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Western security officials claim that Mahan Air is suspected of spending more than a year brokering a complex series of arrangements, unbeknown to the European companies they are engaging with, using the small Iraqi Al-Naser Airlines as a front. Western diplomats fear the aircraft could be used to ferry weapons to conflicts in Yemen and Syria, a concern that Mahan – which is owned by the Kerman Molal-Movahedin Non-Profit Institute – rejects. As part of the deal to free U.S. prisoners in Iran,[126] the

United States removed an Interpol red notice that constituted an arrest warrant on the company's managing director. Mahan Air remains under secondary sanctions, which punish third-country actors doing business with targeted entities or people. But these sanctions were not consistently applied.

John Smith, the acting director of Treasury's Office of Foreign Assets Control, said that several parts of the U.S. government were working to stop Mahan Air flights from landing in European airports and that his office had found no evidence of any European bank doing business with the airline.[127] Yet Emanuele Ottolenghi pointed out that several European companies have already begun providing ground services for Mahan Air flights landing at European airports. These include the Swedish firm Aviator, and Airport Handling of Italy, which mentions Mahan as a client on its website. Therefore, Representative Brad Sherman, a senior member of the United States House Foreign Affairs Committee,[128] asserted to John Smith, "We're relying on the executive branch to enforce this deal because you are able to monitor what Iran does." "And here's an example where you have a major airline doing business in dozens of cities, and you can't find them doing business with a single bank."[129]

It was not merely a matter of failing to identify Iranian transgressions of sanctions, but the Obama administration overlooking** Iranian **sanctions.

It was not merely a matter of failing to identify Iranian transgressions of sanctions, but the Obama administration *overlooking* Iranian sanctions. While the interim nuclear deal in late 2013 made it permissible to export U.S.-made spare parts to Iran needed for safe operations of Iranian civilian airliners, with a U.S. Treasury Department license, the sale of U.S.-origin aircraft was still sanctioned. Yet the Obama administration failed to act when Iranian Transport Minister Abbas Akhoundi announced that Tehran bought 15 used commercial planes. The Iranian state news agency IRNA[130] said on May 12, 2015, that Iran's Mahan Air acquired nine used Airbus commercial aircraft. IRNA did not identify the seller.[131]

Civil aviation equipment, such as cameras and other equipment, have a dual-use application which, when attached to a commercial plane, can be used for a military application. Civil aviation equipment can also be used to transport personnel and cargo; they can have sensory payloads attached to provide a military payload. Despite the potential dual-use application of civil aviation, under the JCPOA, the United States "will authorize the export, re-export, sale, or lease of U.S.-origin commercial passenger aircraft and related parts and services to Iran, which will help improve the safety of commercial air travel for every-day Iranians." It would have taken four to five years to receive a delivery from Boeing and Airbus.[132]

The U.S. Treasury "issued General License I to allow civil aviation firms to explore business opportunities with less regulatory burden." Ali Reza Jahangirian, CEO of Iran's Civil Aviation Organization (ICAO),[133] the highest Islamic Republic Civil Aviation Authority, said, "Iranian airlines will be ready to buy 40 passenger planes every year for ten years if sanctions are lifted." Iran has signed a tentative agreement in the form of a memorandum of agreement with Boeing. In December 2016, Boeing signed a deal with Iran Air for 80 passenger planes worth $16.6 billion that was approved by the U.S. Treasury. On April 4, 2017, Boeing signed a $3 billion deal with Iran's Aseman Airlines, which has ties with the IRGC, for 30 new 737 MAX aircraft, which includes an option for another 30. This has been scuppered by the United States's decision to withdraw from the JCPOA. Congressman Peter Roskam, the Ways and Means Oversight chairman, has also sought to pressure Airbus into scuttling a $25 billion deal to sell 118 planes to Iran.[134]

Despite the U.S. House of Representatives voting against the Boeing and Airbus deals with Iran on November 21, 2016, the U.S. Treasury issued a license for Airbus to sell 106 aircraft to Tehran. A previous license was issued by OFAC on September 21, 2016 for Airbus to sell 17 airplanes to Iran for $19 million. Airbus has already delivered three planes. In January 2017, Airbus agreed for Iran Air to buy 118 planes, later reduced to 112 planes, estimated to be worth some 22.8 billion euros ($25 billion), which was also approved by the U.S. Treasury. On June 22, 2017,[135] Iran's Airtour Airlines signed a MoU for 45 Airbus A320neo aircraft. Despite being French-based, Airbus[136] had to obtain OFAC approval to sell planes to Iran because at least 10 percent of the components used to build these planes are made in the United States.

Congressman Peter Roskam (R-IL) and Senator Marco Rubio (R-FL) sent a letter to President Donald Trump on April 10, 2017, urging him to cancel the deals between Boeing and airlines in Iran. They warned that the Iranian airlines involved in the deals had been used by the Iranian regime "for illicit military purposes, including to transport troops, weapons, and cash to rogue regimes and terrorist groups around the world."[137]

On November 14, 2017, The House Financial Services Committee voted 38-21 to advance the "Strengthening Oversight of Iran's Access to Finance Act," requiring reporting and certification that the sale of commercial aircraft to Iran from firms that do business in the United States will not constitute a terrorism or money-laundering risk.

Iran found it challenging to secure financing for the purchases due to the sanction fears of Western banks. Iranian airline Zagros has reached preliminary agreements with Brazilian plane manufacturer Embraer for the purchase of 50 135-seat passenger planes. Canada's Bombardier,[138] Embraer from Brazil, and Russia's Superjet could also secure orders for the smaller airliners produced along with engine makers Rolls Royce and GE Electric Co. (GE) Aviation.

Sanctions: Iran Accessing the International Financial System

Iran remains a high-risk jurisdiction for the financial sector. The JCPOA undermined the Financial Action Task Force (FATF) that warned its members that they should "apply effective counter-measures to protect their financial sectors from money laundering and financing of terrorism (AML/CFT) risks emanating from Iran." On June 26, 2015, the FATF warned[139] that Iran's "failure to address the risk of terrorist financing" posed a "serious threat … to the integrity of the international financial system." Daniel Glaser, Deputy Assistant Secretary for Terrorist Financing and Financial Crimes,[140] testified in April 2008 that, "Iran lacks an acceptable system of laws and enforcement capabilities that would allow it to detect and prevent money laundering or terrorist financing." These statements[141] echo UN Security Council Resolution 1803 that on March 3, 2008, called for vigilance in dealing with Iranian banks.

On June 24, 2016, the Financial Action Task Force (FATF) issued a directive: "Until Iran implements the measures required to address in the Action Plan, the FATF will remain concerned with the terrorist financing risk emanating from Iran and the threat this poses to the international financial system." The FATF urged its members[142] to "advise their financial institutions to apply enhanced due diligence to business relationships and transactions." In June 2017, FATF said it would extend the suspension[143] of some of its restrictions against Iran. Despite the suspensions, Iran remains on the FATF's blacklist, meaning countries must still apply enhanced due diligence when handling transactions involving the Iranian financial system. On November 20, 2017, the U.S. imposed sanctions on four companies and two individuals for forging Yemeni money on behalf of the IRGC that amounted to hundreds of millions of U.S. dollars.[144]

The IRGC has enormous expertise at establishing six degrees of separation for Iranian citizens or Indian nationals who are based in the UAE are connected to the IRGC or related security/ government entities.

Western banks must research the background of the person/company they deal with – Know Your Customer (KYC). The IRGC has enormous expertise at establishing six degrees of separation for Iranian citizens or Indian nationals who are based in the UAE are connected to the IRGC or related security/government entities. Iran's illicit finances increased in 2012. As Iran began to feel the impact of U.S. and EU sanctions on Iran's oil and finance sectors, the IRGC responded by setting up complex operations involving the likes of Dubai and Turkey. The IRGC has been buying small and medium-sized companies in Iran and using them as front companies. Much of the IRGC's business is done through front companies – many of which are not even formally owned by the IRGC, but by individuals and firms linked to it. Hundreds of IRGC front companies are partnered with foreign companies to bypass sanctions. International businesses seeking to enter the Iranian market are confronted by a complex scenario that on the one hand finds the United States and European Union unraveling Iranian economic sanctions due to the nuclear deal; on the other hand, it is impossible to decouple the Iranian economy from the IRGC, which is subjected to secondary sanctions. It is impossible not to engage with the IRGC as they hide behind front companies, which they have purchased and are responsible for Iran's infrastructure development in all major industries. This is prompting foreign companies to remain wary of partnering with Iranian companies, as it remains unknown which companies have IRGC links. There is a barrier to ownership, as foreign companies are required to partner with local companies that are given 50 percent. Yet foreign companies cannot get information on which companies to partner with due to a lack of transparency and may end up being owned by the IRGC.

To prevent business with the IRGC and create an environment of risk, the U.S. Congress is working on publishing a Government Accountability Office Report, which will provide a full list of IRGC companies. Therefore, there is a need for firms to undertake efficient due diligence because the IRGC has a wide presence across the Iranian economy. Yet to buoy the JCPOA, OFAC and the Obama administration turned a blind eye to minority ownership from IRGC personnel (e.g., 5 percent), but firms were still vulnerable to be sanctioned when there are board leadership and executive level ties.[145]

IRGC Illicit Finances

One way Iran has evaded sanctions has been to deliver cash to a foreign account in a neighboring country. Iranian intelligence conducts economic espionage and focuses on different sectors that can help launder money to facilitate deals. Iranian intelligence identifies Indian nationals who are traders entering and exiting the country to launder money. Another way for Iran to enter foreign markets is for Iran to trade in currencies other than the U.S. dollar. NIOC has expressed that it prefers to receive its oil payments and debt repayments in euros. It is not only the IRGC that facilitates[146] the Iranian regime's evasion of sanctions, but also the SETAD (EIKO, or Executive Headquarters of Imam's Directive). Thus, on

June 4, 2013, under Executive Order 13599,[147] the United States Treasury sanctioned the SETAD and 37 of its subsidiaries – including a number of foreign companies, for posing a threat to the integrity of the international financial system.[148] The U.S. Treasury Department noted at the time that the purpose of the SETAD was, "to generate and control massive, off-the-books investments, shielded from the view of the Iranian people and international regulators." Then-Under Secretary for Terrorism and Financial Intelligence David S. Cohen expressed,[149] "Even as economic conditions in Iran deteriorate, senior Iranian leaders profit from a shadowy network of off-the-books front companies. While the Iranian government's leadership works to hide billions of dollars in corporate profits earned at the expense of the Iranian people, Treasury will continue exposing and acting against the regime's attempts to evade our sanctions and escape international isolation." As Treasury explained: "EIKO (Executive Headquarters of Imam's Directive or Setad) has[150] made tens of billions of dollars in profit for the Iranian regime each year through the exploitation of favorable loan rates from Iranian banks and the sale and management of real estate holdings, including selling property donated to EIKO. EIKO has also confiscated properties in Iran that were owned by Iranians not living in Iran full time … EIKO has been tasked with assisting the Iranian Government's circumvention of U.S. and international sanctions. Because of this unique mission, EIKO has received all of the funding it needs to facilitate transactions through its access to the Iranian leadership."[151]

The U.S. Treasury Department noted at the time that the purpose of the SETAD was, "to generate and control massive, off-the-books investments, shielded from the view of the Iranian people and international regulators."

As a result of the JCPOA, the U.S. Treasury lifted sanctions on the SETAD, despite the fact that there was no indication that its business practices changed and despite the fact that none of these entities were designated for nuclear proliferation.[152] These entities were sanctioned because they were involved in illicit financial practices, including government corruption. There is no indication that this conduct changed. On December 13, 2017, the U.S. House of Representatives passed a draft resolution entitled "Iranian

Leadership Asset Transparency Act (H.R. 1638)" that identifies assets of the Iranian leadership and makes the information public. The purpose of this is to identify how the personal wealth of the Iranian leadership funds terrorism.

Between 2010 and 2011, the Iranian rial plummeted in value, leading many middle-class Iranians to trade their assets to protect themselves. They used smuggling networks on the borders of Afghanistan and conducted currency changes to U.S. dollars. Due to corruption and lack of security checks in Afghanistan, Iranian money could easily be transferred and sent to secure areas. They proceeded to send their money abroad from Afghanistan to the United Arab Emirates to avoid sanctions. Iran has purchased property in Dubai with cash to secure their money, in the long term, during sanctions. Due to the Trump administration's rejection of the JCPOA, it is unlikely that Iran will move its overseas assets back home, or that foreign firms will invest a lot into Iran. Iranian companies may also be reluctant to move money held abroad back into Iran in case a deal collapses, sanctions are re-imposed, and they lose the ability to easily move capital abroad. While sanctions unraveled, the IRGC's income from smuggling went down accordingly, as income derived from the huge monopolies on business (that the IRGC has in Iran) due to the Iranian market that is newly opened up to foreign investors.

As of mid-April 2018, the rial has plummeted again. In 2013, one dollar bought 36,000 rials. In mid-April 2018, the amount mushroomed to 60,000 rials per dollar.[153]

In mid-February 2016, a month after Iran received nuclear-related sanctions relief from the United Nations, United States, and the European Union, the Financial Action Task Force (FATF), the international organization for Anti-Money Laundering (AML), and Countering the Financing of Terrorism (CFT), exhorted member states to warn their banks about the risks of doing business with Iran. The FATF issued a statement urging Iran to, "immediately and effectively address its AML/CFT deficiencies." The FATF wielded the threat to call upon its member states to strengthen countermeasures at its June 2015 meeting if Iran failed to comply with FATF standards. Yet in light of the JCPOA, on June 24, 2016, the FATF, due to influence from the Obama administration, reversed its position despite being an apolitical body and elected to suspend mandatory counter-measures against Iran until June 2017. There is, however, small chance that the IRGC will allow Iran to approve controls that counter illicit financial activity and the financing of terrorism, as this would go against their *raison d'etre*. Nonetheless, the suspension of counter-measures against Iran undermines the FATF's own credibility to protect its members from AML/CFT. This makes it impossible for FATF member states to live up to the previous FATF statement to, "protect against correspondent relationships being used to bypass or evade countermeasures and risk-mitigation practices." More fundamentally, the suspension of counter-measures also contradicts the FATF's blacklisting Iran for being a "terrorist financing risk." In contrast to Iranian banks and the FATF's suspension of counter-measures, banks still place a tremendous amount of importance on AML/CFT and sanctions enforcement. The Bank of America reportedly spends $15 billion a year on compliance issues, while J.P Morgan spends at least $8 billion.[154]

Therefore, even after the JCPOA's removal of sanctions, and the FATF's suspension of counter-measures against Iran, most Western banks remained afraid of conducting business with Iran due to the risk it posed to their accessing U.S. markets. Global banks and major multinational companies also feared to enter the Iranian financial market and being subject to expensive and damaging civil and criminal enforcement actions. Several banks, including HSBC, Barclays, Credit Suisse, Deutsche Bank, ING, and BNP Paribas, were fined millions of dollars in penalties to U.S. regulators for violating Iranian sanctions and processing Iranian transactions.[155] Large banks were more risk-averse to the potential event of snapback sanctions, where it remained unclear whether Iran or import-export banks and export credit agencies will assume the risk. Smaller banks were less risk-averse than large Western banks, such as Austria's Raiffeisen Bank International (RBI), which said that it wanted to open a branch in Tehran, "as quickly as possible even prior to the removal of sanctions."

