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Iran and the Changing Military Balance in the Gulf

Net Assessment Indicators

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Photo: - / Getty Images

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In Strategy

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Setting the Stage: Clashes, U.S. Commitments, and Comparative Resources

Setting the Stage and Defining the Balance

This analysis is far more of a net assessment of past and current trends than a count of the military balance. A military balance is a comparison of forces that implies relative war fighting capability, but a net assessment examines probable actual capability in a given scenario. This is a critical distinction in the case of the Gulf because the United States can deploy so much power relative to Iran and the Arab Gulf states. Put differently, there is only an Iranian-Arab Gulf balance if the United States does not participate in a conflict – a contingency that still seems unlikely in any serious crisis or conflict.

At the same time, other outside powers – local powers – like Israel, Jordan and Egypt – or more remote powers – like China, Russia, and Turkey – can also intervene. At the same time, as the current war in Yemen shows, some Arab Gulf states may fight in a given contingency and others may stand aside.

The chronology at the start of this section focuses on actual events and “scenarios” to show the complex interactions between politics, threats, and the actual use of forces – as well as the number of players that can become involved on any given date.

The charts and tables that follow highlight the separate capabilities of currently deployed U.S. forces. The data in this section are highly unstable. They reflect important shifts following the successful effort to break up the ISIS “caliphate,” but they also reflect the unpredictable shifts in the U.S. effort to both cut U.S. forces or reinforce them – driven by day-to-day events.

The final part of this effort to set the stage shows the resources and spending that shape the current capabilities of Iranian and Arab Gulf forces by country. Later tables and charts show the size and sometimes the qualitative capability of the personnel and major weapons.

It should be stressed, however, that such spending and arms transfers are only rough indicators of the resources that might now be used in any given contingency. Moreover, they do not reflect the differences in the capability of individual countries and their ability to fight limited wars and use their military forces to intimidate and influence their neighbors.

That said, these defense spending and arms transfers analyses still highlight the immense gap between Iran’s limited ability to fund its defense budget and import weapons and military technology compared to the capability of the Arab Gulf states. This is a gap that clearly has been compounded by the re-imposition of U.S. sanctions on Iran in 2018 but is now complicated by the later drop in world petroleum prices and the economic impact of the Coronavirus.

Once again, such uncertainties illustrate the differences by source in even the best the unclassified literature now available and the inability to determine the level of uncertainty in most data – problems that affect virtually every aspect of this analysis and uncertainties now highlighted by the inability to determine how the Coronavirus will or will not reshape future behavior.

The Dynamics of the Growing Crisis in U.S. and Iranian relations

Using a Chronology to Illustrate Real World Military Dynamics

This section shows the dynamics of the confrontations and clashes between Iran and the United States using a detailed chronology that focuses on 2019 and covers a critical year in both the political and military confrontations between the United States and Iran, as well as their resulting impact on the Arab Gulf states.

Complex as this chronology is, it still oversimplifies the current situation in the Gulf. It does not highlight the war in Yemen, the regional arms race, or the full spectrum of threats and conflict between the Arab states and Iran. It does, however, still show the sheer complexity of the interactions between politics and diplomacy, threats, and the actual use of radically different kinds of force. It highlights the Iranian, U.S., and Arab reluctance to escalate to major attacks; their use of outside powers and forces; their reliance on “gray area” operations that mix civil and military actions, and their efforts to control the resulting level of escalation.

It also highlights the degree to which Iran relies on a wide spectrum of military options ranging from the low-level support of non-state actors like the Iraqi Popular Mobilization Forces (PMF) to the use of long-range ballistic missiles, as well as the wide range of different kinds of forces in the Gulf.

It serves as a practical warning to military specialists that no one element of Iran’s forces – or its use of force – can dominate its behavior or even the U.S. and Arab response – regardless of whether the event involves the train and assist activities of the Al Quds Force, naval attacks by Iranian Navy and IRGC-Navy forces, or the IRGC’s long range missile forces. Similarly, the U.S. and Arab response show equal diversity, and each confrontation and actual deployment of forces takes on a different and unpredictable character.

The history behind this chronology also needs careful consideration. It long predates the fall of the Shah in 1979. Major tensions existed between Iran and the Arab Gulf states even under the Shah – such as the time when the Shah took advantage of Britain’s departure from the Gulf to seize Arab territory in Abu Musa and the Tunbs while even attempting to claim Bahrain.

Iran and the Arab Gulf states have been direct rivals ever since the fall of the Shah in 1979-1980, and the United States has confronted Iran ever since 1980 as a result of the Iranian hostage crisis and the threat Iran began to pose to a critical part of the world’s petroleum exports.

The United States has also seen Iran as a threat ever since that hostage crisis. It fought a brief “tanker war” with Iran in 1987-1988. Iran has since played a major role in terrorist attacks against U.S. forces in Lebanon and Saudi Arabia, and the United States has clashed regularly with Iranian supported and supplied Iraqi Popular Mobilization Forces (PMF) in Iraq ever since 2005. Like the Arab states, the United States has sometimes come to the edge of a serious conflict with Iran, but in each such case, one or both sides chose to back away from a major conflict.

Using a Chronology to Illustrate Real World Military Dynamics

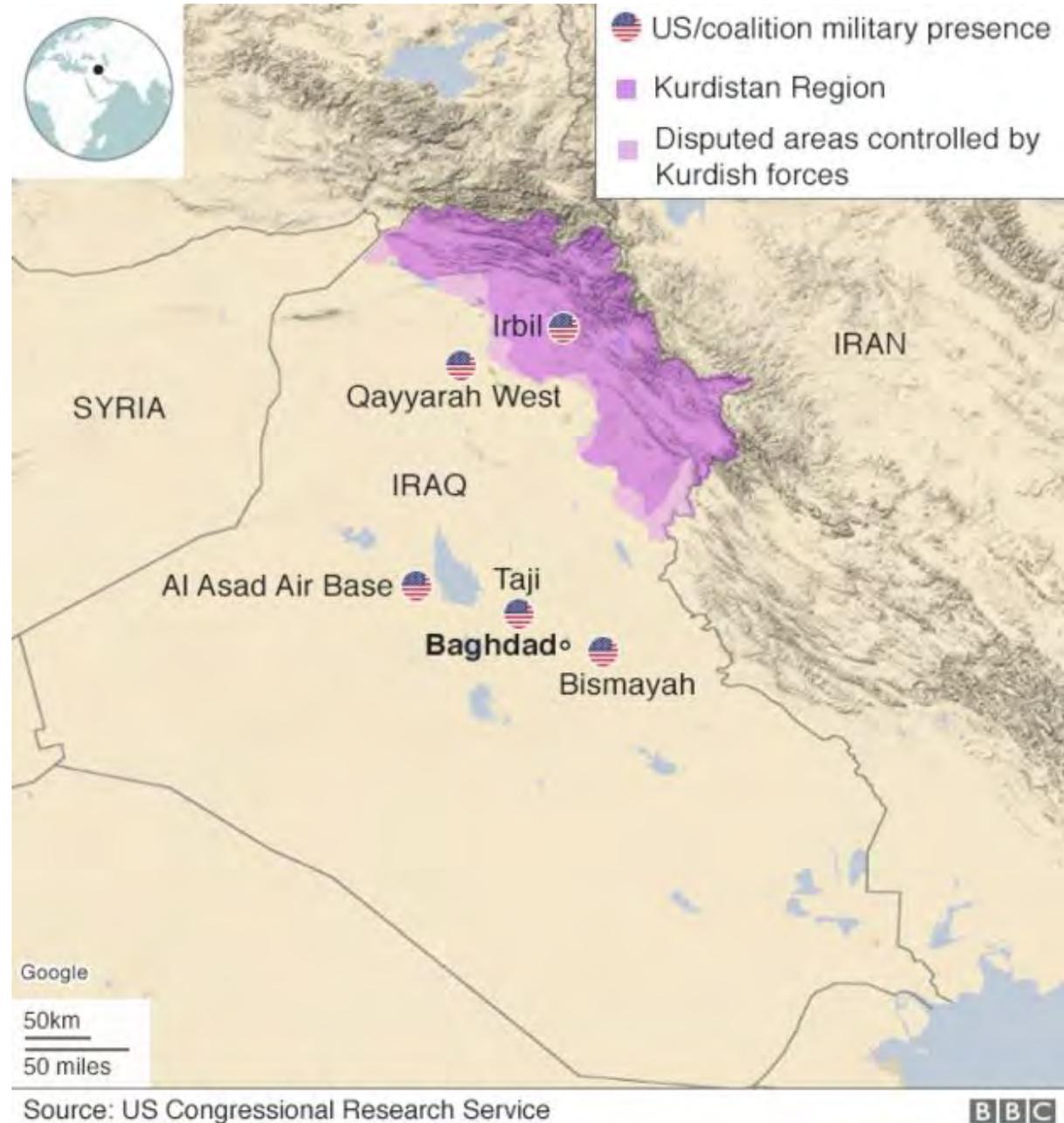
The key issue for the future is whether this process will continue, evolve to some form of meaningful negotiate resolution, or escalate to far more serious forms of conflict – either deliberately or unintentionally. Both sides have serious reasons to back away from such escalation. Iran would at best suffer massive damage. As the later portions of this analysis will show, both sides face the fact that a major war would inflict immense damage to all parties.

The fighting could damage fragile petroleum-driven economies in ways that have not been impacted upon them for a decade or more, ruin the prospects for stable growth, and have a major impact on the global economy and that of the United States. It is possible that even major strikes against petroleum facilities and infrastructure could be contained or limited, but there is still a serious risk that a conflict could escalate to become the Gulf equivalent of “mutual assured destruction,” or MAD.

More broadly, as the United States has learned the hard way from its experience in Afghanistan and Iraq, “winning” wars militarily in no way guarantees winning a stable peace. Real world military history is far more equivalent to the history of miscalculation and escalation than strategy and restraint. U.S sanctions may push Iran to the edge, or Iran may feel its growing asymmetric and missile capabilities are giving it a window of opportunity. As the following chronology shows, the sheer complexity of the current politico-military struggle between both sides continues to create new risks of more serious forms of war.

Iraqi Military Bases with U.S. Forces Present as of 1/2020

Source: Nafiseh Kohnavard "Iraq base attack: US in retaliatory strikes on Iran-backed fighters," BBC, <https://www.bbc.com/news/world-middle-east-51865489>.



Chronology of U.S-Iranian Confrontations and Attacks: 2019 - I

May 8, 2018: Trump announces that the U.S. is withdrawing from the nuclear deal signed by his predecessor, President Barack Obama, which had provided sanctions relief in exchange for restrictions on Iran's nuclear program and stepped-up U.N. monitoring. Over the next several months, the U.S. ratchets up sanctions, exacerbating an economic crisis in Iran.

May 21, 2018: US Secretary of State Mike Pompeo issues 12 demands that Iran make sweeping changes – from dropping its nuclear program to pulling out of the Syrian war – or face severe economic sanctions. They are rejected by Tehran.

August 7, 2018: U.S. reimposes the first round of sanctions on Iran, that had been lifted as part of the nuclear deal. They prohibit trade with a number of business sectors - from aviation and carpets to pistachios and gold.