U.S. rules were ambiguous, even contradictory, regarding how the banks could operate. The Obama administration's commitment to the U.S. Congress was that the U.S. financial system would not be reopened to

Iran due to sanctions. At the same time, the Obama administration was allowing Iran into the U.S. financial system via the back door, due to the JCPOA enabling Iranian banks to reenter the international financial system. Many transactions that Iran will conduct in the international system will be dollarized. Oil, for example, is priced in dollars, so it makes it difficult to price it in a different currency. This is the reason Iran had clamored to allow dollarized transactions and why the Obama administration was attempting to renege on its promises to the U.S. Congress.[156] "U-turn transactions"– a loophole that once allowed Iranian banks to quickly access the U.S. financial system through international exchanges – remain prohibited. Yet in May 2016, Adam Szubin was ambiguous in his testimony to the House Foreign Affairs Committee regarding Iran's partial access to the dollar. On the one hand, he stated that Iran would be denied international access to "large-scale dollar-denominated transactions" or offshore dollar-clearing facilities. On the other hand, though, he encouraged foreign engagement with Iran by noting that as the international currency of choice for international trade is the dollar, every foreign bank in the world has U.S. dollars in their possession. "Our sanctions don't extend to those dollar bills, and foreign actors aren't under our jurisdiction if they choose to give those to any actor, including an Iranian actor."[157]

Accessing the U.S. Financial System

While the Obama administration had expressed that Iran would be prevented from having direct access to the U.S. dollar, the Obama administration created ambiguity regarding Iran's indirect access to the U.S. financial system. In March 2016, in a hearing before the House Financial Services Committee, Secretary of the Treasury Jack Lew avoided answering direct questions posed by Rep. Ed Royce, on whether the U.S. administration is "considering permitting Iranian banks to clear transactions in dollars with U.S. banks or foreign financial institutions including offshore clearing houses." Secretary Lew responded by stating[158] that the administration continues to explore ways "to make sure Iran gets relief" from sanctions. There were fears that the Obama administration would permit Iranian use of dollarized transactions through offshore dollar clearing, intra-bank book transfers and conversions, or some other kind of mechanism that would allow Iran access to the dollar as long as 1) Iranian banks were not engaged in the transactions; 2) Iranian rials were not included in the transaction at the dollar clearing facility; and 3) the payment would not start or end with U.S. dollars. The transaction would be temporarily converted into dollars,[159] allowing the European (or other foreign) bank to conduct at least part of the exchange in dollars, which banks prefer because the dollar is a stable currency with fewer fluctuations and therefore less risk.

A central claim the Obama administration made to advance the unraveling of Iranian sanctions was that denying Iran access to the dollar and the U.S. financial system would provide Washington with leverage after the deal was done.

U.S. House of Representatives Foreign Affairs Committee Chairman Ed Royce noted that President Obama "did not explicitly close the door to other steps that would give the regime access to U.S. dollars through offshore clearinghouses. In other words, Iran would be allowed to launder dollars while the administration looked the other way." This would clearly constitute indirect access to the U.S. financial system. The Obama administration's ambiguity on Iran's accessing the U.S. market created a sense of risk among foreign businesses.

In July 2015, Treasury Secretary Jack Lew testified before the Senate Foreign Relations Committee, "Iranian banks will not be able to clear U.S. dollars through New York," or "hold correspondent account relationships with U.S. financial institutions, or enter into financing arrangements with U.S. banks." A central claim[160] the Obama administration made to advance the unraveling of Iranian sanctions was that denying Iran access to the dollar and the U.S. financial system would provide Washington with leverage after the deal was done. Yet Ed Royce noted that since then, Jack Lew refused to answer whether he stood by that testimony. Furthermore, Lew stated that the United States would comply with both the "letter and the spirit" of its commitments to provide sanctions relief under the nuclear deal. This response led Ed Royce to introduce a bill entitled, "The U.S. Financial System Protection Act" (H.R. 4992) to prevent the Obama administration from allowing Iran's regime access to trade transactions involving the U.S. dollar, including dollar-clearing, dollar-based conversions, and dollar-related foreign currency transactions. The restrictions would remain in place all the while the Iranian regime continues to engage in illicit activities, including terrorism and the development of ballistic missiles and remains designated as a "primary money laundering concern," a hurdle the Obama administration never overcame while seeking to grant Iran access to the dollar.

The Senate Permanent Subcommittee on Investigations reported that in February 2016, under President Obama, the Treasury Department issued a license, that would have allowed Iran to convert $5.7 billion it held at a bank in Oman from Omani rials into euros by exchanging them first into U.S. dollars. This would have violated sanctions that bar Iran from transactions that touch the U.S. financial system.[161]

Iranian Banks Preventing Global Financial System Reintegration

The International Monetary Fund (IMF) commended Iran's "impressive recovery," with growth expected of over 6 percent for the last 12 months and low inflation. Due to a combination[162] of initial lower oil prices, reduced state subsidies, and the Central Bank of Iran's tight monetary policy, which was critical for Iran's ability to grow production, Iran's "impressive recovery" has not trickled down to the public, as according to official statistics, while inflation has dropped, unemployment has risen slightly to about 12.7 percent (30 percent for youth) over the past two years. During the implementation of the JCPOA, Iranian Central Bank Governor Valiollah Seif complained that "almost nothing" was done to reintegrate Iran into the global economy since the implementation of the JCPOA and has even accused the United States of breaching the deal. This is because, as Seyed Arash Shahr Aeini, deputy head of the Export Guarantee Fund of Iran, expressed, "Big foreign banks that were active in Iran projects before the sanctions were imposed [were] still reluctant to start doing business in Iran." The value of Iran's currency has declined by more than 50 percent. Similarly, on March 22, 2016, Supreme Leader Ali Khamenei, declared that "the Americans have not acted on their promises and only removed the sanctions on paper."[163] - Echoing Khamenei, many of the Principlists have been very vocal about the lack of tangible benefits coming from Europe as a result of the JCPOA, as many countries are still wary of investing in the Iranian market. Iran's poor economic growth led Khamenei to express disappointment and align himself with the Principlists' aspirations for economic self-sufficiency by advocating for a "resistance economy."

This prompted the Obama administration to consider further concessions to Iran. On April 1, 2016, President Obama stated that the United States and others would, "provide clarity to businesses about what transactions are, in fact, allowed." He added, "It is not necessary that we take the approach of them going through dollar-denominated transactions." Iranian funds[164] cannot transfer funds into U.S. dollars and use conversion currency. In contrast to Western firms that have a sense of risk accessing the Iranian market, Asian firms are not hesitating to do deals with Iran. An example, South Korea is pledging more funds to Iran, and it is now estimated to have invested up to $15 billion in Iran.[165] It is not due to sanctions that Iran faces insurmountable hurdles to reintegrate into the international financial system, but to the Iranian banks, which have caused immense damage to the Iranian economy by failing to comply with international banking regulations. Martin Cerisola, the assistant director of the IMF's Middle East and Central Asia Department, stated that Iran's economy was weak and required "strong political leadership and support for decisive and coordinated action" to make structural changes for Iran to reap the full benefits of the JCPOA." According to Cerisola, the necessary strong leadership[166] includes the willingness to reform banking laws, strengthen banking supervision, withdraw subsidies, reduce public-sector debt and pursue a prudent monetary policy.

It is not due to sanctions that Iran faces insurmountable hurdles to reintegrate into the international financial system, but to the Iranian banks, which have caused immense damage to the Iranian economy by failing to comply with international banking regulations.

The International Monetary Fund in its December 2015 Article IV report – part of a running assessment of a country's economic and financial policies and developments – recommended to Iran that "bolstering the Anti-Money

Laundering (AML)/Counter-Terrorist financing (CFT) framework would facilitate re-integration of the domestic financial system into the global economy, lower transaction costs, and reduce the size of the informal sector." These rules were adopted internationally and include regulations such as the Basel III standards covering risk management corporate governance, bankruptcy laws, and other bank safety requirements that were tightened in the aftermath of the global financial crisis of 2007-2008. Valiollah Seif acknowledged that Iran's banking system was "outdated" and that banks need to comply with Basel III requirements.[167]

The Iranian regime has failed to allow the Central Bank of Iran (CBI) to enforce its powers of supervision, bank resolution, and maintain its ability to be dealt with as an engaging partner so that it can make transactions that abide by Western requirements. The CBI and Iranian banks require the capability to co-regulate and maintain financial compliance over regulatory efforts (risk-based supervision). Iran is not prepared with accountancy and compliance rules as demanded by the international community. This process may take from five to seven years to train and implement to U.S. and EU standards.

Sanctions against the Revolutionary Guard: Infrastructural, Economic, and Regulatory Hurdles for Businesses to Overcome

Companies seeking to enter the Iranian market had been in the crosshairs of sanctions applied to the IRGC's control of the economy and the delisting of sectors of the economy that the IRGC controls. The IRGC has total domination over the Iranian economy as the IRGC interprets expansively Article 150 of the Iranian constitution, which states, "The Islamic Revolution Guards Corps, organized in the early days of the triumph of the Revolution, is to be maintained so that it may continue in its role of guarding the Revolution and its achievements. The scope of the duties of this Corps, and its areas of responsibility, in relation to the duties and areas of responsibility of the other armed forces, are to be determined by law, with emphasis on brotherly cooperation and harmony among them."

To this end, the IRGC places itself in the position where it transcends any constitutional restrictions due to its "role of guarding the Revolution and its achievements." For this reason, on June 11, 2003, the Ministry of Defense and Armed Forces Logistics[168] issued a directive calling upon "units designated and identified by the Islamic Revolution's Guard Corps… the Islamic Republic Army, Ministry of Defense and Armed Forces Logistics and its affiliated institutions" to serve as contractors in development schemes and projects. The directive apportions any profit[169] to be "transferred to the Chancery," that would fund not only the contract in question but would use any surplus to purchase and upgrade equipment for the IRGC and fund its other activities. The IRGC claims the right to involve itself in any project under the guise of "supporting the programs of the government of the Islamic Republic" and to mobilize the Basij, a paramilitary volunteer force affiliated with the IRGC, to advance economic development. Brig. Gen. Hossein Yasini,[170] deputy chief of human resources of the joint command of the armed forces, considers the constitutional phrase, "economic developmental plans and projects" to encompass "economic, societal, and cultural developmental programs." Such directives are justified[171] upon "orders of the Supreme Leader and Supreme Commander in Chief of the Armed Forces," which supersedes Article 147 of the constitution,[172] – which states that, "[i]n time of peace, the government must utilize the personnel and technical equipment of the Army in relief operations, and for educational and productive ends, and the Construction Jihad, while fully observing the criteria of Islamic justice and ensuring that such utilization does not harm the combat readiness of the Army."[173]

Companies seeking to enter the Iranian market had been in the crosshairs of sanctions applied to the IRGC's control of the economy and the delisting of sectors of the economy that the IRGC controls.

The IRGC's control over strategic sectors of the Iranian economy – banking, energy, construction, telecommunications, tourism, transportation, internet, industrial, engineering, mining, shipping, and shipbuilding, among others—means that any foreign firms considering entering the Iranian market would require a local partner that will often be an IRGC subsidiary or front company.

Emanuele Ottolenghi and Saeed Ghasseminejad have concluded that military-controlled companies (IRGC and the armed forces) that are listed in Iran's stock market are mostly concentrated in strategic sectors such as oil, mining, telecommunications, petrochemicals, automotive, banking, and construction. Together with the SETAD, they control one-quarter of the stock exchange. To justify delisting entire sectors,[174] EU and U.S. authorities have avoided designating most IRGC-linked companies and have arbitrarily framed reality to reflect their interests. KAA, which was designated by the United States as a proliferator of weapons of mass destruction, employs over 135,000 people, works with over 5,000 contractors,[175] and reportedly has over 800 reported subsidiaries. Of the hundreds of companies controlled by KAA[176]and the two cooperative foundations, only a handful were ever identified and designated. Most IRGC front companies and subsidiaries[177] eluded being sanctioned because they could not be adequately linked to the IRGC or because IRGC ownership was lower than the 50 percent threshold necessary to be sanctioned. Emanuele Ottolenghi notes, "Such companies were able, due to the JCPOA, to forge business relations with Western counterparts and access the global banking system to conduct financial transactions."[178] The Trump administration blanket sanctioning of the IRGC would entail the application of sanctions to thousands of additional Iranian companies that have ties to the IRGC. It is also likely that the threshhold for targeting companies with IRGC involvement will not include merely a beneficial ownership criterion, but will be set much lower to include board level representation. This will make U.S.- EU differences more acute.[179]

The IRGC and SETAD conduct numerous joint business ventures and buy companies together. Yet the absurd state of affairs existed that the SETAD was delisted while the IRGC, to which it is connected, remained sanctioned.

The IRGC and SETAD conduct numerous joint business ventures and buy companies together. Yet the absurd state of affairs existed that the SETAD was delisted while the IRGC, to which it is connected, remained sanctioned. The SETAD, similar to the IRGC, has no oversight by government or Parliament but directly reports to the Supreme Leader. SETAD rarely releases information about its revenues and taxes, but like the IRGC extends its influence into every corner of Iran's economy, including auto-manufacturing, shipbuilding, agriculture, food production, finance, energy, and telecommunications. SETAD is estimated to have a value of $95 billion ($52 in real estate and $43 in corporate holdings).[180] SETAD includes the following entities, removed by sanctions due to not contributing to the nuclear program:

- Rey investment company ($40 billion investment arm of a religious trust)

- Parsian Bank – $900m

- Karafarin Bank – $830m

- Tadbir Group – EIKO Investment arm on the Tehran stock exchange[181] SETAD companies are used as pass-throughs for IRGC funds. On occasion, the IRGC and SETAD will work openly together.[182] An example of this occurring was when an IRGC consortium consisting of three companies: Sarmay-e Gozari-e Towse'e E'temad Company, Shahriar-e Mahestan Company, and Sherkat-e Gostaresh-e Electronic e Mobin Iran, purchased the Telecommunication Company of Iran (TCI) for $7.8 billion. The IRGC Cooperation Foundation (Bonyad-e ta'avon-e Sepah)[183] owns the first two companies, while the latter is owned by SETAD. Since September 28, 2009, the consortium[184] owns 51 percent of the Iranian Telecommunication Company, TCI; IRGC has been both the owner and operator of the company.[185]

Emanuele Ottolenghi asserted, "The decision to de-sanction SETAD was political and had little to do with the role SETAD played in proliferation activities. The Obama administration's logic was: 'Since we are making a deal with this regime, it makes little sense that we keep its leader under sanctions.' It was probably a concession to the Iranians,[186] which they must have demanded as part of the agreement, since the main reasons for sanctioning SETAD had to do with its threat to the integrity of the financial system and its shadowy business practices." As a result of the JCPOA,[187] the U.S. Treasury lifted sanctions on the SETAD despite the fact that these entities were sanctioned because they were involved in illicit financial practices, including government corruption.[188]

Iranian Development of Infrastructure and Industry

The following sectors had been seeking uninhibited access to the Iranian market: infrastructure, oil and gas, petrochemicals, transportation, infrastructure, civil aviation, aerospace, automotive, agriculture, water, environment, tourism, trade, electronics, clothing, and cosmetics, especially as Iranians have a preference for Western brands. Iran has a consumer-orientated population and is naturally an attractive destination for Western companies. Yet, it is likely that only small and medium-sized companies that were willing to assume risk. As multinational companies have subsidiaries and investments in the United States and Europe, they do not want to jeopardize this and will not want to assume risk.

The decision to de-sanction SETAD was political and had little to do with the role SETAD played in proliferation activities.

Foreign companies seeking to develop Iran's infrastructure and industry did not initially know whether new service contracts would be approved by the Majlis and were placed on hold until they were approved on July 12, 2016. Rouhani is attempting to tie investment deals with lower unemployment and a rising income for Iranians. The previous Majlis was overwhelmingly opposed to Rouhani and stalled contracts. While it appears that the new Majlis will be more reformist, it is still unknown what its approach will be after it begins.