September, 2018: A rocket attack takes place on the U.S. Consulate in Basra. The U.S. blames Iran and Iranian-backed Shiite forces in Iraq. Soon after, the U.S. closes its Basra consulate.

Nov. 5, 2018: U.S. imposes tough sanctions on Iran's oil industry, this time specifically targeting the key oil and banking sectors – the lifeline of its economy. Secretary of State Mike Pompeo emphasizes list of 12 demands it must meet for sanctions relief. Iran rejects the wide-ranging demands, which include ending its support for armed groups in the region, withdrawing from the Syrian civil war, and halting its ballistic missile program.

April 8, 2019: Trump announces that the elite Islamic Revolutionary Guard Corps (IRGC) is designated as a foreign terrorist organization. It is the first time Washington has formally labelled another country's military a "terrorist group." The designation imposes wide-ranging additional economic and travel sanctions on the IRGC that go into effect on **April 15**.

May 5, 2019: Then National Security Adviser John Bolton announces the U.S. is sending an aircraft carrier strike group, Patriot batteries, and B-52 bombers to the Middle East “in response to a number of troubling and escalatory indications and warnings...The United States is not seeking war with the Iranian regime, but we are fully prepared to respond to any attack, whether by proxy, the Islamic Revolutionary Guard Corps or regular Iranian forces.”

May 8, 2019: Iran says it is preparing to increase uranium enrichment and heavy water production as part of its decision to stop certain commitments made under the nuclear deal. President Rouhani states that, “Starting today, Iran does not keep its enriched uranium and produced heavy water limited. The EU/E3 2 will face Iran's further actions if they cannot fulfill their obligations within the next 60 days and secure Iran's interests. “Win-Win conditions will be accepted.” Trump announces new measures against Iran's steel and mining sectors.

May 12, 2019: The United Arab Emirates says four commercial ships off its eastern coast and Fujairah “were subjected to sabotage operations.” Trump warns that if Tehran does “anything” in the form of an attack, “they will suffer greatly.” Officials identify the damaged ships as the Saudi oil tankers Al-Marzoqah and Amjad, the Norwegian tanker Andrea Victory, and a UAE bunkering barge, the A Michel. Fujairah is the only Emirati terminal located on the Arabian Sea, bypassing the Strait of Hormuz through which most Gulf oil exports pass.

Chronology of U.S-Iranian Confrontations and Attacks: 2019 - II

May 14, 2019: Yemen's Houthi rebels, fighting with a Saudi-UAE-led military coalition, launch drone attacks on Saudi Arabia on **May 14**, striking a major oil pipeline and taking it out of service. Two days later, Riyadh, a key U.S. ally, blames Iran for the attack. The U.S. and Saudi Arabia accuse Iran of arming the Houthis, but Tehran denies the claim.

May 19, 2019: A rocket lands near the U.S. embassy in Baghdad. No one is harmed. President Trump tweets: "If Iran wants to fight, that will be the official end of Iran. Never threaten the United States again!"

May 27, 2019: After meeting with Japanese Prime Minister Shinzo Abe, who offers to broker dialogue between Washington and Tehran, Trump says the U.S. is not looking for regime change in Iran.

June 12, 2019: Abe lands in Tehran seeking to mediate between the U.S. and Iran. The next day, he meets Iran's Supreme Leader Khamenei who states: "I don't consider Trump as a person worthy of exchanging messages with. I have no response for him and will not answer him."

June 13, 2019: A Norwegian and a Japanese oil tanker in the Gulf of Oman near the Strait of Hormuz are attacked with limpet mines in an Iranian attack that leaves one ablaze and adrift as 44 sailors are evacuated by Iran from both vessels and the U.S. Navy rushes to assist. America later blames Iran for the attack, something Tehran denies. Iran speaks initially of "accidents" and Zarif calls the tanker "attacks" during Abe's visit "suspicious."

June 18, 2019: A rocket attack takes place on an operations headquarters of several global major oil companies, including American oil firm, ExxonMobil, near the Iraqi city of Basra. The attack occurs near the Iranian border, is largely by Shiite, and is dominated by pro-Iranian Shiite Iraqi militias. Three people were injured in the attack.

June 20, 2019: Iran's Revolutionary Guard shoots down a U.S. Global Hawk military surveillance drone one source indicates cost some \$210 million. The US says it was flying above international waters. Iran says the drone was flying in Iranian airspace. Trump announces that he called off a military strike on Iran the night before, which was intended as retaliation against Tehran for the downing of the unmanned U.S. drone. He states he did so 10 minutes before the planned attack because of potential casualties, saying it was "not proportionate to shooting down an unmanned drone." Trump also states a U.S. strike could have killed 150 people, and that he is open to talks with Tehran.

However, one source states there are reports that the United States Cyber Command (CyberCom) did launch cyber-attacks on Iranian spy groups and cyberwarfare units. For the past several months it was reported that Iranian cyber-attacks on U.S. government and industrial targets by Iranian hackers were increasing.

June 22, 2019: Iran warns that it is ready to respond firmly to any US threat against it. "We will not allow any violation against Iran's borders. Iran will firmly confront any aggression or threat by America," Abbas Mousavi, foreign ministry spokesman, says. On the same day, Iran orders the execution of a "defense ministry contractor" convicted of spying for the U.S. Central Intelligence Agency, while the U.S. warns it will impose fresh sanctions, adding that military action was still "on the table."

Chronology of U.S-Iranian Confrontations and Attacks: 2019 - III

June 24-25, 2019: June 25, Trump signs an order targeting Khamenei, Iran's supreme leader, and associates with additional financial sanctions. "Sanctions imposed through the executive order ... will deny the supreme leader and the supreme leader's office, and those closely affiliated with him and the office, access to key financial resources and support," the U.S. president says. Zarif, the Iranian foreign minister, responds by tweeting that "hawkish politicians close to Trump were thirsty for war rather than diplomacy," and that Trump is "100% right that the US military has no business in the Persian Gulf. Removal of its forces is fully in line with interests of US and the world. But it's now clear that the B Team is not concerned with US interests—they despise diplomacy, and thirst for war."

June 29, 2019: The U.S. Air Forces Central Command says in a statement that F-22 Raptor stealth fighters are being deployed in the region "to defend American forces and interests."

July 1, 2019: Iran follows through on its threat to exceed the limit set by the nuclear deal on its stockpile of low-enriched uranium, which is used for civilian applications and not for nuclear weapons. The United Nations' atomic watchdog confirms that its inspectors had verified the 300kg cap had been breached. Zarif says the accumulation of more enriched uranium than permitted under the deal is not a violation of the pact. On **July 8**, Iran states it has exceeded the cap on Uranium enrichment set in the nuclear deal, the second time in one week that it acts on its statements it will reduce compliance with the accord.

July 4, 2019: British Royal Marines, police and customs agents in Gibraltar seize a supertanker accused of carrying Iranian crude oil to Syria in breach of European Union sanctions. The *Grace I* vessel is boarded when it slowed down in a designated area used by shipping agencies to ferry goods to ships in the UK territory along Spain's southern coast. On **July 12**, police in Gibraltar arrest the captain and chief officer of the Iranian tanker.

July 11, 2019: Iranian Revolutionary Guard Corps (IRGC) is accused of harassing a British merchant vessel in the Persian Gulf. The presence of a British warship in the area is believed to have saved the ship from a possible takeover or attack.

July 13, 2019: A Panamanian-flagged oil tanker *Riah*, which is based in the UAE, disappeared from ship tracking systems after approaching Iranian waters. It is believed to have been seized by the IRGC.

July 15, 2019: Saudi forces find a remote-controlled ship, called a Blowfish, filled with explosives in the Red Sea, in the path of the oncoming UK destroyer, HMS Duncan. The Duncan was heading to the Gulf to reinforce the British naval presence there in the ongoing Iran crisis. It is believed that the "bomb boat" was placed there by the Yemeni Houthi Shiite group that is engaged in a civil war in Yemen. The Houthis are long-time allies of Iran.

July 19, 2019: The IRGC seizes a British oil tanker in the Strait of Hormuz. The *Stena Impero* tanker "was confiscated by the Revolutionary Guards at the request of Hormozgan Ports and Maritime Organization when passing through the Strait of Hormuz, for failing to respect international maritime rules."

July 25, 2019: The British government announces its warships will escort all British-flagged vessels through the Strait of Hormuz, a change in policy that takes place amid rising tensions in the Gulf. The HMS Montrose, a British frigate, is assigned to escort ships: "Freedom of navigation is crucial for the global trading system and world economy, and we will do all we can to defend it."

Chronology of U.S-Iranian Confrontations and Attacks: 2019 - IV

August 1, 2019: U.S. imposes sanctions on Zarif . “Javad Zarif implements the reckless agenda of Iran's Supreme Leader, and is the regime's primary spokesperson around the world,” Treasury Secretary Steven Mnuchin says in a statement. Zarif tweets this indicated Washington saw him as a “threat.”

August 15, 2019: Gibraltar's Supreme Court rules that the *Grace I* is free to sail, just hours after the U.S. makes a last-minute attempt to keep the vessel under detention.

August 23, 2019: Rouhani announced deployment of a new Iranian designed and made air-defense system into the country's missile defense network at an unveiling ceremony in Tehran. Iran had begun production after the purchase of Russia's S-300 system was temporarily suspended in 2010 due to international sanctions that have barred it from importing offensive and heavy weapons. Rouhani claims the mobile surface-to-air system was “better than S-300 and close to [more advanced] S-400.”

August 26, 2019: Zarif holds talks with President Emmanuel Macron of France at the sidelines of a G7 summit following a surprise invite to the gathering in Biarritz. Zarif says that, “Iran’s active diplomacy in pursuit of constructive engagement continues. (The) Road ahead is difficult. But worth trying.”

August 30, 2019: The UN’s IAEA reported that Iran is still increasing its stock of enriched uranium and refining it to a greater purity than allowed in the agreement.

September 3, 2019: The U.S. sanctions Iran’s agency and two research organizations for being used to advance Tehran's ballistic missile program. The measures imposed by the US Department of the Treasury target the Iran Space Agency, Iran Space Research Center and the Astronautics Research Institute. “The United States will not allow Iran to use its space launch program as cover to advance its ballistic missile programs.”

September 4, 2019: U.S. blacklists an oil shipping network that Washington alleges is directed by the IRGC.

September 7, 2019: Iran begins injecting gas into its advanced centrifuges to increase its stockpile of enriched uranium and warns time is running out for the nuclear deal's other signatories to save the landmark pact. An Iranian spokesman, Behrouz Kalahandi, states Iran's Atomic Energy Organization has started up advanced centrifuges at the enrichment facility in Natanz, the third step by Tehran in scaling back its commitments under the crumbling pact following Washington’s withdrawal.

September 14, 2019: Drone attacks take place on two major Saudi Aramco oil facilities: Abqaiq – the world's largest oil processing plant – and the Khurais oilfield, in eastern Saudi Arabia. The pre-dawn strikes knock out more than half of crude output from the world's top exporter. Saudi oil facilities temporarily cuts off half the oil supplies of the world’s largest producer – about 5% of the world supply of oil – causing a spike in prices. Iran denies involvement, while the Iran-backed Houthi rebels in Yemen claim responsibility. The U.S. says Iran carried out the attack directly, calling it an “act of war” against Saudi Arabia.