Iran may have engineers due to its educated population, but Iran lacks the latest technologies to develop large generators and turbines for hydroelectric facilities, ports, aviation, and agriculture. Iranian infrastructure is weak and lacks roads, hotels, ports, and railroads. Translation services and car rental services that foreign businesses would usually require are not present. Iran has a limited number of 5-star hotels, and people, as a result, have had to postpone trips until hotels were free. The UAE-based Rotana hotels were one of the trailblazers that went into Iran before sanctions were fully lifted and took a risk in doing so, but will probably be the first foreign hotels to operate in Iran since the start of the revolution.

Apart from signing MOUs and exploratory contracts, as opposed to completing full-sized contracts, the investor carried all the risk for infrastructure development. Companies tried to determine whether they will get paid, and how banks will process Iranian payments. People want to work out modalities. Yet, Iran managed to move between the exploratory phase, with companies in France and Italy signing a dozen or so deals. These included oil services group Saipem to ship-maker Fincantieri, which was to be involved in the revival of the Iranian shipbuilding industry, as well as in the mercantile and offshore fields; from Ansaldo Energia and Condotte; to Gavio and Pessina Costruzioni, which was picked to build and manage five "turnkey" hospital facilities in project financing. France has also signed over 30 deals with the Islamic Republic in agriculture, health, industry, telecommunications, aeronautics, sustainable development, and transport.

Removing sanctions would not remove the drags on Iran's economy from corruption, and poor economic mismanagement has taken the forms of misappropriation of funds and corruption.

Lack of Transparency

Businesses seeking to enter the Iranian market face barriers to entry, including corruption, bureaucracy, and the rivaling agendas of different interest groups. Every business transaction, certificate, and license requires bribes. What have not been clearly delineated are what processes are needed for business licenses or certification of a foreign company. An entire industry of consultants in Iran, Dubai, and London has emerged to cut through Iranian red tape and do the paperwork for businesses. While increasing foreign trade and investment would stimulate job creation, income generation, and public spending, removing sanctions would not remove the drags on Iran's economy from corruption, and poor economic mismanagement has taken the forms of misappropriation of funds and corruption. An example of this is a former senior aide to Ahmadinejad who is in prison for corruption – $2.6 billion were embezzled[189] through a network of Iranian banks. The former managing director of Bank Meli,[190] Iran's largest commercial bank, Mohammed Reza Khavari, fled to Canada to escape prosecution for embezzling more than $2 billion. In 2014, Khavari was arrested in a Gulf country and handed over to Iran. Another case was Babak Zanjani, who was accused of money laundering, forgery, and fraud while amassing a fortune estimated at $14 billion. Iran's Oil Ministry has stated that Zanjani owes it $2.5 billion, which he claims he was unable to hand over because sanctions froze the money in foreign banks.

Due to Iran's centrally controlled and protectionist economy, domestic investors, as opposed to foreign investors, are provided with incentives such as receiving foreign currencies at the official rate.

The lack of transparency and accessibility of information prevents companies from entering the Iranian market. Transparency International's Corruption Perceptions Index ranked Iran 130 out of 168 countries. Foreign companies[191] can, as a result of their dealings with Iran, suffer civil and even criminal penalties in their home countries, as evidence of corruption can prompt U.S. authorities to implement the U.S. Foreign Corrupt Practices Act and the UK authorities to apply the Bribery Act. Due to Iran's centrally controlled and protectionist economy, domestic investors, as opposed to foreign investors, are provided with incentives such as receiving foreign currencies at the official rate. While local companies receive subsidies, foreign companies do not receive subsidies. This naturally prevents a competitive economic environment and makes foreign investment in Iran insecure.

Private firms are being incentivized to set up offices in Iran and are being offered financial incentives such as tax cuts.[192] Rouhani has improved access to public statistics, and there are figures available on the rate of unemployment and inflation. Yet businesses lack information on the needs for their supply chains. Iran lacks market research on consumer habits for consulting companies, preventing them from putting together the statistics to advise franchises seeking to enter Iran. Often, if the data exists, it is siloed in various government ministries. Government offices do not fully share information on income and demographics with one another. Another example is the Energy Ministry, which has information on fuel production and consumption at a granular level in provinces, cities, and districts, as well as on the fuel types used for private or commercial consumption. Yet they refuse to share it publicly or with other ministries.[193]

Legal Framework for Investors

In its bid to encourage foreign investment, Iran has passed several laws. Iran is offering foreign investors a tax break from 2016-2021. This is to help Iran reach eight percent growth by 2021. Attracting investments, however, is very different from laws protecting investors. The World Bank's Index of "Ease of Doing Business" for 2016 ranks Iran 150 out of 189 countries on "protecting minority investors." Iranian laws[194] have created an enormous amount of risk for foreign investors. The Iranian government maintains the legal right to cancel contracts, expropriate investments, and prevent foreign investors from post-project repatriation of capital investments and accumulated profits. If there is a dispute between a foreign investor and the Iranian government, an international court cannot enforce its ruling in Iran as Iranian law recognizes national courts as the final decision maker in these types of disputes.[195]

Iranian Principlists who fear foreign influence and their powers waning have lent their influence to the Foreign Investment Promotion and Protection Act (FIPPA), which states that foreign investment is allowed as long as it "does not threaten the national security and public benefits, and deteriorate the environment; does not distort the country's economy and impose unfair implications on products based on local investments." However, "national security" remains undefined,[196] let alone what would constitute a threat to it. This clause could be used against foreign businesses and investments. Similar ambiguity exists in the Islamic Penal Code of the Islamic Republic of Iran, Chapter 9, Article 286, revised on April 21, 2013, which states that whoever commits a crime against national security or causes tribulation to the economic system of the country is the "destructor on Earth" (Mofsid fi al-Arz) and "should be executed." However, the definition of "tribulation to the economic system"[197] is legally undefined. This law has been applied to confiscate corporations' property and capital and could create risk for foreign investment. To this end, the International Property Rights Index in 2015 ranked Iran 108 out of 129 countries worldwide.[198]

The FIPPA Article (2), Paragraph (b), contains a protectionist provision that foreign investments are forbidden if they "impose unfair implications on products based on local investments." This is likely to prevent foreign capital from being invested in the manufacturing and production sectors.

Article (9) of FIPPA enables the Iranian government to expropriate or nationalize foreign investments for the public's benefit. Article (9) states, "Foreign Investments shall not be subjected to expropriation or nationalization, unless for public purposes, in accordance with due law, in a nondiscriminatory manner, and upon payment of appropriate compensation on the basis of the real value of the investment immediately before the expropriation."[199]

Article (13) of FIPPA defines the restrictions of transferring capital investments and accumulated profits of foreign investments abroad: "Article (13): The original foreign capital and the accrued profits, or the balance of capital remaining in the country subject to a three-month prior notice, after fulfillment of all obligations and payment of legal deductions, and upon confirmation by the Minister of Economic Affairs and Finance, shall be transferable abroad."[200] Foreign investors face risk if they seek to transfer revenue abroad as it is unknown what determines the approval of the Iranian Minister of Economic Affairs and Finance.

Chapter 2

The Gulf of the Future

Trade between Iran and the Gulf Cooperation Council (GCC) is limited (with the exception of the United Arab Emirates). In 2000, GCC exports to Iran totaled $1.3 billion. In 2008, this had risen to $13.4 billion. By 2015, GCC exports to Iran amounted to $37 billion. Iranian exports have consistently been less than its imports from the GCC.[201] In 2000, Iran exported $630 million-worth of goods, which reached $2.62 billion in 2008. This created a substantial trade deficit for Iran and an increasing trade surplus for the re-export hubs of the GCC. The GCC's exports to Iran (excluding Saudi Arabia) are almost totally from the United Arab Emirates, which accounted for 96.7 percent of total bloc exports in 2013. The geographic proximity and historical connection between the United Arab Emirates and Iran have always encouraged close connections between the two countries. Tehran is the United Arab Emirates' fourth-largest trading partner. The United Arab Emirates is Iran's largest source of imported goods, accounting for 62.5 percent of the total imports from Iran into the GCC, worth about $27 billion. These trade ties may be challenged in the future as the United Arab Emirates, in 2015, increased its deportation of Shiite personnel due to potential ties to Iran or Hizbullah.

Saudi Arabia's Shiite merchants were beginning to expand business with Iran. However, Saudi Crown Prince Mohammed Bin Salman has prevented them from doing so. Saudi Arabia is not allowing Iranian airlines to fly over its airspace. Saudi Arabia has also frozen its VISA program with Iran.

A chilling of Iranian relations with the United Arab Emirates and Qatar would have a greater impact upon Iran. Yet for GCC states to be committed in their application of U.S. sanctions, the United States would have to once again assemble a sanctions coalition and demonstrate serious willingness to snapback sanctions. In the meantime, businesses in the GCC are eager to benefit from trade with Iran.

Apart from Saudi Arabia, other GCC states have chosen, rather than increase sanctions on Iran, to sanction Iranian proxies such as Hizbullah. If tensions escalate, they will explore sanctioning the IRGC. This would be an extreme move, and the reason they have not done this yet is because the IRGC is so intertwined with the Iranian economy. GCC states have also not gone after the Iranian Central Bank, which would be a serious escalation. In opposition to Saudi Arabia, Kuwait, and Bahrain, Qatar has aided Hamas, as has Iran. Qatar and Iran also have co-funded Islamist groups throughout the region. Their similar regional strategies are due, in part, to the Pars gas field bordering Iran and Qatar, which is a key source of revenue for Qatar.

On the other hand, while GCC states did begin to enforce sanctions, it was harder to get all the GCC states to take further tangible actions due to the dichotomy between security and economic interests.

On the one hand, there is great antipathy among GCC States toward Iran due to the sense of the genuine threat it poses to them. They have voiced concerns that Iran was sponsoring terrorism, funding, and training opposition within GCC states. Furthermore, because of Iran's nuclear pursuit, GCC states are concerned for their security. On the other hand, while GCC states did begin to enforce sanctions, it was harder to get all the GCC states to take further tangible actions due to the dichotomy between security and economic interests.

One reason the United States had in the past been unable to get the United Arab Emirates to sign up fully to Iranian sanctions prior to the JCPOA was due to the split between Abu Dhabi and Dubai that often led to foreign policy difficulties. Abu Dhabi has a more Saudi foreign policy,[202] with a focus on security, and thus has a different threat perception to that of

Dubai, whose emphasis is on economics and trade. The United Arab Emirates as a confederation has a single foreign policy that is directed from Abu Dhabi, which leads to ambiguous policies when Dubai and Abu Dhabi's interests diverge.

Historically, the United Arab Emirates maintained a bifurcated foreign policy toward Iraq in the first Gulf War. Dubai, which has a considerable Shiite presence due to its historical trade with Iran, was pro-going to war with Saddam Hussein, while Abu Dhabi was against going to war with Iran.

In 2010, UAE Minister of Foreign Affairs Anwar Gargash admitted that the United Arab Emirates was interested in securing a balance between sanctions and commercial interests. The global financial crash[203] caused Dubai to rely more on financial support from Abu Dhabi, which translated into a more unitary foreign policy. Abu Dhabi holds 96 percent of UAE oil and generates the state's wealth. After Dubai's economy was severely affected by the economic crisis and bailed out by Abu Dhabi, Dubai's influence in foreign policy is marginal. To this end, Dubai's trade with Iran, while maintaining Iranian cash machines, is not an independent foreign policy from that of Abu Dhabi, but an allowance on the part of Abu Dhabi for Dubai to sustain its economic and financial ties with Iran, which is only at a private sector level. The recession, coupled with the initial lowering of oil prices, has reinforced this dynamic as both sides stand to gain.[204] There has been a steady flow of GCC diplomatic and trade delegations to Iran. They have not been at the level of economic ministers, but have been lower key – business to business and various chambers of commerce. While Abu Dhabi has not directly prevented Dubai's trade with Iran, when Iranian banks got shut down in Dubai in 2010, the Minister of Economy, who was based in Abu Dhabi, complied with U.S. requirements. Dubai's challenge, as sanctions are ramped up, is that Abu Dhabi may choose to securitize its relationship with Iran at Dubai's expense, to gain greater access to Western weaponry.

The Bush-Obama UAE Legacy

The United States has targeted a number of Dubai-based Iranian financial institutions, such as the First Persian Equity Fund, administered by Melli Investment Holding International.[205] The U.S. Treasury maintains a full-time presence in the U.S. Embassy in Abu Dhabi and has accompanied the U.S. Office for Foreign Assets Control (OFAC) to Dubai, to warn UAE banks and regulators of U.S. rules and regulations. The last large-scale visit was in November 2015. The U.S. Treasury took a very tough stand with UAE Central Bank for privately wavering on following the rules imposed by the United States. Yet it is extremely challenging for the United States to advance its position in the United Arab Emirates, with the United Arab Emirates' highly regulated financial services industry, especially since 2001. The financial sector forms a large part of the United Arab Emirates' economic diversification efforts. For the United Arab Emirates to continue being a strong security partner, as well as a stable ally for the United States, it has to diversify its economy. Thus, the United States has not pressed the United Arab Emirates on Iranian sanctions, as the United Arab Emirates cannot afford to lose its trade ties with Iran, as well as private investments many Iranian citizens have made in the United Arab Emirates.[206]

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Dubai's expansion of free zones has enabled Iran to maintain the capability of purchasing needed goods without being caught out by U.S. sanctions. The United Arab Emirates' liberal trade policies and evolving financial compliant laws enabled firms to engage in business with Iran, without being fined by U.S. authorities. This is because neo-liberal economic policies advanced by the United States have been embraced by the United Arab Emirates. Increased U.S. sanctions on Iran encouraged Iran to divert its attention to work with the United Arab Emirates more. International businesses have found ways to use the United Arab Emirates as a re-export hub for activities with Iran. Dubai's re-export hub allowed globally positioned Iranian firms, and other international firms, to re-export products through the United Arab Emirates to Iran and thus avoid getting caught by U.S. authorities. Goods would go into a free zone (not onshore) and proceed to be re-exported to international markets. Companies in a free zone are not allowed to do business onshore, and thus do not register as UAE-based companies, which in turn enables them to re-export products. The re-export hub also allowed these offshore companies to engage in business activities with Europe.

Another method companies used to trade internationally while engaging with Iran was the United Arab Emirates allowing companies to deal with a UAE-based firm (that could be Emirati part-owned), but still have goods sourced from Iran. An alternative method has been via the Creek River in Dubai, which has been the traditional hub for trade with Iran, as well as an ancestral link to trade between the United Arab Emirates, Iran, and the rest of the Gulf. The Creek River did not have a customs house to check incoming and outgoing goods, which has since been rectified. The Gulf remains open with minimum inspections and customs processing.[207] Dhows are yet another way businesses fly under the radar, transporting anything for a price; for example $1 billion of gold transferred from Turkey to Iran through Dubai in November 2015. Such porous borders are also vulnerable to attack.