October 2019: Massive anti-government protests erupt in Lebanon and Iraq. While the protests are primarily driven by economic grievances, they target governments that are closely allied to Iran. In Iraq, protesters openly decry Tehran’s influence and attack Iranian diplomatic facilities.

November 2019: Protests break out in some 100 cities and towns in Iran after authorities raise the price of gasoline. The scale of the protests and the resulting crackdown are hard to determine as authorities shut down the internet for several days. Amnesty International later estimates that more than 300 people were killed.

Chronology of U.S-Iranian Confrontations and Attacks: 2019 - V

November 9, 2019: Iranian-backed Shia militias fired rockets at Q-West Air Base located in North-West Iraq.

December 3, 2019: Shiite militias launch a rocket attack against Al Asad Air Base.

December 5, 2019: Shiite militias fire rockets against Balad Air Base.

December 9, 2019: Shiite militia groups fire rockets at the Baghdad Diplomatic Support Center located on the Baghdad International Airport.

December 27, 2019: A U.S. contractor is killed and four American and two Iraqi troops are wounded in a rocket attack on the K1 base in northern Iraq, near the city of Kirkuk. The attack is made by Kataeb Hezbollah, one of several Iran-backed militias operating in Iraq.

December 29, 2019: In response, U.S. airstrikes hit Kataeb Hezbollah positions in three bases in Iraq and two in Syria, killing at least 25 fighters and bringing vows of revenge. Iraq calls the strikes a “flagrant violation” of its sovereignty.

December 31, 2019: Hundreds of Iran-backed Iraqi Shiite militiamen and their supporters force their way through an outer barrier of the U.S. Embassy in Baghdad and hold two days of violent protests in which they smash windows, set fires and hurl rocks over the inner walls. U.S. Marines guarding the facility respond with tear gas. An American contractor is killed. 100 Marines deploy from Kuwait to the Baghdad Embassy to bolster security. A battalion of U.S. troops from the 82nd Airborne deploy from North Carolina to the Middle East.

January 2, 2020: U.S. Secretary of Defense Esper states, “To Iran and its proxy militias: we will not accept continued attacks against our personnel & forces in the region. Attacks against us will be met with responses in the time, manner, & place of our choosing. We urge the Iranian regime to end malign activities.

- Also on **January 2**, sources report the U.S. launched an unsuccessful attack on an important Quds Force leader in Yemen. Abdul Reza Shahlai is a Yemen-based financial backer and high-ranking member of Iran’s Quds Force. The covert U.S. attack was not revealed until several days later.

January 3, 2020: A U.S. airstrike near Baghdad’s international airport kills Gen. Qassem Soleimani, the leader of Iran’s elite Quds Force and the mastermind of its regional military interventions. Abu Mahdi al-Muhandis, leader of the Kata’ib Hezbollah (KH) and a senior commander of Iran-backed militias in Iraq is also killed in the strike. Iran vows “harsh retaliation.” Trump says he ordered the targeted killing to prevent a major attack. Congressional leaders and close U.S. allies say they were not consulted on the strike, which many fear could ignite a war.

January 4, 2020: Two rockets hit Balad Air Bases near Baghdad. Two mortars also hit Baghdad’s Green zone. These attacks do not result in no casualties or damage.

January 5, 2020: Iran announces it will no longer abide by the nuclear deal and Iraq’s parliament holds a non-binding vote calling for the expulsion of all U.S. forces. Some 5,200 American troops are then based in Iraq to help prevent a resurgence of the Islamic State group. Trump vows to impose sanctions on Iraq if it expels U.S. troops.

- The anti-ISIS Coalition suspends operations against ISIS and halts training programs with the Iraqi military.

Chronology of U.S-Iranian Confrontations and Attacks: 2019 - VI

January 6, 2020: Iran attacks U.S facilities in two bases in Iraq in Erbil and Assad, housing U.S. forces. The U.S. states some 5,000 U.S. troops are still present in country. The Ayn al-Asad air base handles air operations. Erbil houses a U.S. Special Forces operational hub. The Iranian missile attack came on a day that began with thousands of Iranians taking to the streets for General Suleimani's funeral procession, a public mourning marred by a deadly stampede, as millions of people flooded the streets of Kerman to witness the procession. The IRGC announced that, "The fierce revenge by the Revolutionary Guards has begun." Iraqi military officials said that Iran had fired 22 missiles, and U.S. officials state that "It is clear that these missiles were launched from Iran." Zarif tweets that "Iran took & concluded proportionate measures in self-defense... We do not seek escalation or war but will defend ourselves against any aggression." The head of Iran's emergency medical services claims 56 people had died and 213 were injured, the broadcaster IRIB reported on its website. No soldiers are directly killed or suffer fragmentation wounds, but some 109 soldiers suffer blast and concussion damage and at least 34 suffer Traumatic Brain Injury (TBI).

Descriptions of the attack differ. A spokesman for USCENTCOM said a total of 15 missiles were fired, with ten hitting the Ayn Al Asad airbase, one hitting the Erbil base, and four missiles failing to reach their target. U.S. Secretary of Defense, Mark Esper, later gave a similar estimate, saying 16 short-range missiles had been launched from three locations within Iran, with 11 striking Ayn al-Asad (instead of the prior estimate of 10) Other sources reported that two targeted Erbil: one was said to have hit Erbil International Airport and did not explode, the other landed about 20 miles west of Erbil.

According to the Iraqi military, 22 missiles were fired between 1:45 a.m. and 2:15 a.m. local, 17 toward Ayn Al Asad base and five at Erbil. According to U.S. troops at Al Asad, the first missiles landed at 1:34 a.m. and were followed by three more volleys, spaced out by more than 15 minutes each. The attack was over by 4:00 a.m. Iran's Tasnim News Agency reported that the IRGC used Fateh 313 and Quiam ballistic missiles in the attack and claimed that U.S. forces failed to intercept them because they were equipped with cluster warheads (a claim without any technical credibility).

Work by Uzi Rubin indicates that the Quiam 2 (700 km range) and Fatah 313 (500 km range) missiles were used, with 11 missiles assigned to Al Asad, nine of which impacted, and 6 of which struck close to their probable target. Five were fired at Erbil – only one of which came close. While Iran may have given Iraq some warning, the missiles were clearly intended to high populated targets, and the attacks showed that Iranian missiles had the necessary precision. Their problem was reliability.

That same day, an IRGC air defense unit, fearing a U.S. attack in response, used a light surface-to-air missile to shoot down a B-737-800, which crashed shortly after takeoff from Tehran Imam International Airport, killing all 176 passengers on board. These included at least 130 Iranians. Iranian officials initially lied and said the plane crashed due to technical failures unrelated to the missile attacks. However, they refused to allow Boeing or U.S. aviation officials access to the aircraft black boxes On 11 January, after *The New York Times* obtained and published a video showing the moment the aircraft was actually hit by an Iranian missile Iran admitted to having shot down the plane due to human error, claiming their military mistook the plane for a "hostile target". The fact the government had lied led to a wave of anti-government protests against the perceived cover-up, with some demanding that Khamenei resign.

Chronology of U.S-Iranian Confrontations and Attacks: 2019 - VII

January 8, 2020: A U.S. drone strike kills the Islamic Revolutionary Guards Corps (IRGC) Quds Force Commander Qassem Soleimani and Popular Mobilization Forces Deputy Commander Abu Mahdi al-Muhandis outside the Baghdad International Airport. According to President Trump, “Last week, we took decisive action to stop a ruthless terrorist from threatening American lives. At my direction, the United States military eliminated the world’s top terrorist, Qasem Soleimani. As the head of the Quds Force, Soleimani was personally responsible for some of the absolutely worst atrocities.”

- **That same day as a response to Soleimani’s death,** the IRGC Aerospace Force launches 16 short-range ballistic missiles at the Ain Al Asad Airbase in Anbar and towards the U.S. consulate and Hariri Air Base in Arbil. The attack resulted in zero fatalities but caused 11 traumatic brain injuries among the U.S. forces stationed at Ain Al Asad Airbase.
- After President Trump’s speech on **January 8** when he announces “Iran appears to be standing down, which is a good thing for all parties concerned and a very good thing for the world. No American or Iraqi lives were lost because of the precautions taken, the dispersal of forces, and an early warning system that worked very well,” Iran also launches two rockets toward Baghdad’s Green Zone, and one rocket lands within 100 meters of the U.S. embassy.

January 9, 2020: One rocket lands near Balad Air Base, which hosts U.S. troops and equipment. No casualties or damage resulted from the attack, and no group claimed responsibility.

January 12, 2020: Eight Katyusha rockets target Balad Air Base and injure four Iraqi soldiers. No group claimed responsibility for this attack.

January 14, 2020: Five Katyusha rockets land near Camp Taji. No casualties or damage resulted from the attack, and no group claimed responsibility.

January 20, 2020: Three rockets fired from the Zafaraniyah neighborhood located just outside of Baghdad target the U.S. Embassy inside Baghdad’s Green Zone, and two of the rockets land within the Embassy’s outermost fence. The attack occurred during ongoing protests in Iraq.

January 26, 2020: Three mortars target the U.S. Embassy in Baghdad. One of the mortars strikes the Embassy cafeteria during dinner and wounds at least one American. The U.S. State Department commented, "We view last night's attack on the Embassy as an attempt to distract Iraqi and international attention away from the brutal suppression of peaceful Iraqi protesters by Iran and its proxies.”

February 13, 2020: A rocket fired from a Christian cemetery north of K1 military base and hits an open area on the base.

February 16, 2020: Three rockets fired toward the U.S. Embassy land outside the complex but cause no damage.

Chronology of U.S-Iranian Confrontations and Attacks: 2019 - VIII

March 2, 2020: Two rockets fired from the Zayouna neighborhood land near the U.S. Embassy in Baghdad's Green Zone but do not cause any damage.

March 5, 2020: Three rockets fired from the Zayouna neighborhood land near the U.S. Embassy in Baghdad's Green Zone but do not cause any damage.

March 11-12, 2020: Two U.S. service members and a troop from a coalition partner nation were killed in an attack on Iraq's Camp Taiji Base using unguided 107mm "Katusha" artillery rockets, evidently fired improvised truck-mounted launchers. About 30 rockets were fired at Taiji, a major base roughly 15 miles north of Baghdad. 12 to 18 rockets landed on the base, wounding 14 people, including five seriously, and causing some structural damage. A Defense Department official said that there were also about a dozen people were injured. Britain's Ministry of Defense on Thursday confirmed the death of Lance Corporal Brodie Gillon, 26, a Reserve with the Scottish and North Irish Yeomanry. U.S. intelligence analysts believe that the Kataib Hezbollah militia was involved. At this point, the command reports that more than 109 Katyusha rockets had been launched at locations housing US troops in Iraq since October 2019, and 13 sets of attacks have been made on U.S. occupied bases in 2019.