Dubai anticipated that the JCPOA would lead to more economic activity between the United Arab Emirates and Iran. In 2015, an IMF report considered possibilities that sanctions relief could add one percentage point to the United Arab Emirates' real GDP growth over the next two years through higher non-hydrocarbon exports alone. The vice president of the Iranian Business Council in Dubai,[208] Hossein Haghighi, anticipated a surge in trade after the lifting of sanctions, estimating that within the first year total trade between the United Arab Emirates and Iran would increase, "between 15 and 20 percent." The United Arab Emirates expected to become the main hub for international companies looking to invest and conduct business in Iran. In turn, the United Arab Emirates' service sectors, such as tourism and hospitality, as well as its real estate market, would be boosted. Bank of America Merrill Lynch said in July 2015, that

"Turkey and the UAE were the most likely beneficiaries of Iranian foreign trade, which could increase to $200 billion by 2020 from $80 billion."[209]

These optimistic predictions failed to come to fruition, as Western banks did not extend lines of credit with Iran, preventing Iranian markets from being accessible to Western businesses and investors. Thus, experts and the Iranian Business Council in Dubai have expressed that business between the United Arab Emirates and Iran did not pick up despite Iranian sanctions relief. UAE Economy Minister Sultan al-Mansouri[210] said in June 2015 that trade exchange with Iran rose to $17 billion in 2014, but remains lower than the peak in trade reached in 2011 of $23 billion before sanctions began to make an impact. Hossein Haghighi, vice president of the Iranian Business Council in Dubai, said, "Things have not changed much as primary sanctions still remain and banks in the UAE are reluctant to deal with the Iranians or companies, which have Iranian partners, for fear of being penalized for violating sanctions-related regulations." This prevented trade from growing between Iran and Dubai.[211] Numerous international firms left the GCC, due to the initial drop in oil prices that in turn, reduced government budgets while increasing costs. These firms, along with investment firms (private equity and investment vehicles), have also been established in London, which has become the epicenter of energy deals. Even as energy prices surged after President Trump's withdrawal from the JCPOA, Dubai may suffer as companies become increasingly wary of trading with Iran.

Even as energy prices surged after President Trump's withdrawal from the JCPOA, Dubai may suffer as companies become increasingly wary of trading with Iran.

Nonetheless, the United Arab Emirates will continue to be the central point for trade with Iran as the UAE's exports to Iran are worth about 5 percent of its gross domestic product. In its bid to diversify its economy, it constructed Dubai's offshore-based Jebel Ali Port that can re-export goods. The main shipping and air transit hub for business into Iran comes through Dubai's Jebel Ali Port, which also handles between 50-60 percent of all exported Iranian goods, and more trade is brought in by trucks from Istanbul. The United Arab Emirates has also developed the Dubai World

Central airport. The GCC states have no intention to develop infrastructure to compete with Dubai's Jebel Ali's trade with Iran, as it would be too costly. The links and infrastructure needed to trade with Iran on the same level as Dubai would be very difficult and costly to replicate. Iran has been attempting to diversify its trading hubs in order not to be too dependent on a few specific hubs and is developing Oman as a competitive port[212] as a secondary option in case the United Arab Emirates wants to, in the future, abide by U.S. sanctions rather than just international sanctions.[213]

In the near-medium term, Iran needs the United Arab Emirates as a re-export hub, as Iran lacks a deep-water port, and its port infrastructure is underdeveloped, preventing long-distance tankers from entering. For this reason, Bandar Abbas port cannot take large shipments. It will be 10 years until Iran develops deep-water sea ports. Furthermore, ships face insurance issues shipping to Iran, and it has simply been too risky to engage in direct trade. Iran anticipated that after sanctions, there would be a transshipment of auto parts via the United Arab Emirates.[214]

China's "One Belt One Road Initiative" (OBOR)

However, since the "One Belt One Road Initiative" was announced by Chinese President Xi Jinping, the Gulf Region Countries of Saudi Arabia, United Arab Emirates, Qatar, Kuwait, Bahrain, Oman, Iraq, and Iran have wholeheartedly pledged their cooperation to it, offering a completely new and incredibly lucrative "new market" alternative in the face of U.S.-led sanctions.

Tehran, in particular, will be a key player in Beijing's multibillion-dollar One Belt, One Road (OBOR) initiative to resurrect the ancient Silk Road, with massive international land and sea trade and transit investments, which has currently received a total of $1.1 trillion in investment commitment with an estimated infrastructure investment estimated at $750 billion a year by 2020 in Asia alone. To Tehran's west, railroads will link Turkey and Iran.[215] From there, Turkey will serve as the "spoke" for traded goods to funnel into Europe. On the other side of the compass dial, ground transportation routes will connect Tehran with Central Asian countries, Afghanistan, and western China. This will include ground transportation infrastructure flanking Iran's east and west border, in addition to access points at the Persian Gulf, the Gulf of Oman, and the Caspian Sea, together making Iran "the centerpiece" of the massive groundbreaking project that would connect about 65 percent of the world's population and a quarter of its GDP.[216]

Currently, China is highly dependent upon oil and gas imports, principally from the Persian Gulf and Africa, which are carried mainly by tankers over Sea Lines of Communication (SLOCs) and run through maritime choke points. According to Energy Information Administration (EIA), the statistical arm of the U.S. Department of Energy, China's oil imports in 2015 amounted to about 6.6 million barrels per day (b/d), representing 59 percent of the country's total oil consumption, and gas imports amounted to 1.4 trillion cubic feet (Tcf) in 2015 (about 24 percent of consumption). These consumptions are expected to double in the next 20 years for China's sustainable development.

One reason for China's persistence in purchasing Iranian oil is that an energy imports cut-off enforced during hostile conditions may trigger a rapid collapse of China's economy and paralyze its military forces.

Almost one-third of Iranian oil shipments this year have gone to China, according to energy research firm Genscape. According to ClipperData, Iran delivered 766,000 barrels per day to China in March and nearly 700,000 barrels per day in April.[217] As new sanctions cause European States to cut back or even stop buying Iran's oil, it would leave more crude for China to buy at a discounted rate as China is Iran's biggest customer.

One reason for China's persistence in purchasing Iranian oil is that an energy imports cut-off enforced during hostile conditions may trigger a rapid collapse of China's economy and paralyze its military forces. Hence One Belt One Road and especially the Gulf Pearl Chain, which includes all the six GCC countries, as well as Iraq and Iran, would be a breakthrough to reduce its dependence on SLOCs on one side. It would also increase economic and regional integration, as it would connect West Asia with

Southeast and East Asia, which would be a win-win situation for all the partners.[218]

As the United States slowly begins to move out of this region, it has forced these countries to look east for trade and support, where China's vital energy interests in the region have given it reasons to take a larger interest in regional security. Hence, today, China is making inroads, providing suitable alternatives in all spheres – energy, political, infrastructure, defense, and beyond.[219] Jon Alterman said OBOR was envisioned as a mechanism, "to secure China from a [potential] American-led blockade,"[220] against the fast-growing economy. Furthermore, Alterman suggested that Beijing views a strategic partnership with Iran as a "great hedge against American hegemony."[221] Steve LeVine of the Atlantic Council concludes that, "In the same way that Britain ruled its 19th century empire through a far-flung navy, and the United States has done so through its trade deals and its own big naval ships, Beijing is preparing for the day years from now when it may be the premier global power." As a direct result,[222] Iran and those doing business with Iran and its companies could find themselves in a position where trade in the East could, in the near future, outweigh the benefits and restrictions of trade in the West.

Country-by-Country Review of Tensions between Economic and Security Needs

The United Arab Emirates

Only when security risk and threats peak will security concerns be prioritized at the expense of trade and economic interests. Until that point, GCC states will maintain contradictory policies that seek to preserve their security policies and economic interests simultaneously.

Saudi Arabia

In contrast to the United Arab Emirates, Saudi Arabia to a greater degree streamlines its defense, security, and economic policies and relegates the latter to the former. While Saudi Arabia in the past maintained a profitable trading relationship with Tehran, King Abdullah sought to reverse this. However, after the storming of the Saudi embassy in Tehran and Saudi Arabia's execution of Shiite Sheikh Nimr in 2016, a ban on trade was imposed between the two nations. Yet trade between Saudi Arabia and Iran were previously relatively low. Over nine months in 2015, they traded goods with a value of $215 million. But ambiguity also exists between Saudi Arabia's[223] security and economic policies. While Saudi Arabia has cut trade ties with Iran, South Korean engineering firms, power developers, shipbuilders, and terminal operators, of which a number are owned by Saudi Arabia, are operating in Iran to advance Iran's economic diversification and infrastructure development. The Saudi government is actively partnering through its private sector, public sector, and foreign investors by jointly financing projects in the fields of gas, renewable, and nuclear energy power plant construction in both Iran and the GCC. This ties Saudi Arabia's economic future to entities that are equally committed to the future development of its rival Iran. Saudi Arabia's Independent Power Projects (IPP) model of finance aims to spread risk by partnering with the private sector and can allow the Saudi state to fund a partner developing infrastructure in Iran.[224] An example of this is Saudi Arabia partnering with Korea Electric Power Corporation (KEPCO) to develop Ribagh I, a large electricity plant in Saudi Arabia. KEPCO simultaneously has a $10 billion agreement with Iran's Power Generation and Transmission Company.[225]

Kuwait

While Kuwait has followed Saudi Arabia's anti-Iranian posture, Kuwait and Iran have simultaneously explored options as to whether Iran could export gas to Kuwait via Iraq, given Kuwait's growing needs for natural gas. This contradicts their concerns of terrorist threats emanating from Iran. In September 2015, a terror cell was uncovered in Kuwait, which led to the prosecution of 26 people, including an Iranian national, for possession of weapons and explosives and for spying for Iran and its Lebanese proxy, Hizbullah.

Bahrain

A terrorist bombing in Bahrain in April 2016 that killed a policeman and wounded several others led to a Kuwaiti member of parliament to describe Iran as the "true enemy" of Gulf Arab states. In July 2017, Bahrain announced that it broke up an Iranian-backed terrorist cell. Bahrain also followed[226] Saudi Arabia's confrontational posture toward Iran. However, despite Bahrain's security concerns, the Bahraini royal family has a history of oil and corporate dealings with Iran. Iran tried to claim that Bahrain was part of Iran in the 1960's and 1970's, especially as Bahrain is predominantly Shiite. In 1981, Iran attempted a coup in Bahrain. Saudi Arabia and Bahrain refuse to allow Iranian flagged vessels into their ports and attempt to push Iranian trade elsewhere in the form of informal sanctions. Because of this, these countries are cracking down on Shiite merchant families. With the American 5th Fleet based in Bahrain, Bahrain's royal family will not face negative consequences.

Qatar

The recent schism in the GCC, between Saudi Arabia, the United Arab Emirates, and Bahrain on one side, and Qatar on the other, is due to the latter's close relations with Iran. The Trump administration has recalibrated its strategic calculus away from Iran and closer to Saudi Arabia and the United Arab Emirates, to push back increased Iranian involvement across the region. This undoubtedly led to an emboldened Saudi Arabia, followed by the United Arab Emirates, to sever ties with Qatar and close land, air, and maritime borders with Qatar on June 5, 2017. One of the conditions for the resumption of ties was for Qatar to scale back its relations with Iran. In response to the sanctions placed on Qatar by Saudi Arabia and the United Arab Emirates, Iran sent food shipments to Qatar, leading to Qatar restoring full diplomatic relations with Iran. In an attempt to demonstrate that Qatar could withstand any long-term economic blockade, on July 4, 2017, Qatar announced a boost in its gas production. Qatar Petroleum stated that it intended to increase its gas production by 30 percent and produce 100 million tons of natural gas a year by 2024. Despite the embargo, Qatar remains the world's largest exporter of LNG and is likely to continue supplying the United Arab Emirates with gas, as it provides Dubai with 80 percent of its power supply; and provides 40 percent of the United Arab Emirates' power supplies. Furthermore, Qatar's trade with Saudi Arabia, the United Arab Emirates, and Bahrain accounts for less than 8 percent of total exports. Nonetheless, Qatar is currently preparing legal action against the Gulf countries with the World Trade Organization over its economic embargo.

To a large degree, Qatar is insulated from rival GCC states' sanctions. Its new Hamad port, 40km south of Doha, was inaugurated on September 5, 2017, and is one of the largest ports in the Middle East. It will be a regional transport hub giving Qatar the ability to directly import goods from China, India, Turkey, Pakistan, and Oman rather than relying upon the Jebel-Ali re-export hub in Dubai.

Iranian Links to Dubai

More than the other GCC states, the United Arab Emirates experiences the paradox of following Saudi Arabia's security lead while being closely tied to Iran. Dubai is home to a 400,000-strong Iranian community that runs a large business network driving the United Arab Emirates' trade with Iran. The United Arab Emirates has traditionally been a key conduit for trade with Iran. A large number of Emiratis are of Iranian origin (Ajami), and cities like Dubai and Ras al Khaimah have strong commercial relations with them. There are also historical links tying Ajami merchants with family and trading ties to Iran from the southern Gulf to Iran. Additionally, the oldest part of Dubai is called "Bastakyia" because its residents came from the Bastak region of Iran.[227]

Iranian expatriates in the GCC are also of great importance within the United Arab Emirates, due to the market share they possess in Dubai. They own large amounts of property and use this as a vehicle for wealth generation and a way of diversifying their assets, so they are not that exposed to sanctions. In 2010, Iranians were the fourth-largest foreign buyers of Dubai property,[228] behind nationals of India, Britain, and Pakistan. Iranians accounted for 12 percent of real estate transactions that year. According to Cluttons, that figure dropped 3 percent in the first quarter of 2015. To procure these assets, Iranian expatriates[229] exploited loopholes in the financial controls of the United Arab Emirates. However, in the last year or so, firms operating in the United Arab Emirates have reacted and made it harder to engage with Iranian personnel. The U.S. Foreign Account Tax Compliance Act (FATCA) and the Organization for Economic Cooperation and Development (OECD's) Common Reporting standard (CRD) are increasingly demanding further regulations and risk adverse measures. HSBC was fined very heavily for this, and as a result, many financial institutions have stepped up their AML and compliance standards. In the aftermath of HSBC's large U.S. fines,[230] many have had problems selling property in the United Arab Emirates, as HSBC would not allow individuals to profit from money sourced from Iran. Yet, due to the instability[231] and stigma of the Iranian economy, large sums of Iranian money remain in the United Arab Emirates and are tied to assets. A senior official of the UAE Central Bank expressed, "We are confident that a relaxing of sanctions will increase the transit of funds and finances through the UAE. This will further highlight the importance of our economy on international trade."[232]

Market Entry to Iran

Many firms offer the prospect of facilitating market entry in Iran, but few have significant contact and network bases to conduct thorough due diligence within Iran, and who are effectively capable of delivering much-needed information. The alternative to being risk averse or[233] forgoing due diligence for direct market entry to Iran is for the United Arab Emirates to serve as a substitute. The United Arab Emirates continues to be the key central conduit for trade with Iran. Due to the total volume of traffic flowing through Jebel Ali Port, it is only natural that companies focusing on exporting to Iran be created in the United Arab Emirates. If Iran's financial sector is not integrated with the international financial system, many Iranian firms will continue to conduct business and transactions from within the United Arab Emirates due to their established links with that country. Iranian authorities tacitly allow this to occur, as the United Arab Emirates has refused to cooperate with U.S. sanctions, abiding instead with UN sanctions.[234]

Oman

Muscat has made the strategic decision to gravitate away from the GCC states and align itself closely with Iran while presenting itself as a neutral entity between Iran and Saudi Arabia. The majority of Omanis are a sect of Shi'a Islam, making it easier for Iran to align with them. This led to numerous Iranian businesses opening in Muscat and Oman building new ports. Oman is a place that accepts Iranian trade,[235] as Duqm in Oman is a neutral port in the sectarian landscape. While trade ties with the United Arab Emirates remain strong, Iran has been attempting to develop a contingency plan to expand its commercial ties with Qatar and Oman. Iran understands that if Saudi Arabia seeks to alienate Iran, Iran has to find a new avenue for trade and commerce. Oman is becoming the natural hub for commerce and re-export.

It is unlikely that without incentives from the United States and the international community, the United Arab Emirates will lose its market share of exports to Iran. Even if the United Arab Emirates, to its economic detriment, did stop trading with Iran,[236] the exports would simply get re-exported through Oman.

Alternatively, Iranian smuggling setups are very wide across the GCC and utilize a widespread network, including Iranian government officials and prominent businessmen that use connections in Pakistan, Afghanistan, and China to smuggle items. Iran has often succeeded in developing parts of its economy through this method.[237]

Strait of Hormuz

The IRGC has routinely threatened to close the Strait of Hormuz, through which the U.S. Energy Information Administration notes that some 30 percent of all seaborne traded oil flows. The IRGC possesses a considerable Anti-Access/Area Denial (A2/AD) threat to the GCC. Its fleet of fast attack ships, midget submarines, and shore-based missiles threaten every ship that passes into the Persian Gulf. They have often harassed U.S. and other nations' ships and arrested foreign sailors under the pretense that they ventured into Iranian territory. Furthermore, Iran is attempting to build a blue water capability to expand its presence in the Indian Ocean. The presence of the American Fifth Fleet in Bahrain is part of international efforts to stabilize the region and to deny Iranian attempts to hegemonize the region. GCC states did not perceive the presence of U.S. bases in the region as a sufficient deterrence to Iranian aggression, as the Obama administration was reluctant to militarily confront Iran while it sought to insulate its diplomatic deal with Iran at all costs.[238]

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IRGC Brig. Ali Fadavi asserted, "Today, the Americans and the entire world know that one of our operational goals is destroying U.S. Navy Forces." In November 2014,[239] ahead of the nuclear talks, Fadavi stressed that "American removal from the Gulf is one of the basic tasks of the IRGC," threatening that his forces could destroy and sink the U.S. fleet "in 50 seconds." In February 2015, the IRGC carried out[240] war games in the Strait of Hormuz that included the laying of mines and sinking of a model of an American aircraft carrier. Iranian State TV broadcasted a banner quoting Iran's first Supreme Leader, Ayatollah Khomeini, declaring, "If the Americans are to be buried at the bottom of the waters of the Persian Gulf, so be it." In January 2016, ten U.S. sailors were captured and taken hostage by Iran.[241] In July 2016, IRGC boats maneuvered dangerously close to a U.S. military vessel. The U.S. Navy's Fifth Fleet recorded about 300 incidents with Iranian vessels in

2015. Pentagon spokesman U.S. Navy Capt. Jeff Davis noted that there had been 35 incidents of unsafe or unprofessional behavior by Iranian vessels in 2016. The "vast majority" had occurred in the first half of that year. The United States, until recent incidents in both January and July of 2017,[242] when they saw the *USS Mahan* and *USS Thunderbolt* fire warning shots at Iranian ships in the Strait and Gulf, respectively, failed to respond decisively to these frequent intimidations due to its want, under the Obama Administration, to insulate the JCPOA.

An Iranian attack against critical infrastructure may jeopardize GCC states' partnership with the private sector in their attempts to diversify their economies and develop infrastructure.

Fears exist that Iranian-GCC tensions could escalate to the point that rather than blocking the Strait of Hormuz or confronting GCC forces head-on, Iran is likely to target specific GCC states' vulnerabilities, such as critical civilian installations in Abu Dhabi, Manama, or Riyadh due to their lack of strategic depth. Furthermore, Iran could target political power and civilian leadership that is concentrated in a few locations. An Iranian attack against critical infrastructure[243] may jeopardize GCC states' partnership with the private sector in their attempts to diversify their economies and develop infrastructure.

Chapter 3

Energy Intelligence: Sanction Ease, Initial Reduced Oil Prices, and Their Effects on the Iranian Market

Since the lifting of sanctions, Iran was able to return to pre-sanctions levels of crude oil production. Exports rose[244] by as much as 40 percent in mid-2016, and Iran's oil production has surged by 730,000 barrels per day since the end of 2015, the largest gain from any OPEC country. Currently, Iran produces 3.8 million barrels per day (MBD). Current conservative estimates forecast an expanded capacity to increase output by an additional 400,000 more barrels of oil a day (MBD). In the 2016-2017 Iranian year that ended in March,[245] Iran shipped 780 MBD of crude oil from the Kharg terminal, up by 80 percent from the previous year. Iran's exports are currently more than 2 MBD of crude oil, plus another 600,000-700,000 barrels per day (B/D) of condensates. Ali Kardor, the managing director of the National Iranian Oil Company (NIOC), believes that Iran will reach an oil production rate of 4.5 MBD, with exports of 2.5 million B/D within five years. The increase[246] in oil production will come from an increase of 420,000 B/D from the West Karoun oil field and an additional 280,000 B/D from oil fields in central and southern Iran, as well as the Falat Ghare oil company.[247]

Despite being burdened by weak infrastructure and low global oil prices, Iran continued to produce oil at a high rate in a bid to aggressively retain and further expand its market share in world oil markets. The Iranian regime originally believed that it could maintain a surplus on its economy and pump oil at a drastically lower price per barrel than its regional neighbors. Therefore, Iran can afford to produce and export oil at higher rates. The IMF estimated that Iran needed oil production to cost $55 per barrel to break even, while Saudi Arabia needs $70.[248]

The reason for the IMF's lower estimation vis-a-vis Iran was because Iran has a much more diversified economy, partly due to sanctions that have forced it to invest in other mechanisms to generate revenue. As of December 2017, Iranian heavy crude prices rose to over $60. Sanctions on the IRGC, which dominates the energy sector, may also lead to an increase of Iranian oil prices.

The increase of energy prices and GCC States' output will enable them to diversify their economies, increase their energy exports which will reduce budget deficits and increase liquidity in their banking sectors.

Oil prices will fluctuate dramatically as President Trump imposes further sanctions on Iran, which caused OPEC to reverse its decision to extend the reduction of oil output until the end of 2018.[249] In 2014, during a period of a supply glut, Saudi Arabia was willing to see oil prices fall to undercut Iran despite this also impacting upon the Saudi economy. Conversely, President Trump's withdrawal from the JCPOA as well as additional sanctions placed upon Iran's energy sector will enable GCC States to significantly increase oil revenues. In the aftermath of President Trump's announcement to withdraw from the JCPOA, crude oil prices surged, eventually climbing back above $70 a barrel later in the day.[250] The increase of energy prices and GCC States' output will enable them to diversify their economies, increase their energy exports, which will reduce budget deficits, and increase liquidity in their banking sectors. Furthermore, oil prices have already risen due to the United States increasing oil production[251] and China increasing its imports, overtaking the United States as the biggest crude importer in 2016.[252]

During the period of the JCPOA, Iran's economic diversification was critical in its negotiation position within OPEC to maintain its oil production levels. OPEC initially met in April 2016 to attempt to prevent oil prices from lowering further, but negotiations fell through after Saudi Arabia pulled out of talks and as Iran refused to participate in the oil deal after reaching its pre-sanctions output of around 4 MBD. In May 2017, Iran agreed to cooperate with the OPEC-led production costs, with the aim of removing 1.8 MBD from international markets, and thus drive the price of oil up. While low oil prices[253] had impacted Iran and other exporting states, it has been clearly shown that Iran was willing to play the long game against its OPEC adversaries in a bid to reclaim some of the lost export markets. There are numerous reasons for oil prices not plummeting after Iran came back online. OPEC and global oil producers agreed to curb output, with the majority of petro-states either fully complying or reaching at least 80 percent on average.

Sanctions, ironically, restricted Iran's ability to import equipment for its energy sector, and in turn, caused Iran to seek to stay connected to international markets by diversifying its economy and develop its own capabilities.

Here's an example of how Iran found ways to circumvent sanctions:[254] Reza Zarrib, a gold trader along with Mehmet Hakan Atilla, an executive at Halkbank, both participated in a scheme that originated before 2012 in which the Turkish government, the national oil and gas company, and Turkish banks sought to provide access for Iran to international markets by laundering hard currency in exchange for Iran's gas. On January 3, 2018, Atilla was convicted[255] in Manhattan's federal court on five of six counts, including bank fraud and conspiracy to violate U.S. sanctions law.

On the other side of the Gulf, there has been a growing sentiment within the business community that Saudi Arabia will lose an oil war with Iran if it continues to push inflated production rates. The social contract in the GCC is very different to that of Iran, and lots of the citizens across the GCC depend upon the rentier state to sustain their lifestyles. Iran can sustain its diversified economy when low oil prices would cripple and collapse any GCC monarchy. Iran has also demonstrated that it does not need to only profit directly from oil sales, whereas the GCC economies are heavily under-diversified. Measures are being taken to diversify the GCC economies. Yet these measures come very late in the day and will take at least a decade or so to reap the benefits, causing the GCC to be considerably more vulnerable than Iran.[256] Therefore, when OPEC met for a second time on November 30, 2016, the 13-nation bloc, minus Saudi

Arabia, succumbed and allowed Iran to keep their output at 3.25 MBD from the beginning of 2017 and collectively reduce their output by 1.2 MBD. Non-OPEC producers, including Russia, pledged to contribute to the deal by cutting 558,000 barrels in daily output.

Sanctions, ironically, restricted Iran's ability to import equipment for its energy sector, and in turn, caused Iran to seek to stay connected to international markets by diversifying its economy and developing its own capabilities.[257]

Iran's Economic Diversification

In 2015 and 2016, the average OPEC crude oil price was less than $50 per barrel. In 2016, the price dropped to $40.68, which was less than half the price it was two years earlier in 2014 when it was at $96.29. With the combination of significantly reduced revenues from exports and the reluctance of international banks to engage with Iran, Iranian citizens do not feel the economic benefits from its oil terminals coming back online. Iran draws more revenue from the export of electronics to Asian markets, with other Iranian goods gaining increased market share in Middle Eastern and Asian countries, such as automobiles, minerals, and construction materials. While still important, oil is becoming a smaller part of Iran's trade. In 2012, the country imported $57 billion in goods and exported $34 billion in non-oil products, meaning that non-oil exports covered 60 percent of the import bill, compared to 24 percent in 2002 and 14 percent in 1992. Iran produced this economic shift in part by converting more of its oil into industrial products for export. According to the Iranian Customs Administration, the $29.2 billion in non-oil exports over the first eleven months of fiscal 2012/2013 included $9.0 billion in chemical products (mostly petrochemicals such as urea fertilizer and polyethylene) and $3.2 billion in plastics made from oil. But other products are also being exported at high rates, including $8.2 billion in minerals, stone, cement, and related products, $5.3 billion in agricultural products, and $800 million in carpets. The country's largest market is Iraq, which took $5.6 billion in goods over the same period, including much of Iran's manufactured exports (e.g. more than $300 million in automobiles). The next-largest customers were China ($4.8 billion), the United Arab Emirates ($3.9 billion), Afghanistan ($2.5 billion), India ($2.4 billion), and Turkey ($1.3 billion).[258]

The select application of energy sanctions empowered the regime's control of its economy and influence on society, having spearheaded diversification. Iran is economically diversifying away from the export of raw crude to attract more downstream deals. This is leading experts and analysts to suggest that there could be as much as $200 billion worth of investments to be allocated for petrochemicals.[259] As upstream oil and gas exploitation and extraction take around 75 percent of investments in Iran, it will help Iran to diversify its economy.

The predicament facing the international community is that by attempting to reduce Iran's influence on global oil and gas markets, it has caused Iran to diversify its economy, resulting in either directly empowering Iranian citizens, or the regime's social controls on its citizens. This is further magnified[260] when analyzing the key players and actors within the energy market, as most are directly connected to the regime and the IRGC.

The alternative is for the United States to allow Iran unfettered access to global oil and gas markets, promoting the regime to avoid economic diversification and maintain its reliance on oil and gas, which reinforces the regime's control of society. If, however,[261] Iran is shut off from international oil and gas markets or is only allowed to engage with Asia, simplistic supply/demand economics will encourage further Iranian dependence on oil and increase exports to Asia, which will increase the presence of the regime's Principlists (fundamentalists) in society.[262]

Oil Storage Division

U.S. companies alone maintain sanctions, as the National Iranian Oil Company (NIOC) and the National Iranian Gas Company (NIGC), which are government owned/controlled, were no longer under U.S. secondary sanctions, meaning non-U.S. companies were able to trade with them. This distinction placed U.S. companies at a disadvantage in entering the Iranian market and merely led to the division of storing crude oil. The U.S.

stored international oil, and in turn enabled international oil companies to store Iranian oil. While the United States was still prohibited from directly buying Iranian oil, the import of Iranian blended oil continued to flow into the United States. Furthermore, while U.S. restrictions on the import of Iranian oil are aimed at restricting the funding of the Iranian regime, the United States has not been able to restrict payment for the storage of Iranian oil in foreign markets (outside the United States). Ironically, the global glut of oil forced international oil companies to transfer and store oil in the United States to make way for Iranian oil.

Sunni-Shiite Oil War

Oil has more geo-political significance than gas due to its role within OPEC and the global positioning of oil prices. Through its participation in OPEC, Iran in the past deliberately avoided participation in negotiations to reduce oil output as it engaged in a trade war with other states, predominantly Saudi Arabia. Iran's strategy was to regain a sizable market share as a result of its loss since the nuclear-related sanctions. Iran's desertion of the initial OPEC meeting was a clear indication that they were confident to maintain the oil war. The Iranian regime's budget in 2017 is set at around $330 billion, and reports suggest this will enable the government to operate even if the price of oil is at $40 per barrel. Iran's oil war was partially domestically driven as its growth rate of 3.7 percent growth in GDP is averaging higher than the global average of 3.1 percent growth in GDP for 2015. Furthermore, inflation is going down, with some suggesting it will drop to 7 or 8 percent.

With the 60 percent drop in the price of oil, many were hoping this would leverage Iran into making more concessions with Saudi Arabia on the rate of oil production. Sanctions, however, unexpectedly prepared Iran for reduced commodity sales. Apart from Iran's forced economic diversification, Iranian oil production costs the least to produce in the world, due to the easy availability of oil and cheap labor, thus automatically granting Iran larger profit margins. Yet, Iran has been limited in its customer market due to being subject to sanctions. As a result, Iran was not nearly as affected by reduced oil prices as Saudi Arabia, which until now has relied upon oil to run its economy.

There are suggestions within OPEC that Iran has already reached its peak capacity of output and cannot produce further oil due to weak infrastructure. With an influx of investment and spending, however, exploration and collection quickened, suggesting that Iran was maneuvering to leverage its natural assets.

Iran's Allocation of Funds and Oil Production

Iran produced six million barrels of oil per day in the late 1970s, but has since been unable to reach those levels of production. Sanctions have severely harmed Iran's energy sector as in mid-2012, Iran's oil exports plummeted from 2.5 million B/D to 1.4 million B/D, their lowest levels since 1986. Sanctions caused Iran to meet only 60 percent of its oil and gas targets, as its access to technology, capital, and procurement was blocked. Before sanctions, Iran was exporting around 2.2 MBD. The opening of the Iranian market[263] started at a time when oil prices hit rock bottom. By May 2017, the Iranian Oil Ministry stated that it had plans to increase oil production by 3 MBD.[264] Despite its large reserves, Iran could barely meet its domestic natural gas needs in 2015. By early 2015, Iran only[265] produced around 2.8 MBD, now reaching 3.7 MBD, and exported around 2.1 MBD. By the end of the first quarter of 2017, numerous sources had confirmed that Iran had become self-sufficient in gas production, as it had improved capacity at the South Pars field. These efforts[266] resulted from a $20 billion investment across six offshore projects. The current rate of production is at 570 cubic meters a day of gas, resultantly putting Iran on a similar level as Qatar.[267]

In December 2015, Iran listed 52, later increased to 78 active oil and gas fields.[268] Iran has an estimated 158 billion barrels of proven oil reserves[269] and 1,187.00 trillion cubic feet of gas.[270]

While oil and gas investments only made up 10 percent of investment in Iran in 2014,[271] revenues from them amounted to some 30 percent of the regime's income.[272] Lower oil prices intensified political infighting within the Iranian regime and in turn, created confusion as to exactly where the funds would be allocated. Prior to the oil conflict, the amount of frozen Iranian funds was estimated to be $130 billion. Iran was anticipated to add 500,000 to one million MBD to the international market in 2018 to try to capitalize on any bump up in the prices.