This militia's strategy often involves a mobile launcher, such as a truck, parked within several miles of one of several American bases and armed with a timed trigger set to fire in around 30 minutes. The timer gives the crew ample time to flee before the rockets launch. Articles indicate that the U.S. bases lack C-RAM defenses against such attacks, and other defense systems like Patriot missiles, which had previously been deployed to Afghanistan. The were most likely Iranian Fajr-1 rockets, which are copies of a Chinese rocket called the Type 63. At just over 4 inches in diameter and 4 feet long, the Fajr-1 weighs roughly 40 pounds and carries a 3- to 5-pound high-explosive warhead to a maximum range of about 5 miles. They do not need to be fired from special launchers; instead, they can be fired from a simple dirt ramp or a pile of rocks with nearly as much accuracy as they could from a purpose-built launcher.

March 12-13, 2020: U.S. launches retaliatory strikes targeting an Iranian-backed Shia militia group believed responsible for a rocket attack that killed and wounded American and British troops. The U.S. strikes five Katib Hezbollah bases and weapons facilities inside Iraq to "significantly degrade their ability to conduct future attacks against Operation Inherent Resolve (OIR) coalition forces." These facilities stored weapons used to target U.S. and coalition troops, according to the Pentagon. The Defense Department said Thursday's "defensive" strikes were "proportional" and a "direct response" to the threat of the Iranian backed groups operating in Iraq." The United States will not tolerate attacks against our people, our interests, or our allies," Secretary of Defense Mark Esper said in the release. "As we have demonstrated in recent months, we will take any action necessary to protect our forces in Iraq and the region." The strikes were a partnered operation with the British, a U.S. official said.

March 14, 2020: Camp Taji was attacked by a barrage of 33 rockets fired from concealed launch pads hidden in an industrial garage in the Abu Adam area located north of Baghdad. The attack wounded three U.S. soldiers and two Iraqi Air defense personnel. Usbat al-Thaireen, a new Shi'ite militia calling for the departure of U.S. forces from Iraq, claimed responsibility.

Chronology of U.S-Iranian Confrontations and Attacks: 2019 - IX

March 16, 2020: Basmaya base, which houses the U.S.-led Coalition against ISIS and NATO forces, was attacked by two rockets launched from an agricultural area in Nahrawan. Usbat al-Thaireen claimed responsibility.

March 17, 2020: Two rockets launch from Baghdad Arab Jabur neighborhood toward the Jadriyah neighborhood. One rocket lands in the Tigris River, and the other hits an abandoned building just across the Tigris River from the U.S. Embassy.

March 18, 2020: The U.S. State Department on Wednesday announced new sanctions on Iran after the renewed rocket attacks by Iran-backed militias.

Secretary Pompeo stated, “Yesterday, the U.S. Department of State sanctioned nine entities and three individuals who have engaged in activity that could enable the Iranian regime’s violent behavior. The actions of these individuals and entities provide revenue to the regime that it may use to fund terror and other destabilizing activities, such as the recent rocket attacks on Iraqi and Coalition forces located at Camp Taji in Iraq. Our sanctions will deprive the regime of critical income from its petrochemical industry and further Iran’s economic and diplomatic isolation. The United States will continue to fully enforce our sanctions.”

March 19, 2020: U.S.-led coalition troops pull out of Iraq. Iraqi and coalition officials states that the withdrawal was part of a planned drawdown, and training activities were already suspended due to concerns about the coronavirus. Coalition forces withdrew from al-Qaim on the Iraq-Syria border. Further troop withdrawals are also planned in the coming weeks.

“The withdrawal was agreed between the Iraqi government and the coalition forces,” said Brig. Tahseen al-Khafaji, who was at a withdrawal ceremony. Another senior Iraqi military official said he expected the coalition to leave two bases in northern Iraq in the coming weeks, including Qayara south of Mosul and K1, in the province of Kirkuk.

March 23, 2020: U.S. and UAE forces hold a joint military exercise at Al-Hamra Military Base in the UAE. The military exercise is part of a biennial exercise called Native Fury. According to Brig. Gen. Thomas Savage of the 1st Marine Expeditionary Force, “We’re about stability in the region. So if they [Iran] view it as provocative, well, that’s up to them. This is just a normal training exercise for us.”

Source: Adapted from: Wikipedia, PennLive, “U.S.-Iran attacks: Timeline of events leading up to countries’ confrontations, threat of war,” Jan 08, 2020

<https://www.pennlive.com/nation-world/2020/01/us-iran-attacks-timeline-of-events-leading-up-to-countries-confrontations-threat-of-war.html>; NPR, “Timeline: How The U.S. Came To Strike And Kill A Top Iranian General,” January 4, 2020 7:00 AM ET, <https://www.npr.org/2020/01/04/793364307/timeline-how-the-u-s-came-to-strike-and-kill-a-top-iranian-general>; Al Jazeera, “US-Iran standoff: A timeline of key events,” www.aljazeera.com/news/2019/06/iran-standoff; The History Guy, “Timeline of Attacks in the 2019-2020 Iran Crisis,” www.historyguy.com/timeline_iran_crisis_2020.htm; By Thomas Gibbons-Neff and John Ismay, “An Iraq Attack, a Rudimentary Insurgent Tactic Allows Little Defense,” New York Times, March 12, 2020, <https://www.nytimes.com/2020/03/12/world/middleeast/iraq-iran-rockets.html?referringSource=articleShare>; Kyra Rauschenbach, “US-Iran Escalation Timeline: March 2020 Update,” *Institute for the Study of War*, March 20, 2020, <http://www.understandingwar.org/backgrounder/us-iran-escalation-timeline-march-2020-update>; Samya Kullab and Qassem Abdul-Zahra, “US-led coalition troops pull out of base in western Iraq,” Military Times, March 20, 2020, <https://www.militarytimes.com/news/your-military/2020/03/20/us-led-coalition-troops-pull-out-of-base-in-western-iraq/>; Michael Pompeo, “Further Sanctions on Entities Trading in or Transporting Iranian Petrochemicals,” *U.S. State Department*, March 18, 2020, <https://www.state.gov/further-sanctions-on-entities-trading-in-or-transporting-iranian-petrochemicals/>.

**Uncertain Future U.S.
Commitments and Current Bases
and Forward Deployed Forces**

The United States as an Uncertain Partner

The maps and tables in this section show the United States is now investing heavily in improved power projection forces and capabilities, and that there are still major U.S. deployments in the Gulf region even at the end of 2019. These increases in power projection capabilities not only include plans to buy major advances in major combat systems like the F-35 stealth fighter and B-21 stealth bomber, but also include significant increases in readiness and strategic lift.

They also highlight the dangers in any assessment of the balance or of the war fighting capability that focuses on current U.S. forward deployments. It is the combined size and capability of both current forward deployments and U.S. power projection forces that will shape U.S. capability in any given situation – a factor that some analysts in the Gulf do not fully understand and one that leads them to focus on each major shift in current forward deployments as the key indicator of U.S. capability.

The United States has shown all too clearly that it lacks a coherent long-term security strategy for the Gulf ever since it invaded Iraq in 2003 – other than one of continuing the fight against Islamist extremist movements like ISIS and Al Qaida. For example, both President Obama and President Trump have called for added Arab burden sharing in somewhat different forms in spite of the fact that several Gulf Arab strategic partners are already spending at levels that threaten their economy and stability.

President Trump has both talked about enduring commitments and discussed major cuts in U.S. forward deployed forces. The out-years in his FY2021 defense budget request at least implies he plans further cuts if reelected but the indicators are unclear. During the first months of 2020, senior U.S. officials have also talked about maintaining a presence in Syria.

Senior U.S. officers and officials have also said on background that the United States will not leave Iraq, but Iraqi attitudes are unclear and so is the U.S. resolve in staying. The United States officially stated it had 5,200 personnel in Iraq in early 2020 – with that figure sometimes surging over 1,000 more. The United States also announced in early March 2020 that it was retaining two aircraft carriers in the Middle East and was in the process of moving Patriot and C-RAM missile defense batteries into Iraq as tensions mounted over attacks on U.S.-occupied Iraqi bases by Iraqi Popular Mobilization Forces with links to Iran.

Yet, Iran may be gradually push the United States into a further withdrawal. On March 16th, a series of new Popular Mobilization Forces' attacks on U.S. forces in Iraqi bases led the United States to withdraw forces from three bases (joint bases at al Qaim near the Syrian border, Qayyarah Airfield West near Mosul, and K-1 Air Base in Kirkuk) and move some out of Iraq – leaving a minimal U.S. military and diplomatic presence and effectively ceding new area to Iranian influence.

The United States as an Uncertain Partner

Moreover, U.S. officials also announced in the background that the United States was considering withdrawing troops at Al-Taqaddum Air Base west of Baghdad later in 2020 and also considering changing the overall structure of Combined Joint Task Force Operation Inherent Resolve from a three-star billet to a two-star command, putting a major general in charge rather than a lieutenant general.

More broadly, the United States has not announced any new or longer-term plans regarding future deployments in Iraq and has not reacted elsewhere largely than by reacting to any immediate crisis. The United States also has not reacted in any clear way to the rising level of Russian arms sales and activity in the Gulf or Chinese activity in the Indian Ocean and Red Sea Areas. It has not intervened decisively in an effort to resolve the boycott crisis in the Gulf or to put the GCC on a track that would lead to major improvements in its interoperability and effectiveness. If anything, the United States seems to have focused more on selling arms than how they are to be used.

The United States has also continued to stress the importance of its strategic partnerships with the Gulf Arab states. However, it has done a poor job of planning and defining its own future role in the Gulf, and – aside from the relatively smooth military-to-military relations that exist between USCENTCOM, the COAC in Qatar, and the 5th Fleet in Bahrain – its actions have led to growing uncertainty on the part of its Arab partners. This is a critical issue in the balance because at this point, the United States is the only power with the battle management; C⁴; cyberwarfare; and intelligence, surveillance, and reconnaissance (ISR) assets to integrate the individual Arab Gulf states into cohesive military operations with other Arab states as well as with the U.S. and European power projection forces.