Over the longer term, a robust rate of Iranian domestic energy consumption, combined with some energy sector mismanagement challenges,[273] aging oil fields, reservoir depletion, and the residual difficulty of navigating sanctions, will keep Iran's energy ambitions in check. This means that it is unlikely to create a radical shift in global oil market supply patterns or create a significantly larger consuming country dependency on Iran or OPEC for oil supplies. Additionally, it is unlikely that Iran's crude oil capacity growth will exceed 4.5 to five MBD by the early 2020s, or 5.5 MBD by 2030, which is close to Iran's pre-1979 high. The current "surge" in Iranian oil exports to Europe currently totals 1.1 MBD, and exports to Asia dropped to 1.2 MBD in May 2017.[274]

> ***Over the longer term, a robust rate of Iranian domestic energy consumption, combined with some energy sector mismanagement challenges, aging oil fields, reservoir depletion, and the residual difficulty of navigating sanctions, will keep Iran's energy ambitions in check.***

On January 16, 2016, in the aftermath of sanctions being lifted, National Iranian Oil Co. (NIOC) quickly activated deals with European buyers. European firms have imported 500,000 B/D; only 100,000 B/D lower than pre-sanctions levels. Tehran managed to recover its market share of crude exports that existed before sanctions, increasing crude exports by an immediate 500,000 B/D. Oil cuts by OPEC states and increased violence in Venezuela and Libya have seen oil supplies and exports slow, allowing Iran to accelerate production and exports in a bid to regain aspects of the lost shared ownership of global oil markets.

Oil Infrastructure

Iran's ability to develop its energy infrastructure was greatly contingent upon the lifting of restrictions on dual-use technologies, including liquid natural gas technology, refining, and petrochemicals production. The JCPOA removed barriers[275] to trade in the petrochemical sector and lifts restrictions on the access of Iranian petrochemical companies, including those with significant IRGC ownership, to sensitive dual-use technology. The chemical and petrochemical industries[276] are also critical to the explosive system, fuel materials, and composite materials needed for ballistic missiles.[277]

While Iran may have been able to expand its capacity in a few areas, Iran cannot fully undertake large-scale extraction.

In June 2010, UN Security Council Resolution 1929 noted that, "the potential connection between Iran's revenues derived from its energy sector and the funding of Iran's proliferation-sensitive nuclear activities, and further noting that chemical process equipment and materials required for the petrochemical industry have much in common with those required for certain sensitive nuclear fuel cycle activities."[278]

Yet, the delisting of sanctions for dual-usage technologies enabled Iran to attract foreign companies and investment for upstream and downstream projects. Nonetheless, due to the sensitive nature of dual-use technology, the Trump administration reapplied sanctions to this sector.

Despite this, Iran will continue to pursue equipment to modernize their energy sector that can be easily procured with cash, most likely of Russian and Chinese origin. This could be repackaged as agricultural goods or car parts.

Iran has not replaced drilling wells and requires new platforms. Despite Iran's outdated extraction technology and homemade machinery, Iran has been able to tap new oil wells. While Iran may have been able to expand its capacity in a few areas, Iran cannot fully undertake large-scale extraction. This has not generated good prospects for Iran to complete a long-term push to expand its export refining and petrochemical production. As a result, Iran's First Vice President Eshaq Jahangiri has said that the government plans to invest $200 billion in the oil sector to develop the industry, using new technologies. It will take three to five years[279] to construct infrastructure and accommodate the expansion of Iran's export potential. In a best-case scenario,[280] with no interruptions in production and extraction, there will not be significant changes in Iran's export potential for a minimum of five to seven years.[281]

Accessing Iran's Energy Market

EU Council Regulation 1861 permits trade and joint ventures with Iranian individuals, as well as financing in Iranian crude oil and petroleum products, and natural gas and petrochemical products. Nonetheless, Asian states and European firms that are interested in gaining access to the Iranian market fear the impact of U.S. sanctions. Numerous[282] international oil companies involved in developing Iranian fields in the past were mulling their return if the fiscal terms on offer are sufficiently appealing. More than 30 foreign companies have qualified for oil and gas projects in Iran, including Schlumberger, Royal Dutch Shell Plc, Italy's Eni SpA, and Russia's Rosneft Oil Co. and Lukoil PJSC. Iran's oil ministry[283] considered offering contracts to develop 52 projects up to $100 billion. Companies that participated in the Tehran Oil and Gas high-level conference in November 2016 included: BP, Eni, Gazprom, Korea National Oil Corp., Repsol, Rosneft, and Wintershall. Delegates also included European firms such as Royal Dutch Shell, Statoil, Total, Sulzer, Lincoln Electric, and FUCHS and OMV, as well as Russia's Lukoil, Chinese state rivals Sinopec and China National Petroleum Corp., and Japan's Inpex. These companies never left Iran when sanctions were placed. Officially, they kept offices but were on "unpaid leave." U.S. International Oil Companies (IOCs)[284] were expectedly absent, given their heightened concerns about legacy U.S. sanctions against Iran. At the conference,[285] further MOUs and declarations of interest were signed and voiced, including:

- The Society of Iranian Petroleum Industry Equipment Manufacturers reached an MOU on industrial cooperation with the Italian Valves and Taps Constructor Association.

- British Petroleum (BP) declared an interest in opening a representative office in Iran with an eye to investing in Iranian projects.

- The Research Institute of Petroleum Industry of Iran and Korea Institute of Geoscience and Mineral Resources (KIGAM) signed a cooperation agreement.

- The managing director of France's IPC PIPING, an international supplier of piping solutions for oil, gas, chemical, and petrochemical industries, declared an interest in finding an Iranian partner.

Despite its attempt to increase oil exports, Iran remained constricted by methods of payment and infrastructure. Pipelines can only cater for a certain volume of oil, and as a result, sea-based delivery is the preferred method of delivery. Iran, however, continued to face obstacles due to the lack of deep-water facilities and the limited number of ships that can deliver oil.

The managing director of the Iranian Oil Terminals Company (IOTC) was reported to have said that the Kharg Oil Terminal, "increased its crude oil loading capacity to 8 MBD." To note, this is nearly triple the current production rate,[286] indicating a significant capability to continuously flood international energy markets. The Kharg Oil terminal is not only an asset but also the principal target in any offensive campaign (A2/AD target) against Iran as it currently manages 95 percent of Iran's oil exports.[287]

Iran had strategically maintained the production of oil in a bid to capitalize when sanctions were relaxed. This allowed Tehran a degree of flexibility and maneuverability in contract negotiations, as there was the knowledge within Tehran that a significant amount of oil had been stored in between 55 and 60 supertankers. As of April 2017, it was reported by *Reuters*[288] that Iran had in fact sold off all of its sea-stored oil. While these assets have been removed, it is estimated[289] that Tehran will have to retrofit a further

20 tankers. However, it is unable to do so due to international sanctions and is instead looking to purchase new ships.[290]

This has left only a small handful of oil tankers directly transferring Iranian oil to predominantly Asian markets. For this reason, Iran relies upon foreign tankers to export its oil. Indian companies, including Essar Oil, Reliance Energy, Hindustan Petroleum Corp, Bharat Petroleum Corp, PetroVietnam, and Japan's Idemitsu Kosan, as well as Chinese state-controlled shipper China Shipping Development, are all shipping Iranian oil. The firms listed as predominant carriers of Iranian oil[291] include National Iranian Tanker Company (NITC), Irano Hind, Idemitsu Tanker, and JX Ocean and Kine. Increasingly, more European firms, predominantly from Greece and Belgium, had been carrying Iranian oil.[292]

In the first quarter of 2016, eight foreign-listed (i.e. non-Iranian) tankers delivered 8 million barrels of Iranian crude oil to Europe. This equates to only ten days' worth of oil[293] that was previously sold by Iran in the pre-sanctions era. At least 26 European and Asian-owned supertankers, capable of carrying 25 million barrels of light and heavy crude oil as well as fuel oil, had shipped Iranian oil, enabling Tehran to ramp up exports much faster. Iranian oil exports via tankers peaked at 563 shipments in 2016, compared to 66 in 2012, with regular shipments reaching France, Italy, Germany, Spain, and Holland.[294]

Since the relaxation of sanctions and the initial months of the Trump administration, Iranian oil exports have increased each month in both the Asian and European markets. By July 2017, Iran's oil exports increased by 45,000 barrels per day versus June 2017. According to the Iranian Oil Ministry,[295] as of July 2017, 2.2 MBD is exported from Iran, with Asian markets receiving 1.3 MBD of the total. This is further compounded by the fact that Iran is producing around 4 MBD, creating a further surplus that could reinforce and replenish their now empty stockpiles even more. Less than 2 MBD is being stockpiled.[296] February 2017 showed a five-year high in Iranian oil exports to Europe.[297]

While the United States remains staunchly opposed to relaxation on sanctions toward Tehran, the U.S. firm Pall Corporation agreed to sell advanced filtration technology used in the refining process. The value of this contract is not known. However, it[298] represents the difficulty Washington is in, regarding its engagement with Tehran. While other states have approached Tehran, U.S. firms remain on the outside and have lost commercial revenue. The United States has the tools to penalize energy companies doing business with Iran, as many foreign companies maintain operations in the United States and use dollars to pay for equipment and contractors, making it harder to conduct project finance and investments.

Asia and Iran

If NIOC fails to regain a large share of the European market, it will reclaim a lost market share in Asia for further exports. This is a trend that is already taking place with established pipelines and China's reconstituting the Silk Road with its One Belt One Road Initiative. Asian countries have been reluctant to adopt U.S. sanctions. Asian financial instruments and methodology greatly facilitate Iran's trading with the Asian market, enabling it to overcome restrictions imposed by the West over its banking system. Asian nations are allying[299] with Iran in its trade war with the United States to accommodate their growing populations and economies.[300] To this end, as European companies and investors exit the Iranian market, China will increasingly seek to fill the void. Chinese companies that do little or no business in the United States and as a result are unconcerned by secondary sanctions and will be the major beneficiary of European companies pulling out of the Iranian market. China has emerged as Iran's largest trading partner. Its trade with Iran jumping 30 percent in the first six months of 2017 alone.[301] China has extended credits to Iran totaling some $35 billion.[302] It remains to be seen whether the Trump administration will penalize Chinese companies that seek to do business with Iran. The United

As European companies and investors exit the Iranian market, China will increasingly seek to fill the void. Chinese companies that do little or no business in the United States and as a result are unconcerned by secondary sanctions and will be the major beneficiary of European companies pulling out of the Iranian market.

States placed a seven-year ban on Chinese telecommunications firm ZTE in April 2018, for violating U.S. prohibitions on the export of certain parts to Iran and North Korea.[303]

In the first half of 2016, high-level delegations from China, India, South Korea, and other Asian countries visited Iran, signed deals of cooperation and investment, and increased their import of Iranian oil. South Korea saw its import of Iranian oil increase by 67 percent from mid-2015 to mid-2016, with Seoul procuring 210,996 B/D of Iranian crude[304] in April 2016 alone. South Korea aims to double the delivery of Iranian oil as it attempts to find cheaper sources of oil. South Korean imports increased by 11.8 percent in April 2016 alone, thus revealing their strategy to store as much oil as possible while prices were low. As of 2017, Iran has firmly retaken its market share in South Korea, where it has become the second largest exporter to Seoul. However, South Korea's[305] oil imports from Iran subsequently dropped in volume towards mid-2017. Nonetheless, South Korea remains the second largest market for Iranian oil, after China.[306]

China has been the biggest importer of Iranian crude, importing nearly half of all Iranian exports. China has been increasing its interest in Iran by signing multi-billion dollar deals and significantly increasing its import of oil. There are even suggestions that China was to be the recipient of 50 percent of all Iran's exported oil. In April 2016, China[307] imported at least 800,000 B/D and is set to increase its imports[308] to increase its reserves of oil, as it hoards global oil reserves in a bid to protect it from heightened sales. In an attempt to develop the Iranian oil and gas industry, China has committed significant funds to Iran to ensure Iran's commitment to providing China with a low-cost source of oil in the long term. As a result of its relationship with Iran, during a period of low oil prices, China slowed down its internal production of oil and increased its import of foreign reserves. This has seen Iranian exports to China surge by 25 percent in 2017.[309]

India has also increased its import of Iranian oil, with March 2016 being the second highest month in its recorded history of imported oil. Furthermore, India is attempting to force through[310] a payment of $6.5 billion in arrears to Iran in a bid to gain greater access to investments and resources in the

Iranian market to increase its import of Iranian oil.[311] This payment is for Indian oil imports that took place during the period of sanctions on Iran. Iran sold Indian oil,[312] charging only at cost, insurance, and freight (CIF), while[313] India was not forced to pay for transportation fees.[314] These measures guaranteed their alliance during the sanctions period, enabling Iran to attract future investments from India. Modi visited Tehran in mid-May 2016 as a goodwill gesture to guarantee more such oil deals. To avoid complications as a result of further U.S. sanctions, India is paying Iran in Euro accounts through Turkey's Halkbank.[315] India[316] is expected to import the equivalent of 400,000 B/D of Iranian oil, and it has earmarked at least $20 billion in investments in the Iranian energy market. Iranian exports represent a smaller percentage of the Indian market, as Russia exports more oil to India. Furthermore, in 2017 alone, Iranian exports have already dropped by 25 percent due to India's reprisal for Iran's awarding of an exploration contract to France's Total and the exploration gas contract offered to China's National Petroleum Corporation.[317]

As customers cannot receive shipping insurance, it makes it difficult for Iran to export the oil.

Iran has been able to attract foreign investors to its oil market. The United States' failure to advance universal energy sanctions enabled Asian states to gain access to cheaper sources of oil and gas, resulting in their continuing engagement with Iran in this manner. The JCPOA's lifting of energy sanctions saw Iranian oil exports to Asia hike 25 percent in February 2016. With a glut in the international storage of international oil,[318] it is likely that the amount of Iranian oil exported will plateau foreign markets to develop internal capabilities to store Iranian oil, thus spurring further production of Iranian oil.

Insurance

Under the JCPOA, buyers struggled with lingering restrictions linked to some still-extant U.S. sanctions relating to dollar payments and shipping insurance. Every ship requires insurance for routes they take. The United States' withdrawal from the JCPOA will prevent Iran from acquiring shipping insurance. In turn, as customers cannot receive shipping insurance, it makes it difficult for Iran to export the oil.[319] Iran in the past has[320] struggled to receive vessel insurance due to aged tankers.