Illustrative U.S. Power Projection Weapons Investments FY2020-FY2021 - I

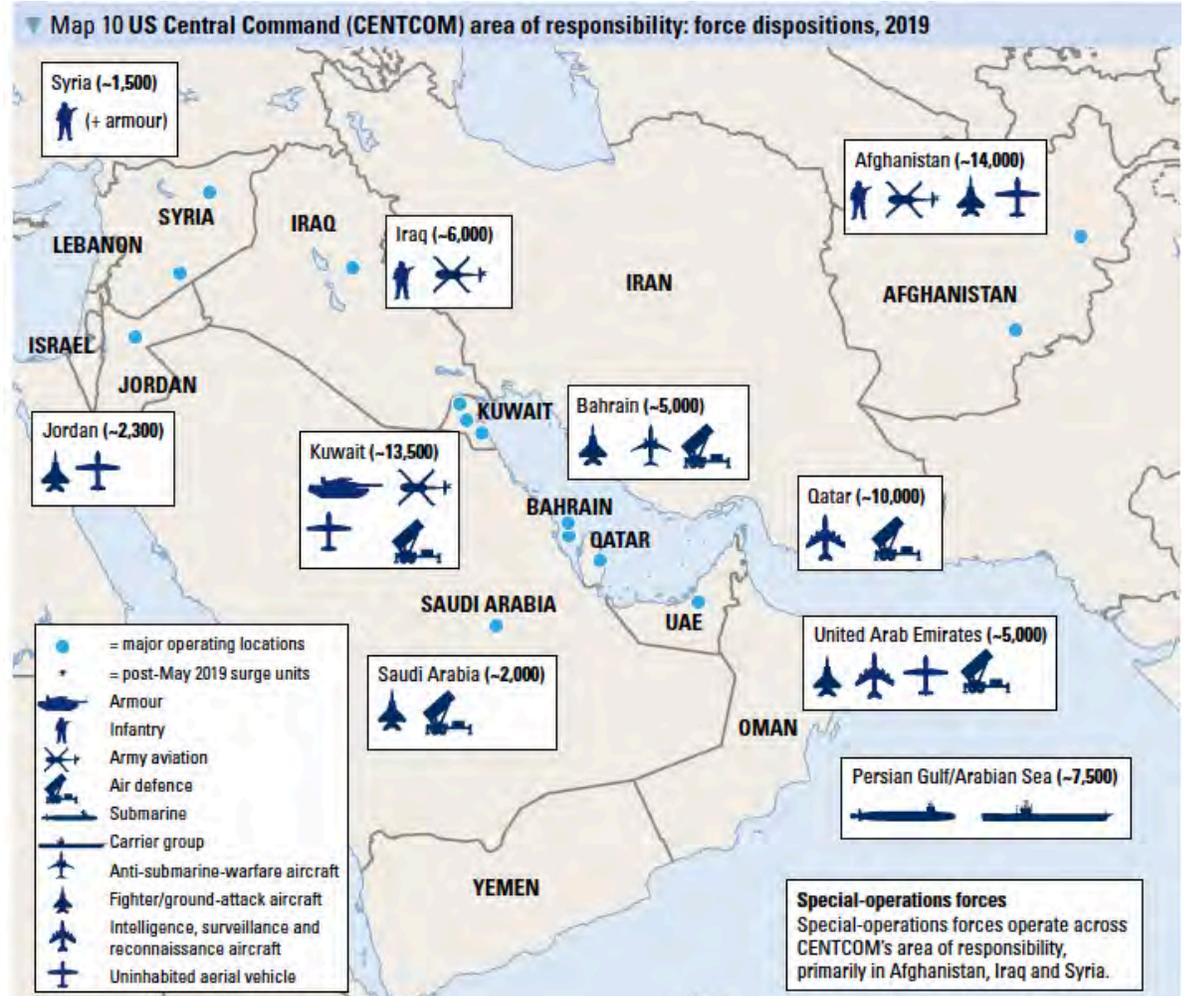
Item	FY2020 Enacted (\$US billions)	FY2021 Requested (US billions)
B-21 Long Range Strike Bomber	3.0	2.8
Long-Range Stand-Off (LRSO) Missile	0.7	0.5
Ground Based Strategic Deterrent (GBSD)	0.6	1.5
Sea-Based Interceptors (SM-3 IIA and IB)	0.7	0.6
AEGIS Ballistic Missile Defense System	1.0	1.1
Terminal High Altitude Area Defense (THAAD)	0.8	0.9
Patriot Advanced Capability (PAC-3) Missile	0.7	0.8
F-35 Joint Strike Fighter	12.6	11.4
KC-46 Pegasus Tanker	2.2	3.0
AH-64 Apache Attack Helicopter	1.0	1.2
CVN-78 Ford Aircraft Carrier	2.6	3.0
DDG-51 ARLEIGHBURKE Class Destroyers	5.8	3.5
Landing Platform Dock Ship (LPD)	0.3	1.2

Illustrative U.S. Power Projection Weapons Investments FY2020-FY2021 - II

Item	FY2020 Enacted (\$US billions)	FY2021 Requested (US billions)
Global Positioning System (GPS) III and Projects	1.7	1.8
Space Based Overhead Persistent Infrared (OPIR) Systems	1.6	2.5
Joint Light Tactical Vehicle	1.6	1.4
M-1 Abrams Tank Modifications/Upgrades	2.2	1.5
Amphibious Combat Vehicle	0.4	0.5
Armored Multi-Purpose Vehicle	0.6	0.3
Joint Direct Attack Munition (JDAM)	1.1	0.5
Guided Multiple Launch Rocket System (GMLRS)	1.3	1.5
Standard Missile-6 (SM-6)	0.7	0.8
Joint Air-to-Surface Standoff Missile (JASSM)	0.6	0.6
Long Range Anti-Ship Missile (LRASM)	0.2	0.6
Hellfire Missile	0.7	0.5
Small Diameter Bomb	0.4	0.4

IISS Summary Estimate of Location of Major U.S. Deployments in the MENA/Gulf Region - 2020

US Army	
Afghanistan	3rd Brigade Combat Team, 82nd Airborne Division 2nd Security Force Assistance Brigade 10th Combat Aviation Brigade
Iraq	1st Stryker Brigade Combat Team, 25th Infantry Division
Qatar	12th Missile Defence Battery
Saudi Arabia	3/4th Air Defense Artillery Battalion*
Bahrain; Kuwait	1/7th Air Defense Artillery Battalion
Iraq; Kuwait	244th Army Reserve Expeditionary Combat Aviation Brigade
Kuwait; Syria	30th ARNG Armored Brigade Combat Team
Qatar; UAE	4/3rd Air Defense Artillery Battalion
US Marine Corps	
Bahrain	VMA-311 fighter/ground-attack squadron with AV-8B
Afghanistan; Iraq; Kuwait; Syria	1 & 2/7th Marine Regiment
US Air Force	
Afghanistan	79th Expeditionary Fighter Squadron with F-16C 354th Expeditionary Fighter Squadron with A-10C 62nd Expeditionary Attack Squadron with MQ-9A
Jordan	389th Expeditionary Fighter Squadron with F-15E 46th Expeditionary Attack Squadron with MQ-9A
Kuwait	361st Expeditionary Attack Squadron with MQ-9A
Qatar	340th Expeditionary Air Refueling Squadron with KC-135 7th Expeditionary Airborne Command and Control Squadron with E-8C
Saudi Arabia	763rd Expeditionary Reconnaissance Squadron with RC-135
Saudi Arabia	27th Expeditionary Fighter Squadron with F-22A*
United Arab Emirates	4th Expeditionary Fighter Squadron with F-35A 159th Expeditionary Fighter Squadron with F-15C 494th Expeditionary Fighter Squadron with F-15E* 908th Expeditionary Air Refueling Squadron with KC-10A 968th Expeditionary Airborne Air Control Squadron with E-3 99th Expeditionary Reconnaissance Squadron with U-2S/RQ-4 Reconnaissance Unit with RQ-170/RQ-180
US Navy	
Arabian Sea; Persian Gulf	1 Ohio-class submarine 2-3 Los Angeles/Virginia-class submarines USS Abraham Lincoln aircraft carrier <ul style="list-style-type: none"> ■ Strike Fighter Squadron 25 with F/A-18E ■ Strike Fighter Squadron 86 with F/A-18E ■ Strike Fighter Squadron 103 with F/A-18F ■ Strike Fighter Squadron 143 with F/A-18E ■ Electronic Attack Squadron 140 with EA-18G ■ Airborne Early Warning Squadron 121 with E-2D
Bahrain	Patrol Squadron 45 with P-8A
Saudi Arabia	Electronic Attack Squadron 134 with EA-18G
	USS Lyle Gulf cruiser USS Normandy cruiser USS Farragut destroyer USS Forrest Sherman destroyer USS Lassen destroyer



Iranian and U.S. Military Bases



Source: IISS, “The Military Balance 2019,” 60-62,
<https://www.iiss.org/publications/the-military-balance/the-military-balance-2019>

Nominal Total U.S. Deployments in the MENA/Gulf Region (I)

Based on IISS 2020 *Military Balance* Estimate

ARABIAN SEA: US Central Command

- US Navy • 5th Fleet: 2 SSGN; 1 CVN; 2 CGHM; 2 DDGHM;
Combined Maritime Forces • TF 53: 1 AE; 2 AKE; 1 AOH; 3 AO

ASCENSION ISLAND: US Strategic Command

- 1 detection and tracking radar at Ascension Auxiliary Air Field

BAHRAIN: US Central Command

- 5,000; 1 HQ (5th Fleet); 1 fr sqn(-) with 5 AV-8VB *Harrier* II; 1 ASW sqn with 5 P-8A *Posidon*; 2 AD bty with MIM-104E/F *Patriot* PAC-2/-3

BRITISH INDIAN OCEAN TERRITORY: US Strategic Command

- 300; 1 Spacetrack Optical Tracker at Diego Garcia; 1 ground-based electro-optical deep space surveillance system (GEODSS) at Diego Garcia

US Pacific Command

- 1 MPS sqn (MPS-2 with equipment for one MEB) at Diego Garcia with 2 AKRH; 3 AKR; 1 AKEH; 1 ESD; 1 naval air base at Diego Garcia, 1 support facility at Diego Garcia

DJIBOUTI: US Africa Command

- 4,700; 1 tpt sqn with C-130H/J-30 *Hercules*; 1 spec ops sqn with MC-130H/J; PC-12 (U-28A); 1 CSAR sqn with HH-60G *Pave Hawk*; 1 CISR UAV sqn with MQ-9A *Reaper*; 1 naval air base

EGYPT: MFO

- 454; elm 1 ARNG recce bn; 1 ARNG spt bn

IRAQ: US Central Command

- *Operation Inherent Resolve* 6,000; 1 mech inf bde(-); 1 EOD pl; 1 atk hel sqn with AH-64E *Apache*

ISRAEL: US Strategic Command

- 1 AN/TPY-2 X-band radar at Mount Keren

KUWAIT: US Central Command

- 13,500; 1 ARNG armd bde(-); 1 USAR (cbt avn) hel bde; 1 spt bde; 1 tpt sqn with 12 MV-22B *Osprey*; 1 CISR UAV sqn with MQ-9A *Reaper*; 3 AD bty with MIM-104E/F *Patriot* PAC-2/-3; 1 (APS) armd bde set; 1 (APS) inf bde set

Nominal Total U.S. Deployments in the MENA/Gulf Region (II)

Based on IISS 2020 *Military Balance* Estimate

LIBYA: UN • UNSMIL 1

PERSIAN GULF: US Central Command

• US Navy • 5th Fleet: 10 PCFG; 6 (Coast Guard) PCC

Combined Maritime Forces • CTF-152: 4 MCO; 1 ESB

QATAR: US Central Command

• 10,000: 1 ISR sqn with 4 RC-135 *Rivet Joint*; 1 ISR sqn with 4 E-8C JSTARS; 1 tkr sqn with 24 KC-135R/T *Stratotanker*; 1 tpt sqn with 4 C-17A *Globemaster*; 4 C-130H/J-30 *Hercules*; 2 AD bty with MIM-104E/F *Patriot* PAC-2/-3

US Strategic Command

• 1 AN/TPY-2 X-band radar

SAUDI ARABIA: US Central Command

• 2,000; 1 ftr sqn with 12 F-22A *Raptor*; 1 EW sqn with 5 EF-18G *Growler*; 1 SAM bty with MIM-104E/F *Patriot* PAC-2/-3

SYRIA: US Central Command

• *Operation Inherent Resolve* 1,500; 1 ARNG armd BG; 1 mne bn

TURKEY: US European Command

• 1,700; 1 tkr sqn with 14 KC-135; 1 ELINT flt with EP-3E *Aries II*; 1 air base at Incirlik; 1 support facility at Ankara; 1 support facility at Izmir

US Strategic Command • 1 AN/TPY-2 X-band radar at Kürecik

UNITED ARAB EMIRATES: US Central Command

• 5,500: 1 ftr sqn with 12 F-15C *Eagle*; 1 FGA sqn with 18 F-15E *Strike Eagle*; 1 FGA sqn with 12 F-35A *Lightning II*; 1 ISR sqn with 4 U-2; 1 AEW&C sqn with 4 E-3 *Sentry*; 1 tkr sqn with 12 KC-10A; 1 ISR UAV sqn with RQ-4 *Global Hawk*; 2 AD bty with MIM-104E/F *Patriot* PAC-2/-3

Comparative Military Budgets and Arms Imports

Comparative Military Budgets and Arms Imports

The charts and tables in this analysis ignore the over \$700 billion a year in U.S. military spending that shapes the pivotal role that U.S. forces play in the Gulf military balance. They also ignore the comparative resources of outside powers – those that align with Iran – like Syria, the Houthi, and Hezbollah – those that align with the Arab Gulf – like Egypt and Jordan – and additional outside powers – like Turkey, Russia, China, and Israel.