International shipping to Iran remains hazardous, as numerous firms are struggling to get third-party insurance, while firms offering insurance are issuing insurance at around $80 million per ship. After an agreement on a temporary insurance fix,[321] foreign vessels are handled more than a third of Iran's crude shipments. Shipping of Iranian oil was enabled by limited insurance cover offered by "P&I" clubs – maritime mutual associations that provide "protection and indemnity" insurance to shippers. The insurance offers a "fallback" cover that is designed to offset any shortfall in payments from U.S. reinsurers, who are not allowed to deal with Iran. If however, the fallback cover is exhausted in an incident, costs like collision and cargo liabilities will not be covered, and the ship owner will be held responsible. A single Very Large Crude Carrier (VLCC) supertanker costs around $90 million, and the costs of a large oil spill can reach into billions of dollars. As a result, insurers say many first-tier oil shippers, many of them publicly listed, such as Euronav, Teekay Group, or Frontline, are refusing to carry Iranian oil.[322]

International Petroleum Contracts (IPC) – Barrier to Entry

International companies faced regulatory and bureaucratic hurdles when seeking to invest in Iran's oil sector. The Iranian Petroleum Contracts (IPC), designed by Rouhani to attract foreign investors to invest upwards of $200 billion in Iran's oil infrastructure by providing a fiscal and commercial framework,[323] was initially touted to have gone through in February 2016. The National Iranian Oil Company (NIOC) assumed responsibility for the contract in order to help protect Iranian interests. Iran's Oil Ministry had to cancel a conference in London in February 2016 to introduce details of IPC and subsequently hold tenders for dozens of oil and gas development projects. This was due to the opposition of regime Principlists, who opposed foreign companies accessing Iran's natural resources.

The Iran Petroleum Contract (IPC) was unveiled in November 2015, replacing buy-back contracts. The IPC offers foreigners 49 upstream oil and gas projects and aims to attract between 2017 and 2020 upstream capital investment of between $2 billion and $13 billion. Iran plans to begin issuing tenders in early 2017.

The IPC grants Iran the right to maintain sovereignty over its hydrocarbon reserves. However, payment of all direct and indirect expenses, as well as finance and operation costs, will be dependent on the allocation of a portion (maximum 50 percent) of products or proceeds based on current day sale prices.

Despite the tendering process for oil projects that have been legally ratified by the Iranian cabinet, the possibility exists for a company to pay for a tender and lose money if the cabinet decision is challenged by the IRGC in the future. On August 3, 2016, the Cabinet of Ministers passed a resolution to approve the terms, structure, and model of the IPC. The new Iran Petroleum Contract (IPC) is a risk service contract that replaces the buy-back contract integrating exploration, development, and production. The IPC, however, has been delayed several times due to the review of the Supreme National Security Council, which is a rival of Rouhani. The IPC does not recognize the snapback of U.S. secondary sanctions as a *force majeure* event and as such does not grant any withdrawal right to the contractor in the event of such a snapback. This removes the incentive for firms to invest or do business in Iran at the moment due to President Trump's withdrawal from the JCPOA. Despite the IPC, it has been challenging for foreign firms keen to access Iran's vast oil and gas reserves. Therefore, foreign companies are currently signing only initial exploratory MOUs. The NIOC has approved the KAA construction conglomerate – affiliated with the IRGC – and ten other corporations and conglomerates to develop new oil and gas projects. Under the framework of the IPC, the NIOC further signed multiple MOUs with:

- Tenco to conduct studies on South Azadegan,[324] Mansouri, and Abteymour oil fields, as well as Farzad-A and Farzad-B offshore gas fields.

- Russia's Lukoil and Malaysia's oil giant Pertamina are also conducting surveys on Abteymour and Mansouri oil fields.

- Persia Oil and Gas Industry Development Co., to develop the Yaran, Koupal, and Marun oil fields in the southern, oil-rich province of Khuzestan.

- Royal Dutch Shell to explore the South Azadegan, Yadavaran oil fields bordering Iran and Iraq, and the Kish gas field.

As a result of the JCPOA, Total S.A. and China National Petroleum Corporation were set to develop Phase 11 of the giant South Pars gas field. Total agreed to develop Iran's share of the offshore South Pars deposit and estimates the project needs an initial $1 billion to get started. Prior to the withdrawal from the JCPOA, the Trump administration's newly placed sanctions[325] on the IRGC, which dominates the energy sector, created obstacles for Total SA when investing in Iran's oil and gas infrastructure. Total was set to study the giant South Azadegan oil field. In July 2017, Total did not wait for the conclusion of the U.S. administration's Iran Review Policy and prematurely signed a deal to develop the South Pars field, whose gas will enter the Iranian market in 2021. Total estimated the first phase of the project to cost around $2 billion. Iran's state news agency said the project would require a total investment of about $4.8 billion. Total estimated the project to have a production capacity of two billion cubic feet per day, or 400,000 barrels of oil equivalent per day, including condensate.[326] Due to President Trump's withdrawal from the JCPOA, Total was forced to pull out of the expansion of Iran's South Pars gasfield, a project amounting to $4.8bn in which Chinese state-controlled CNPC has a 30 per cent stake. CNPC is likely to take over Total's stake.

- Schlumberger was set to work on three oil fields straddling the western Iranian border with Iraq.

- DNO was set to develop the western Changuleh oil field.

- PTT Exploration and Production Public Company Limited (PTTEP), Thailand's state oil company, is to study Changuleh, Belal, and Dalpari oil fields.

- In late November, Pergas Consortium, a group of 11 international oil and gas companies, signed a preliminary agreement to study two oil fields in Khuzestan.

- Malaysia's oil giant Pertamina to study Abteymour and Mansouri fields.

- Tehran opened talks with several foreign companies, including the Maersk Group, to tap into the oil layer of the South Pars gas field. After January 2017, Iran planned to launch its first new-style tender to develop oil and gas fields since the lifting of sanctions, where the giant South Azadegan oil field near the Iraqi border would be the first project to be tendered. As of August 2017, the NIOC has shortlisted 20 companies from initial tenders and has signed feasibility MOU's with Total, Petronas, Inpex, Royal Dutch Shell, and Tenco for the Azadegan oil field.[327]

Total and other interested IOCs (international oil companies) were aware that the new Iran Petroleum Contract (IPC) is akin to a risk service contract that will pay companies in cash or kind on a fee per barrel or fee per cubic feet for gas production basis.[328]

IOCs have claimed that the NIOC was setting its prices too high according to previous oil prices, when it was over $100 per barrel, and not below $50, which is the modern context of the glut. The NIOC was offering too little in the way of incentives in what is a highly competitive market.

IRGC Influence in the Energy Sector

The National Iranian Oil Company (NIOC) is owned by the Iranian government through the Ministry of Petroleum, and it is responsible for the exploration, production, refining, and export of oil and petroleum products in Iran. Section 312 of the U.S. Iran Threat Reduction and Syria

Human Rights Act (ITRSHRA) (2012) classified the NIOC as a person – the legal definition of an individual or an entity – as an agent or affiliate of the IRGC, whose property or interests in property are blocked pursuant to the U.S. International Emergency Economic Powers Act (IEEPA). This prevents foreign financial institutions[329] from providing any financial services for NIOC. Because both NIOC and NITC are part of the Government of Iran, they are both blocked under U.S. Executive Order 13599. Yet, the JCPOA removed sanctions from the NIOC, claiming it was no longer an agent or affiliate of the IRGC. This is despite the IRGC's influence increasing within the NIOC during the sanctions period.

For example, on August 3, 2011, Iran's parliament approved the appointment of Rostam Qasemi, a Brigadier General in the IRGC, as Minister of Petroleum. Before his appointment, Qasemi was the commander of KAA, which remains sanctioned. Qasemi has since publicly expressed his allegiance to the IRGC. As the IRGC has become increasingly influential in Iran's energy sector, KAA has obtained billions of dollars' worth of contracts with Iranian energy companies, including NIOC, often without participating in a competitive bidding process. The intertwined relationship between the NIOC[330] and the IRGC reveals the political nature of the JCPOA, which was rejected on May 8, 2018 by the Trump administration.

In an attempt to access Iran's energy market, companies initially attempted to distinguish between companies that are non-sanctioned, government-owned and companies that are sanctioned due to being owned by the IRGC. The (NIOC) and the National Iranian Gas Company (NIGC), along with their numerous subsidiaries, are IRGC-owned/controlled entities responsible for selling Iranian oil and natural gas. An example of this is the NIOC's subsidiary the Petroleum Engineering Development Company (PEDEC), which owns the South Yaran oil field, which was set to go online in mid-2016 and will yield approximately 50,000 barrels per day. The IRGC companies in charge of drilling include, "National Iranian Drilling Company (NIDC), Puya Energy Kish, Naft Kar, and KAA Construction Headquarters." KAA remains under sanctions.[331] The IRGC has increased its dominance in the oil and gas sector by assuming ownership of public enterprises. As a result, IRGC companies were set to receive significant contracts in the oil and gas sector due to increased levels of foreign investment in upstream and downstream projects. In turn, Iranian state-owned companies connected to the IRGC would have been able to procure technology (including liquid natural gas technology, refining, and petrochemicals production) and issue bonds to finance new projects.

While the NIOC and NIGC are controlled by the IRGC but no longer under U.S. secondary sanctions, thus enabling non-U.S. companies to trade with them, the IRGC owns several companies in the upstream and downstream energy sector. If these companies are on the U.S. Treasury's Specially Designated Nationals (SDN) list, both U.S. or non-U.S. companies that would have interacted with them could have been subject to U.S. sanctions and reputational risk. This constituted a grey area for investment and cooperation that could have created risk for foreign companies investing in the Iranian energy sector. The extent of IRGC influence in the energy sector can be seen when President Ahmadinejad appointed Brig. Gen. Rostam Qasemi, the commander of KAA's troops, as Iran's Minister of Oil on August 3, 2011. Foreign companies were afraid that tax money will go to the IRGC.[332] It is not clear anymore which companies are IRGC- owned and which are not. Forty percent of the oil fields and 60 percent of the contractors are owned by IRGC. Firms were encouraged to undertake exhaustive due diligence. The IRGC's influence on oil and gas led to U.S. Executive Order 12938,[333] which targets proliferation targets such as, but not limited to, IRGC al Quds commander Qassem Soleimani, the IRGC, and a company called Rock Chemie, which is a chemical manufacturer in Iran.[334]

While pragmatists in the Iranian regime identified the economic benefits of opening up the energy sector to foreign investors, elements of the IRGC that benefited from the private sector being decimated by sanctions did not want foreign firms to benefit and would rather have maintained their stranglehold on the oil sector. An example of this occurred on a visit[335] to the South Pars gas field in early March 2016. IRGC Commander Mohammad Ali Jafari said that the massive IRGC-run engineering company, KAA, needed to remain an important player in the energy industry. On June 25, 2006, the NIOC gave the IRGC engineering corps, KAA, a no-bid contract to develop the 15^{th} and 16^{th} phases of South Pars Gas Field. But the IRGC and companies owned by the IRGC[336] remained on both the U.S. and EU non-nuclear sanctions lists. In another example of the IRGC increasing its domination[337] of the energy sector due to the exit of a foreign partner can be seen when in July 2006, Iran's Bank Saderat, in cooperation with Credit Suisse, suspended financing that was essential to Oriental Kish Company (sometimes called Oriental Oil), a company drilling for oil and gas in various Persian Gulf fields. KAA immediately acquired the Oriental Kish Company, along with $90 million in equipment.[338]

Despite being concerned about foreign companies benefiting from accessing Iran's energy sector, the IRGC also stood to benefit from the unraveling of sanctions on this sector. The production at the South Yaran oil field, a project owned by NIOC's subsidiary the Petroleum Engineering Development Company (PEDEC), was set to begin in March 2017 and would yield approximately 50,000 barrels per day. According to *Fars News*,[339] the IRGC companies "National Iranian Drilling Company (NIDC), Puya Energy Kish, Naft Kar, and KAA Construction Headquarters are in charge of drilling" and would benefit from contracts.[340] With further sanctions placed on the IRGC by President Trump in late July 2017, there could be a further restriction or reaction to IRGC-owned companies.

Iran Accessing Energy Revenues and Circumventing Sanctions

Iran was unable to receive past revenues it was owed. Britain pledged to help provide Iran with revenues made from sales of natural gas from the Rhum gas field in the North Sea off the coast of Scotland, which is co-owned between BP and the Iranian government. BP decided to pump gas from the field, take the revenue, and hold it in an account to pay the Iranian government when the sanctions were lifted.[341] In the aftermath of President Trump's withdrawal from the JCPOA, BP halted planned work on the Rhum gas field.[342]

For Iran to circumvent the unwillingness of many lenders to issue letters of credit for Iran-linked trade or bypass using the U.S. dollar, Iran sought to develop barter trade. To this end, NIOC offered to exchange exports of crude cargoes for imports of refined fuel. Chinese investors often avoided traditional banking routes and engaged in bartering with Iran. The Bank of Kunlun was created[343] to enable China's Ministry of Oil to deposit payments to Iran. Iran used 30 to 40 percent to make cash payments for purchases elsewhere in Asia and the rest was used to finance projects in Iran and buy Chinese items.

The NIOC established joint accounts with foreign companies. The option of a joint account was considered in the case of the Greek refinery ELPE, which had an outstanding debt of 600 million Euros to the NIOC due to banking restrictions caused by sanctions. ELPE received a quarter of its crude oil from Iran before EU implementation of sanctions and sought to resume purchases immediately and begin paying debt arrears. Yet Hellenic Petroleum SA struggled to secure payment for deliveries because banks refused to process payments. In December 2016, Tehran and Athens agreed to a roadmap that saw Hellenic Petroleum's debt be repaid to Iran over the following two years as international sanctions were partially lifted.

Previously, Iran had creatively found ways to circumvent energy sanctions and export oil by blending their oil with Bangladeshi or Singaporean oil, as this way the oil was not deemed a wholly Iranian product and thus not subject to sanctions. This technique also altered the shipment's physical specification, which proceeded to be sold with Iraqi-origin documents. Other ways Iran circumvented sanctions included tankers switching off tracking systems, ship-to-ship transfers, and discharging and loading at remote ports.

Oil Investments in Iran

National oil companies internationally need to increase overall reserves as their own holdings are decreasing and reserves are estimated to run out in the foreseeable future. It was appealing for companies to seek to attain the Iran Petroleum Contract (IPC) and enter Iran because Iran's oil is easily accessible.[344]

International oil companies (IOCs) were aware of barriers to entry to the Iranian market. Article 153 of Iran's constitution forbids foreign ownership of natural resources. As such, the NIOC and two other state-owned enterprises manage all oil and natural gas projects. Foreign companies can only engage in exploration and development phases by entering into contracts with Iranian subsidiaries. Foreign companies risk having their contracts arbitrarily terminated by the IRGC, which dominates the Ministry of Oil. In the past, former IRGC General Rostam Qasemi[345] threatened Chinese companies to terminate their contracts and replace them with IRGC-owned companies. The Iranian government has been unable to establish[346] regulations for the IRGC and therefore cannot oversee the IRGC's actions. The IRGC is only answerable to the Supreme Leader. For this reason, foreign companies were slowly assessing opportunities.

Gas Investments

The Iranian gas market will remain critical to the future construction and development of Iran in a post-sanctions era due mainly to the fact that Iran holds the second largest reserve of gas in the world. Total Chief Executive Patrick Pouyanné[347] expressed, "Gas is our priority there, and petrochemicals." This however, was challenging in practice, as most of Iran's reserves are largely underdeveloped[348] and have weakened Iran's export capabilities. At the end of 2012, the Iranian natural gas reserve was 1,187 Trillion Cubic Feet (TCF), an increase of 5.4 percent over that of the previous year. However, Iran's share in the global gas trade market was only 4.7 percent, ranking 6th. By 2015, it had reached 1202 TCF.[349] Tehran is preparing for the medium to long-term future[350] by rebuilding its LNG (liquefied natural gas) infrastructure. Iran is reported to have earmarked $289 billion in investments by 2025, of which $137 billion are to go on upstream projects. It is estimated[351] that six gas refineries will be built by 2022. Ali Kardor estimates that in the next five years Iranian gas production will reach 1.3 billion cubic meters per day and production of gas condensate will reach 864,000 B/D. The increase in gas production is expected to come from South Pars.[352] These predictions are however, challenged by the Trump administration's reimposition of sanctions.