They do, however, show that Iran has been massively outspent by its Arab Gulf neighbors. The first figure in this section provides a summary count of Iranian and Arab Gulf forces and shows that if one only looks at numbers – rather than force quality and force modernization – Iran is strong in areas like military personnel, main battle tanks, and artillery.

The later charts, which focus more on force quality and force modernization, paint a very different picture. The moment one examines the quality of key weapons – land, air, and sea – the Arab Gulf states have a definitive lead – one explained in large part by the financial data on military spending. This lead is clearly reflected in the charts and tables that show comparative military spending, military spending as a percent of GDP, and the relative flow of arms imports into Gulf countries – all of which have a very limited military industrial base.

These figures on military spending and comparative levels of effort do suffer from the same problems in quality and reliability that affect virtually all the data on the region – including the most basic economic, population, and civil statistics. Descriptions of the ways in which data are generated and validated are often from missing figures, and some figures are generated for political purposes.

The spending and arms data shown in this section are drawn, however, from two leading think tanks – the IISS and SIPRI – and from declassified U.S. government data by the Congressional Research Service and the U.S. State Department. While the numbers from each source differ, they still broadly agree in showing that the Arab Gulf states have spent vastly more on military forces than Iran, that many Arab states spend an exceptional high percentage of their GDP, and that the Arab lead in arms imports is even greater than the lead in military spending.

At the same time, these numbers need to be put in careful context even if one ignores the now unpredictable impact of the Coronavirus:

- Open source reporting by DIA warns that official estimates of Iranian spending seriously undercount the cost of its military and foreign train and assist efforts.

- Arab Gulf states often under report actual spending – and Qatar and the UAE have stopped open source reporting in recent years.
- IMF, World Bank, and CIA reporting indicate that Iraq is effectively bankrupt and has the economy of a failed state. Its lack of political unity and leadership raises major questions as to when it can achieve economic stability and a stable pattern of military spending.
- For all of the U.S. whining about burden sharing, the Arab Gulf states are spending more of their economies on security than the United States and far more than the 2% of GDP goal set by NATO.
- Four Arab Gulf states have spent nearly 10% – or more – of their GDP on security in recent years: Iraq, Qatar, Saudi Arabia, and the UAE. These spending levels are so high that they seriously affect their economic development and ability to fund the economic reforms and diversification that can create the levels of employment and per capita income needed to maintain or achieve internal stability.
- The divisions and tension between the Arab Gulf states and the internal national policies waste vast amounts of Arab spending on forces that lack any coherent focus on key missions, interoperability, integration, and standardization. Arab self-destructiveness critically undercuts the value of Arab military spending and arms imports.
- Corruption is a major problem in the ways both Iran and the Arab Gulf states spend their national security funds, but it is often hard to trace because the money is officially allocated within the budget rather than misappropriated or stolen.
- Iran’s ruling elite and IRGC are able to draw directly on state funds and contracts, as well as run state enterprises and projects in ways that serve their interests.
- The problems that the Arab Gulf states have in using money honestly and effectively to pay for national security expenditures are compounded by contractual arrangements that benefit given royal families and senior military, and sometimes divert major funds directly to them. This is often of various offset and coproduction agreements. Outside assessments of corruption often ignore these sources of diversion and waste.
- Waste and the misuse of national security funds are further compounded in the Arab Gulf states by “glitter factor” investments in special configurations and advanced technology that is not needed alongside efforts to create military industrial bases that are little more than expensive assembly and local service efforts that benefit given defense contractors.
- While USCENTCOM attaches and military advisory teams that often do focus on trying to create truly effective Arab Gulf forces, both the United States and other foreign governments often emphasize sales over actual military needs at the national political level – compounding the waste and real-world corruption problems in arms transfers.

- The sales data in the charts in this section show that the United States and Europe face growing competition for arms sales from Russia and China.
- As is noted in the next section of this report, Iran’s ties to the Assad regime, Syria, factions in Lebanon, factions in Iraq, and factions in Yemen link it to “failed states” that cannot finance their own military efforts and seriously limit the military capabilities of such outside states.

The trends shown in these charts also must be interpreted in terms of both historical perspective, and the broader economic trends in the individual regional economies. National security spending trends generally do not reflect the radical sudden changes that regularly take place in the demand for – and price for – petroleum. These changes produce radical sudden shifts in export revenues, Gulf state GDPs, and the funds available in the national budget. The spending data do not reflect the impact of poor governance and the competing needs of the civil sector, which generally are shaped by major inequities in income and job creation.

They do not reflect the combined impact of sanctions and failed economic policies on Iran’s overall ability to spend. More specifically, they do not show how much sanctions affect Iran’s oil exports, even as one of the most diversified economics in the Gulf, but also one where the *CIA Factbook* reports that petroleum and petroleum-related products still counted for 60% of exports in 2018. These petroleum and petroleum-related products also accounted for 99% of Iraq’s exports, virtually all of Kuwait’s, most of Oman and Qatar’s, 90% of Saudi Arabia’s, and more than 45% of the UAE’s.

In short, only the last charts and tables in this section, which show the instability in petroleum export income and the sudden shocks that past wars have caused, begin to reflect the warnings that would come from a full-scale analysis of regional and national economic trends. The civil needs and expectations of even the wealthiest Gulf Arab oil exporters present major funding and budget challenges that cannot be met as long as they spend so much of their economy on military forces and security.

Each national case is radically different – both in funding military forces and meeting nation-by-nation civil challenges – *but UN, World Bank, and IMF studies all show that the need for job creation and diversification alone confronts every regional state with critical dilemmas in trying to fund both a civil future and its current role in the regional arms race.*

Moreover, the drops in oil export revenues caused by the drop in petroleum prices and income shown in the final charts in this section are now compounded by the massive impact of the Coronavirus as well as the competition between Saudi Arabia and Russia to maximize their own petroleum revenues. This net assessment is being made at the start of a massive shift in the global economy that has little to do with any traditional military geopolitical competition, and whose outcome is now extremely unpredictable.

The Coronavirus also introduces another key element of uncertainty. As noted in the introduction, the Coronavirus may have a massive future impact on Arab military expenditures and arms imports, and Iranian military expenditures and domestic military production. Even before the virus became an issue, some of the key Gulf economies affecting the balance were already “failed states” with weak or nearly bankrupt economies. These included Iran, Iraq, Lebanon, Syria, and Yemen. There currently is no way to estimate how serious the impacts of the virus will be, and the United States has continued to place new economic sanctions on Iran.

As is shown later in this analysis, “oil wealth” is very limited in terms of per capita income in many of the Gulf states and the value of petroleum exports has varied sharply and unpredictably over time. This section warns that the wealthiest petroleum exporter in the Gulf – Kuwait, Qatar, Saudi Arabia, and the UAE – are spending very high percentages of their GNP on national security – some close to 10% – as is at least one less wealthy state: Oman. The virus has already sharply cut demand for petroleum and petroleum prices. Sustained cuts could force even the wealthiest states to reduce national security spending, arms imports, and efforts to reform their economies and cut their dependence on petroleum exports.

These trends are so uncertain, however, that any effort to estimate their impact now involves little more than speculative guesswork. Accordingly, the analysis that follows warns that it is not possible to estimate the detailed impact of the Coronavirus, but they are certain to be all too real.

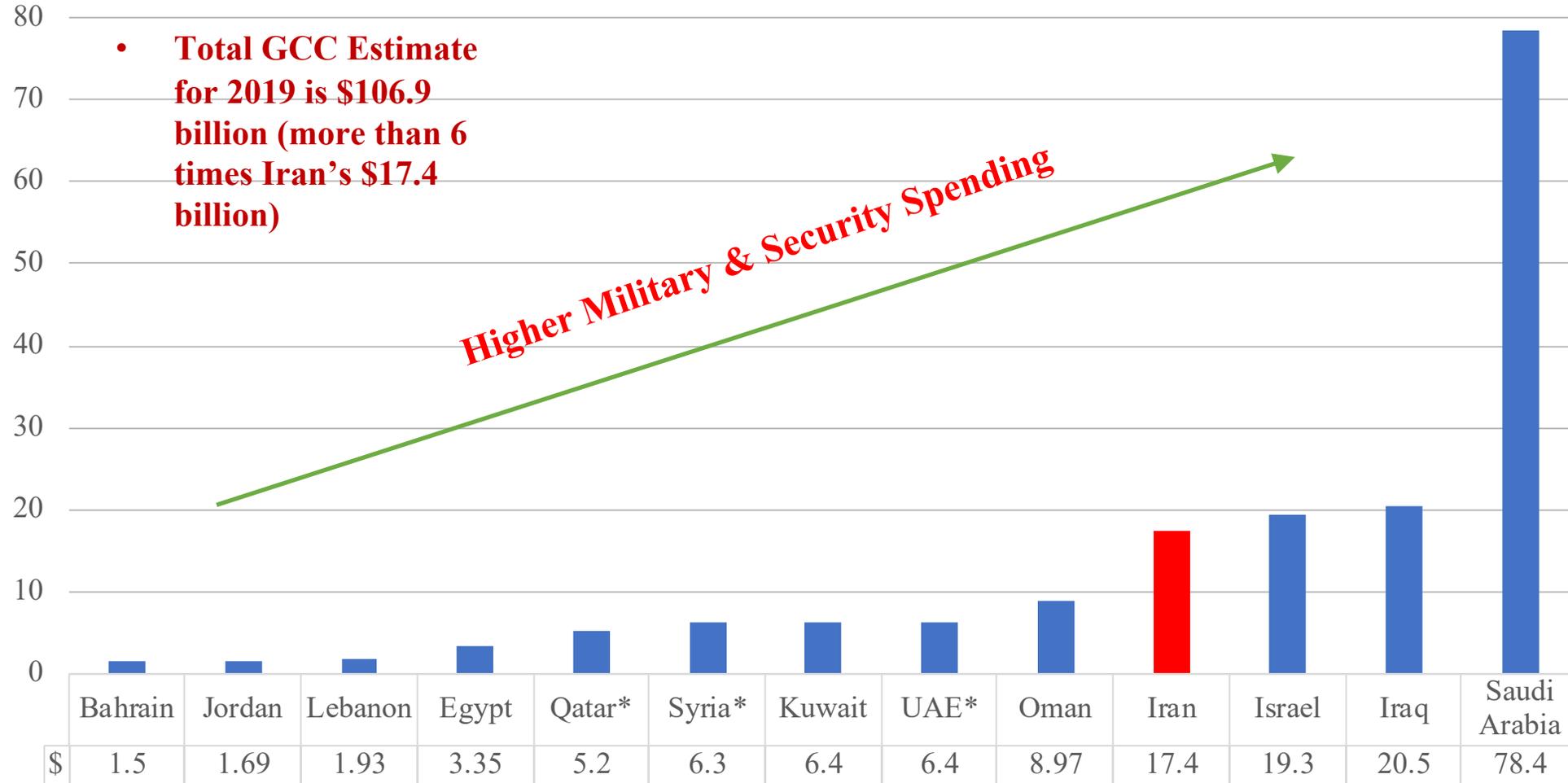
Iran and the Arab Gulf Balance in 2020

Based on IISS 2020 *Military Balance* Estimate

	Iraq	Iran	GCC	Saudi	UAE	Bahrain	Kuwait	Oman	Qatar
Active Personnel	64,000	523,000	374,800	227,000	63,000	8,200	17,500	42,600	16,500
Reserve Personnel	-	350,000	23,700	-	-	-	23,700	-	-
Main Battle Tanks	393	1,513	1,937	900	385	180	293	117	62
AIFVs	240	610	1,766	760	405	67	492	2	40
APCs	2,092	640	3,121	1,340	928	203	260	200	190
Towed Artillery	60	2,030	359	110	93	36	-	108	12
Self-Propelled Artillery	72	292	669	224	181	82	106	24	52
Multiple Rocket Launchers	3	1,476	194	60	88	13	27	-	6
Combat Aircraft	65	336	748	407	156	38	66	63	18
Attack Helicopters	28	-	79	35	-	28	16	-	-
Major SAM Launchers	0	205	296	236	14	6	40	-	-
Destroyers	-	-	3	3	-	-	-	-	-
Frigates	-	-	6	4	1	1	-	-	-
Corvettes	-	6	21	4	10	2	-	5	-
Patrol and Coastal	32	61	111	28	32	10	20	10	11
Submarines	-	21	0	-	-	-	-	-	-
Submersibles	-	3	0	-	-	-	-	-	-
Mine Warfare	-	-	5	3	2	-	-	-	-
Landing Ships	-	12	3	-	2	-	-	1	-
Landing Craft	-	11	42	5	17	9	6	5	-

Source: Adapted from IISS, “The Military Balance 2020,” 334-373, <https://www.iiss.org/blogs/military-balance/2020/02/new-features-military-balance-2020>

IISS: Comparative Military and Security Spending in 2020 (Current \$ U.S. Billions)

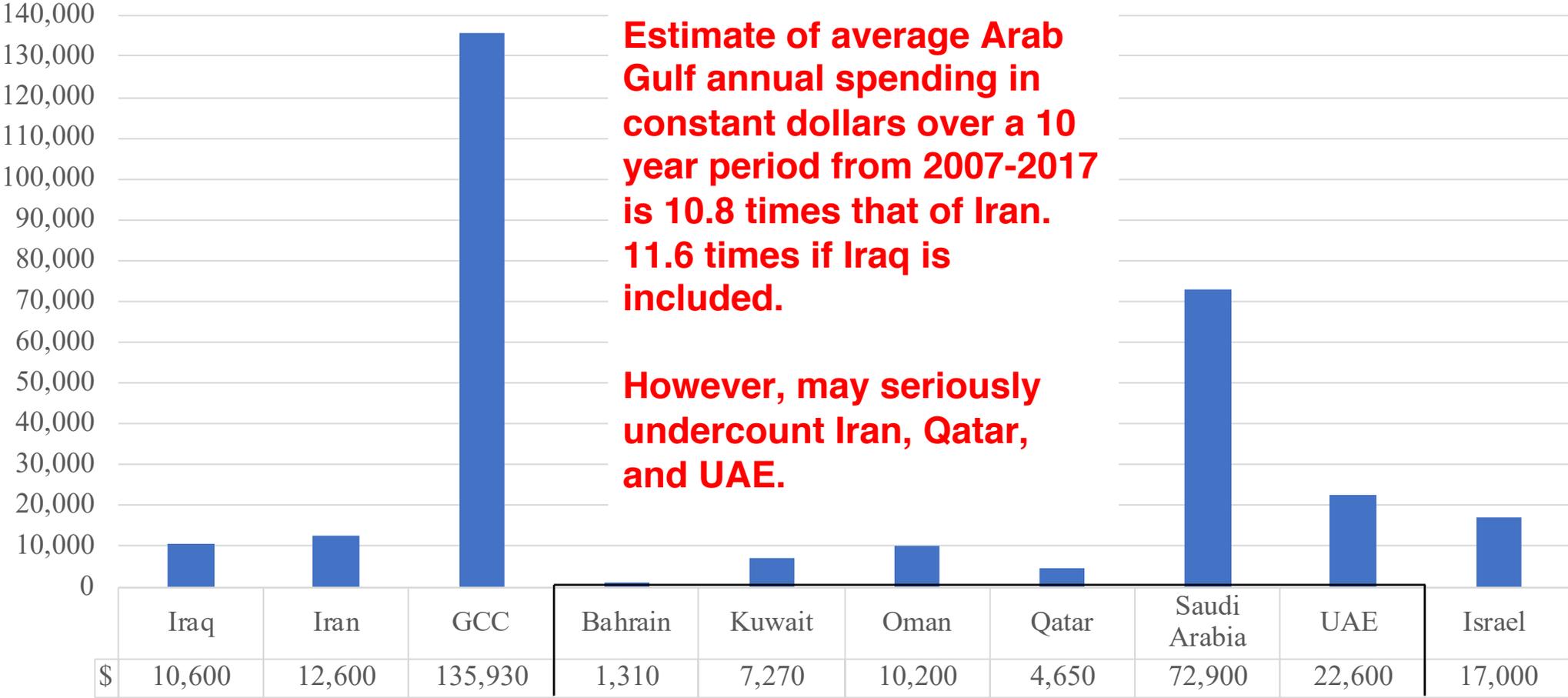


Source: Adapted by the author from IISS, *Military Balance 2020*, “Chapter Seven The Middle East and North Africa.”

*Author’s estimate for Qatar, UAE, and Syria

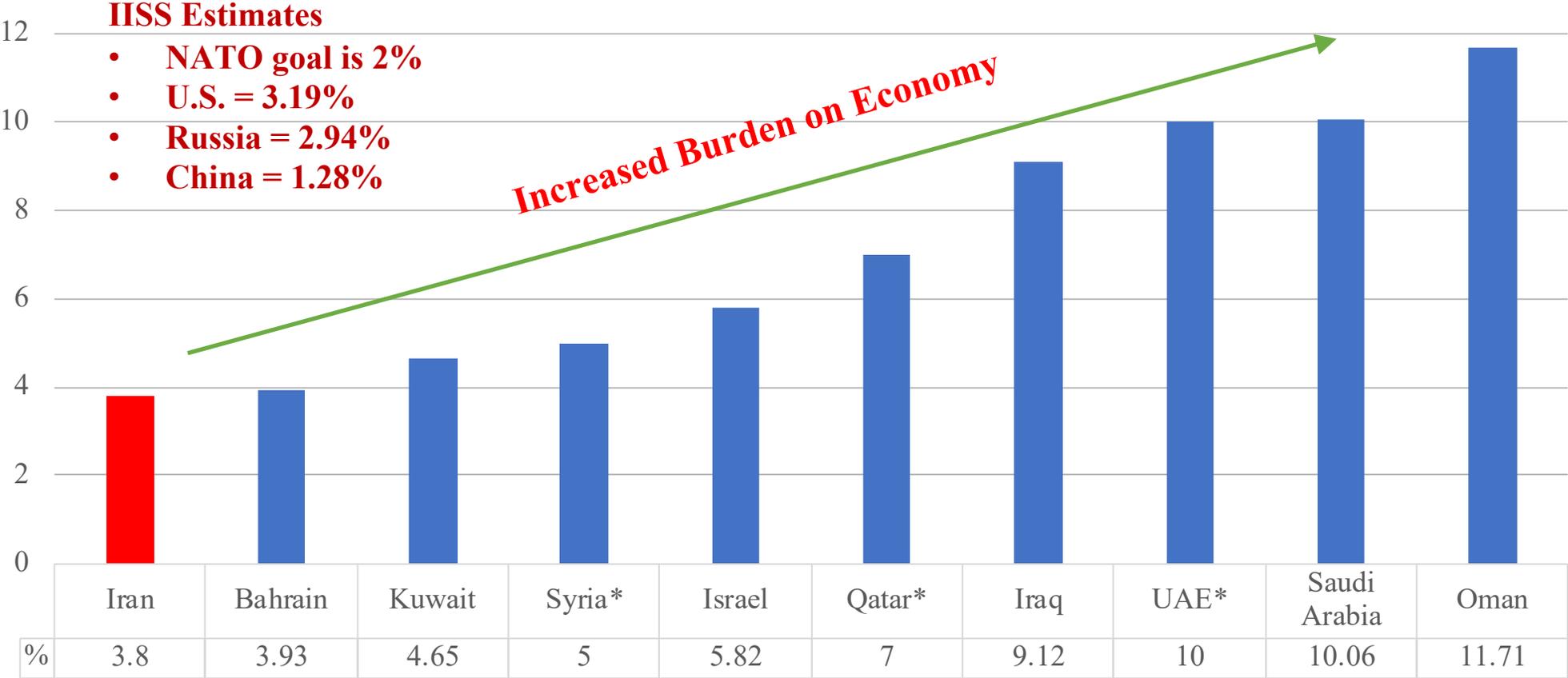
WMEAT: Mean Annual Value of Military Expenditure from 2007-2017

(in constant 2017 \$ U.S. millions)



Source: Bureau of Arms Control, “World Military Expenditures and Arms Transfers 2019 Table I Military Expenditures and Armed Forces Personnel, 2007 2017,” Table I: Country Rankings & Trends, *U.S. Department of State*, 2019, <https://www.state.gov/world-military-expenditures-and-arms-transfers-2019/>