Iranian liquefied natural gas (LNG) development was touted as a serious potential component of the future Iranian economy, requiring considerable investment. International firms remained reluctant to invest the great sums required to develop the infrastructure to provide Iran with the capacity to produce and export LNG products. The surfeit of LNG production capacity planned to serve global LNG demand through the early 2020s made new projects for this period, and in a low-energy price environment. Additionally, it was likely that some of the sophisticated technology produced by Western companies, which is necessary for liquefying gas, would remain restricted by sanctions even after the nuclear deal and lifting of sanctions. Existing pipelines to the Caucusus and Central Asia were very costly to build and took a long time to develop. This means that it would be difficult or impossible for foreign companies to develop a substantial Iranian LNG export industry for a number of years.

Energy Driving Foreign Policy

Europe aimed to diversify its sources of gas and not be beholden to Russia, which currently supplies Europe with a quarter of its gas. In 2015, U.S. President Barack Obama spoke openly about the need for Europe to reduce its reliance on Russian gas following the conflict in Ukraine. As the Iranian market is close to Europe and is vastly under-developed, Iran was considered a key potential market for European companies to invest in the extraction of gas. The United States is interested in curbing Russia's sphere of influence that is leveraged by its energy exports. The increasingly aggressive regime in Moscow, and its previous ransom of gas to Europe in 2009 has remained etched in the European psyche toward Moscow.

Due to Iran's gas reserves and the profit margins surrounding Iranian oil, Iran uses gas for electricity and exports its oil. Iran uses gas predominantly to power the country, and it is beginning to explore the possibility of utilizing this to assist in power delivery to its neighbors, thus improving its foreign relations. Iran is offering long-term contracts to develop infrastructure and make Iran an alternative to Qatar as a gas producer. Building gas infrastructure, such as condensation plants and underground pipes, to transfer gas is a greater investment than oil shipments and helps shape foreign policy as it entails the development of a long-term relationship.

Russia being aligned closer to Iran than Qatar meant that it could better influence and control gas exports to Europe from Iran, the Caspian Sea region, and Central Asia. This led to the Iran-Iraq-Syria pipeline deal that was signed in 2012. There are joint Russian-Syrian-Iranian efforts[353] in the long term regarding gas deposits in and around Syria. Iranian gas could run from the Iranian Port Assalouyeh near the South Pars gas field in the Persian Gulf to Syrian ports, such as Latakia, and through pipelines under the Mediterranean to export its gas. This would strengthen the Shiite axis extending Iran's sphere of influence from Iran to Iraq, Syria, and Lebanon. Iran will also be able to expand its regional presence by providing electricity to neighbors, such as Iraq, where it can increase its influence.[354, 355]

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In contrast to Iran and Russia, in 2009 Qatar proposed building an alternative pipeline to send its gas northwest via Saudi Arabia, Jordan, and Syria to Turkey, which in the long run would be cheaper than liquefying and shipping gas. This would have undermined Russian gas exports to Europe, which led Putin to pressure the Assad regime to reject Qatar's proposal.

Iranian energy exports to the Caucasus and Turkey were smooth deals, in contrast with attempted deals with the GCC. Gas exports took shape in December 2014, while Iran was still under Western sanctions. Kazakhstan, Turkmenistan, and Iran opened a new 928 km-long Ozen-Gyzylkaya-Bereket-Etrek-Gorgan railway line, providing access for Central Asian goods to Iran and the Middle East. This line also paved the way for Iranian commodities to reach Russia and China.[356] Recent transactions with China, South Korea, India, and Pakistan demonstrate the immediate interest from Asian countries in receiving Iranian gas exports. South Korea[357] has tripled its imports of Iranian oil and gas in recent months. South Korea sent a delegation of over 230[358] business executives to explore investment opportunities in Iran.

Export Route Diversification

Before sanctions, international trade between Iran and South Korea was approximately $17 billion annually. Iran has nearly completed[359] developing the "peace pipeline." The National Iranian Gas Company awarded KAA a contract to build a 600-mile pipeline from Iran to India via Pakistan. Iran[360] sought Pakistan's involvement to complete the building of their part of the pipeline. At the time of sanctions, India and Pakistan claimed they were unable to receive finance. Since the JCPOA, China has offered to finance the Pakistan pipeline.

Iranian gas exports are arriving at the Chinese-built Gwadar port in Pakistan as part of the OBOR project. Freight only has to travel by land rather than by sea before it is exported to China. By transiting via Gwadar, China is directly benefiting from Iranian trade from the port it owns, which will also help bring Iran and China closer together.

Similarly, Chabahar, located in southeastern Iran on the Gulf of Oman, offers a trade route to supply energy from Iran to India and Afghanistan, as well as Central Asia – bypassing Pakistan and deepening both Iranian and Indian ties with Central Asian countries that are energy-rich, such as Turkmenistan and Uzbekistan. To this end, India's Prime Minister Narendra Modi announced India's plan to spend $500 million to develop for Iran its first deep-water port on its Indian Ocean coast, 50 miles from Gwadar. Currently, Iran's ports can only handle small ships, whereas Chabahar will enable Iran to trade with big cargo ships. On December 3, 2017, Iran's President Hassan Rouhani inaugurated the first phase of the Chabahar port development project.

Gas pipelines will increase the flow of gas from Iran to China via the Turkey-China pipeline, enabling Iran to deliver to European and Asian markets. As China is the biggest consumer[361] of gas, the delivery of Russian and Iranian gas will have to be sustained. As a result, Iran is going to come more online.

Iran’s Petro-Chemical Industry

The United States issued sanctions prohibiting investment in, and the provision of goods and services to, Iran’s petrochemical sector in November 2011. The European Union followed suit in March 2012,[362] targeting both exports of petrochemical products[363] and imports of technology for the sector. The U.S. Treasury also blacklisted eight Iranian petrochemical companies in May 2013. Iran’s petrochemical industry[364] had already been affected by sanctions imposed by the UN Security Council on Iran in 2006, leading to heavily reduced export levels.[365]

Iran’s petrochemical products are the country’s largest source of income after oil, with Iran being the largest manufacturer[366] of petrochemicals in the region in terms of total volume. Saudi Arabia is a close second. Turkey has also been a significant importer from Iran in some specific products, such as polyethylene and polypropylene. Iran produces 26 percent of the region’s polyethylene and is expected to produce 30 percent of the region’s ethylene (it is currently producing 22 percent). The value of petrochemical production is expected to grow 10 percent annually and rise 10-25 percent within two years of sanctions relief upon Iran. This is due to a combination of factors,[367] including an increase in access and a growing application for domestic use of its gas assets that will enable greater exploitation and application of its petrochemical industry. Iran aims to realize an output of 120 million tons by 2020 and 180 million by 2025. In 2017, Iran’s 57 petrochemical complexes produced nearly 55 million tons of goods.[368]

Until 2013, European markets had been the primary target for Iranian petrochemical exports. Since the implementation of the JCPOA, the Islamic Republic of Iran Shipping Lines (IRSL) has reestablished shipping lines with Europe. Iran has sent a container ship transporting petrochemicals to two European ports. The suspension of petrochemical sanctions led these exports to rise 32 percent to $3.17 billion. There were reports of discussions[369] with Shell and Linde Group for the investment and development of

Iranian petrochemicals. Considering their current relationship, it is likely numerous European firms will invest in this market. Recognizing this potential, the Iranian Petrochemical Commercial Company opened an office in London, United Kingdom, on July 9, 2017.[370]

After 2013, as sanctions increased, China and India became major export destinations for petrochemical products. Iran's favorable geographic location makes both Asian and European markets an important export destination for Iranian petrochemical products. In April 2016, a deal was signed between the Iranian executor company of Petrosaman Faragostar and the Chinese Company CNTIC for the construction of the first petrochemical power plant in Mehran (Ilam Province), valued at €1.56 billion.

Investment

Iran has ambitious new investment plans in the petrochemical industry, which as expressed more broadly in the Iran 2025 document, will be used to diversify its economy beyond oil and gas. Iran's petrochemical sector will need $52 billion in investment over the next five years as Iran aims to double the capacity of the industry up to 2021. Numerous firms were in discussions with Iran to invest in the petrochemical sector. The French firm Total had expressed its prioritization of Iranian gas and petrochemical markets for investment.[371] Due to the United States' withdrawal from the JCPOA, Iran will court China and India to achieve receive these investments.

Iran proposed to attract foreign investment to resume over 60 halted petrochemical projects to increase the current production capacity of 58 million tons (FY2015) to 130 million tons per annum in the next five years. In addition, the government further proposed 36 new investment opportunities with the potential to increase the total production capacity of petrochemical products, as mentioned before, to over 180 million tons per annum by the end of 2025.

Ownership

The National Petrochemical Company (NPC) is a government-owned company and is overseen by the Ministry of Oil. As a result, the petrochemicals industry faced as many obstacles to entry as the oil and gas industry did. The NPC owns 17 percent of the Persian Gulf Petrochemicals Industries Company (PGPIC). In turn, the PGPIC accounts for 50 percent of total Iranian petrochemical product exports. This indicates the regime's stranglehold on Iranian petrochemical capabilities. The NPC undertakes an administrative role in developing the infrastructure for the petrochemical industry. The IRGC is not a majority owner in any of the publicly traded petrochemical companies, but holds major stakes in many of these firms and will benefit from the suspension of petrochemical sanctions.[372] These include companies such as:

- Kermanshah Petrochemical Industries Co. (market value: $362.6 million)[373]
- Pardis Petrochemical Co. (market value: $1.62 billion)[374]
- Parsian Oil & Gas Development Co. (market value: $2.6 billion)[375]
- Shiraz Petrochemical Co. (market value: $527.8 million)[376]

Infrastructure

Iran's Sixth Development Plan (FY2015-2020), proposes strategic downstream development plans[377] aimed at removing project financing constraints and eliminating technology obsolescence. Developing effective marketing and distribution systems are also key policies, looking to be implemented.

The Iranian regime plans to pursue the following key priorities in the petrochemical vertical during the Sixth Development Plan period:

- Attract over $70 billion in resources (both foreign and local finance) to run 62 halted petrochemical projects requiring about $33 billion, as well as for 36 new proposed projects with the total capital expenditure of $35-40 billion. This will allow the country to surpass the total production capacity to over 180 million tons per annum.

- Increase the export of petrochemical products from $12 billion to over $40 billion and increase the export of relevant consumer goods threefold.

- Boost investment in downstream petrochemical industries by developing industrial cities near feedstock provinces, such as Bushehr, Khuzestan, Kermanshah, Ilam, and Kurdistan provinces.

- Rapidly develop railway and maritime transportation networks and facilities to deliver petrochemical goods.

- Iran plans to develop infrastructures, such as power plants, desalinated water plants, and road and rail transportation. Besides these, the government is also cognizant of taking necessary measures to support industry growth through appropriate import duty restructuring, ensuring minimal bureaucratic processes in investment and project financing, and developing new free trade economic zones.[378]

Conclusion

Access to Advanced Technology and Financial Resources Key to Growth

The easing of sanctions upon Iran opened Tehran to international markets. However, the Trump administration's reimposition of sanctions will make Tehran face eastward toward Asian markets. Unlike its rentier state neighbors on the Arabian Peninsula, Iran's economy is not dependent upon natural resources. Tehran was able to accelerate its production and export of oil in an attempt to reclaim lost market share. Due to Iran's underdeveloped energy infrastructure and low cost of exploration and production, many states engaged Iran for oil and gas, with several Asian states leading this charge. European firms were not far behind during the period of the JCPOA, as they remained cautious of potential sanctions violations. Iran's gas reserves and potential can destabilize international markets, and while initial efforts were undertaken with French and Chinese partners, this was seen more as a cooperative effort by Tehran to ensure foreign partners maintain a vested interest in the relaxation of sanctions upon Iran.

For Iran's energy sector to grow, however, there would have to be a renewed focus on advanced technology transfers and system-wide overhauls, as well as a pipeline of uninterrupted wealth generation to afford these transactions. Compounding sanctions upon the Revolutionary Guard Corps increase the difficulty on Tehran to engage in practices of modernization, and as a result, will eventually prompt a political debate within Iran to either remove the IRGC's ownership of the domestic energy sector and grow, or maintain ownership and attempt to make advances where possible. The latter option presents ample opportunity for foreign intervention to cripple Iranian capabilities, should further sanctions not deter Iranian aggression.

About the Author

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Barak Seener was the Middle East Research Fellow at the Royal United Services Institute (RUSI), and an Associate fellow at the Institute, on whose behalf he has debriefed international defense and security policy makers and diplomats on matters relating to the Middle East. Barak has lectured at NATO and the EU on Gulf security, and participated in strategy groups for various governments planning scenarios on Middle East security. Barak staged a conference in London at (RUSI) on Palestinian statehood. This examined the security implications for the region, bringing together leading Israelis, Palestinians, U.S., and European representatives in London. Prior to joining RUSI, Barak was one of the Henry Jackson Society's founders in Westminster and was the Henry Jackson Society's Greater Middle East Section Director.

Barak has provided analysis and expert commentary for a range of international broadcasters including Al-Jazeera, BBC, CNN, Chinese CCTV, Fox News, Sky News, Voice of America, and news outlets such as *Bloomberg*, *Reuters*, *Associated Press*, the *Evening Standard*, *Jerusalem Post* and *Xinhua*.

Barak has written and commented on transatlantic relations, universal jurisdiction, nuclear proliferation, and Middle East issues, including the Arab Spring, tensions in Libya, Egypt, and Syria, strategic and security dynamic between Iran and the Gulf, and the Palestinian-Israeli conflict.

Barak has published extensively for CNN, *Defense News*, *Jane's Intelligence Review*, *The National Interest*, *Middle East Quarterly*, *Jerusalem Post*, and *InFocus*. Barak has also reported for the Washington Institute for Near East Policy's PolicyWatches and PeaceWatches.

Publications that Barak has edited include: *Al Qaeda's Armies: Middle East Affiliate Groups and the Next Generation of Terror*, by Jonathan Schanzer; *Foreign Affinity Terrorism in the Twenty-First Century: How to combat the International Terrorist Network in the United States*, by Raymond Tanter (In Press); A policy focus by Maj.-Gen. (Res.) D. Almog (April, 2004), *The West Bank Fence: A Vital Component in Israel's Strategy of Defense*, including a military critique; and *A Defensible Fence: Fighting Terror and Enabling a Two State Solution*, Washington Institute for Near East Policy, D. Makovsky (April, 2004). He also contributed to the American Foreign Policy Council's *World Almanac of Islamism*.

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The Trump Administration's withdrawal on May 8, 2018, from the uncertainty accompanying the fate of the Joint Comprehensive Plan of Action (JCPOA) will cost the Iranian economy a heavy price. It has created wariness on the part of foreign investors, especially European investors, and prevented the Iranian market from significantly reaping the fruits of the deal.

Prior to the withdrawal from the JCPOA, there were numerous preparations by foreign businesses and investors to enter the Iranian market, but only a marginal number of deals and investments materialized. Following the American withdrawal, major European companies began to move their business away from Iran and cut their trade with it.

Even though the European Union is determined to stick to the deal, it will be very difficult for the EU to convince companies to prefer the Iranian market over the American market, once secondary sanctions are resumed. Russian and Chinese companies may try to fill the gap but may encounter difficulties. Although India has declared that it will abide only by UN sanctions, it appears that Indian companies will hesitate to ignore the American threat.

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