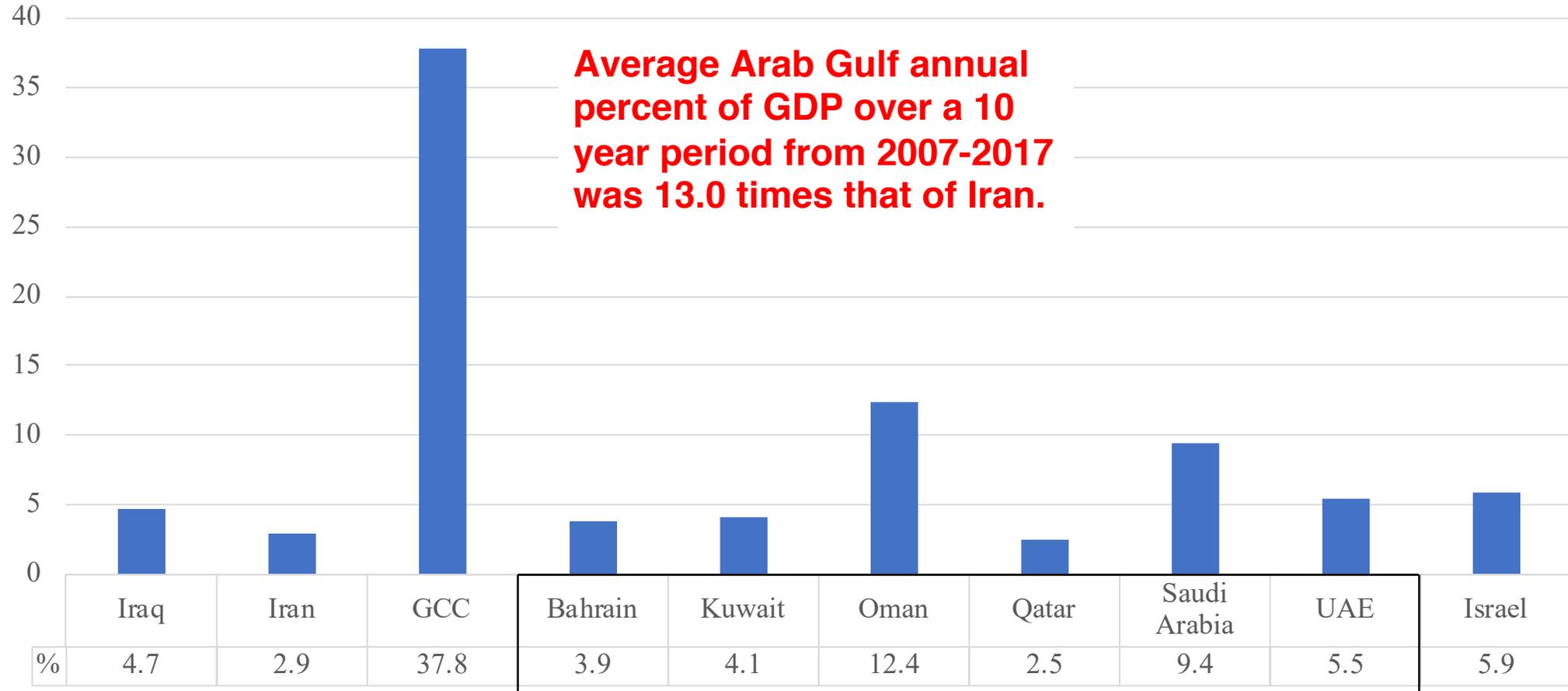
IISS Comparative Estimates of Military Spending as Percent of GDP, 2020



*Author’s estimate for Syria, Qatar, and UAE

Source: Adapted by the author from IISS, *Military Balance 2020, Chapter Seven, “The Middle East and North Africa.”* and IHS Markit, *Jane’s Sentinel Security Assessment – The Gulf States 2017*

WMEAT: Mean Annual Value of Military Expenditure as Percent of Mean Annual GDP from 2007-2017



Note: Figures for Iran, Qatar and UAE are too low to be credible.

Source: Bureau of Arms Control, "World Military Expenditures and Arms Transfers 2019 Table I Military Expenditures and Armed Forces Personnel, 2007 2017," Table I: Country Rankings & Trends, *U.S. Department of State*, 2019, <https://www.state.gov/world-military-expenditures-and-arms-transfers-2019/>

SIPRI: Low Iranian Military Spending Relative to Arab States, 2000-2018 (Military expenditure by country, in constant (2017) \$US million, 1988-2018 SIPRI 2019)

Middle East	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bahrain	359.0	372.3	444.1	516.0	531.9	513.3	574.2	642.6	719.9	828.2	842.8	1033.5	1182.2	1347.6	1475.3	1442.0	1505.5	1532.7	1396.8
Egypt	2627.7	2834.3	2902.8	2383.9	2369.7	2659.4	2952.5	3306.9	3779.9	4017.4	4407.3	4464.0	4557.7	4359.8	5085.1	5475.5	4513.0	2765.6	3110.0
Iran	8327.1	10378.8	3243.9	3717.1	5243.6	6796.7	8751.5	9330.9	11082.0	12584.6	13561.3	14277.7	16494.0	11997.2	9901.1	10588.8	12264.0	13931.2	13194.2
Iraq	..	..	..	..	613.7	1120.3	1236.1	1989.9	3116.3	3237.2	3752.9	4278.6	4141.1	7780.2	6921.3	9604.2	5970.4	7416.4	6318.0
Israel	9407.8	9607.4	10090.9	10827.5	11127.1	10919.2	11559.0	12128.9	14191.9	14030.4	14605.3	16343.2	15567.1	17319.7	18485.8	16969.4	14783.8	15581.6	15946.8
Jordan	529.3	528.9	521.9	611.8	586.7	603.7	701.6	1032.4	1358.4	1568.3	1557.9	1594.8	1472.8	1444.9	1548.9	1614.9	1768.3	1939.7	1957.7
Kuwait	2697.1	2685.7	2821.5	3130.7	3450.1	3509.4	3597.8	4115.7	4430.3	4208.9	4335.2	5393.5	5941.5	5698.1	5832.2	5735.1	6446.7	6764.6	7296.3
Lebanon	930.0	958.5	907.5	923.4	954.6	962.5	1009.0	1152.2	1169.5	1426.2	1585.4	1626.5	1757.2	1935.7	2270.1	2239.4	2606.5	2441.1	2775.6
Oman	1577.2	1819.9	1868.5	1969.3	2230.7	2739.0	3022.6	3244.6	3462.5	3367.5	3671.4	5000.7	9250.7	8766.3	8213.5	7533.6	7936.0	6802.7	6710.0
Qatar	..	..	761.0	784.6	772.4	887.5	1065.7	1562.2	2317.5	1948.4	1876.8	..	..	..	..	..	..	..	..
Saudi Arabia	19964.3	21026.7	18501.9	18747.5	20910.4	25392.0	29580.5	35469.5	38222.9	41267.2	45244.5	48530.9	56497.9	67020.0	80762.4	87185.9	63672.8	70400.0	67554.7
Syria	897.0	1022.5	1102.9	1436.2	1388.5	1450.3	1435.2	1599.0	1732.4	2182.0	2346.0	2494.9	..	..	..	..	..	..	..
Turkey	9993.7	7216.1	9050.4	10277.9	10920.8	12081.2	13363.3	15319.2	17127.3	16352.3	17939.4	17304.9	17958.2	18662.6	17772.2	15880.9	17854.0	17824.0	18967.1
UAE	5875.8	5798.0	5354.1	5834.7	6816.9	6604.2	7165.4	8461.0	11571.7	13836.4	17504.7	19181.8	19024.1	23561.1	22755.1	..	..	..	..
Yemen	473.7	540.1	737.4	807.3	735.5	815.6	822.1	1050.5	1196.4	1420.8	1448.2	1612.3	1618.8	1648.8	1714.8	..	..	..	..

- **Iran never spent more than \$16.5 billion per year from 2000-2018**
- **Saudi Arabia alone average over \$0 billion per year and spent \$67.5 billion in 2018 vs. \$13.1 billion in 2018.**
- **UAE rose from \$5.4 billion in 2002 to \$25.6 billion in 2013. Estimated to have spent over \$24 billion from 2015 on.**

Source: SIPRI, "Military Expenditure Database," February 19, 2020,

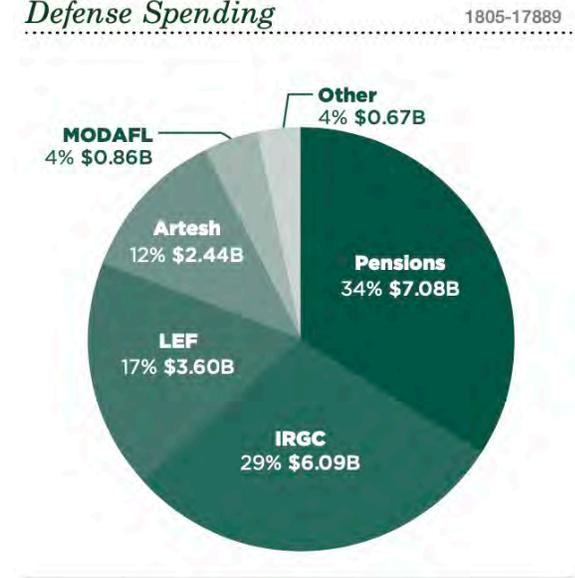
<https://www.sipri.org/sites/default/files/Data%20for%20all%20countries%20from%201988%E2%80%932018%20in%20constant%20%282017%29%20USD%20%28pdf%29.pdf>

DIA Estimate of Iranian Defense Spending

Official Iranian Defense Expenditures 2011–2019



Official 2019 Iranian Defense Spending



Following a significant increase in Iranian defense spending from 2014 to 2018 after the implementation of the JCPOA, Iran’s security forces have experienced a funding decrease in 2019. Key drivers of this defense budget decrease include the reimposition of U.S. oil and banking sanctions, the depreciation of the Iranian rial, and chronic economic mismanagement. Iran’s official defense budget for 2019 is approximately \$20.7 billion, roughly 3.8 percent of gross domestic product (GDP), as passed by the Iranian Majles. **This total includes funding for the major components of Iran’s security apparatus, including the IRGC, Artesh, and LEF, as well as the Armed Forces General Staff (AFGS), the Ministry of Defense and Armed Forces Logistics (MODAFL), and security forces pensions.** The decline in funding for 2019 is similar to the decrease following the implementation of multi-lateral oil and financial sanctions in 2012. Iran’s current defense funding may face further cuts as Iranian oil export revenue continues to decline.

Although it is smaller in size, the IRGC receives a greater proportion of the defense budget than the Artesh. In 2019, Iran allocated 29 percent of the defense budget to the IRGC, compared with 12 percent for the Artesh. The government allocated 34 percent of the budget to pensions for all military personnel, and law enforcement personnel received about a third of the budget. ... Iran also distributes funding to its many partners and proxies, expenditures not fully accounted for in the official budget. **Between 2012 and 2018, Iran provided more than \$16 billion to the Syrian regime, Hizballah, Iraqi Shia militias, the Houthis, and Palestinian groups...**

Tehran has a variety of off-budget sources of funding, making it difficult to accurately estimate the true size and scope of Iranian defense spending. The supreme leader can authorize transfers to defense and security organizations from the National Development Fund, Iran’s reserve fund, as it reportedly has done to support military activities in Syria.120 Moreover, the IRGC runs numerous private companies—most notably the wide-ranging Khatemolambia (“seal of the prophets”) Construction Headquarters—and exploits its far-reaching political and social influence to raise additional revenue. The IRGC and IRGC-QF can also gain extra income through smuggling and other illicit activities in the region.

Iran’s new 5-year national development plan, released in July 2017, emphasizes a broader range of conventional capabilities than past plans. The plan continues to prioritize missiles and naval forces, but it also emphasizes air power, including the first public reference to offensive air capabilities in an Iranian strategic document. The plan also provides new focus on electronic warfare (EW) capabilities.

CRS: U.S. Estimates Massive Arab Lead in Arms Imports:

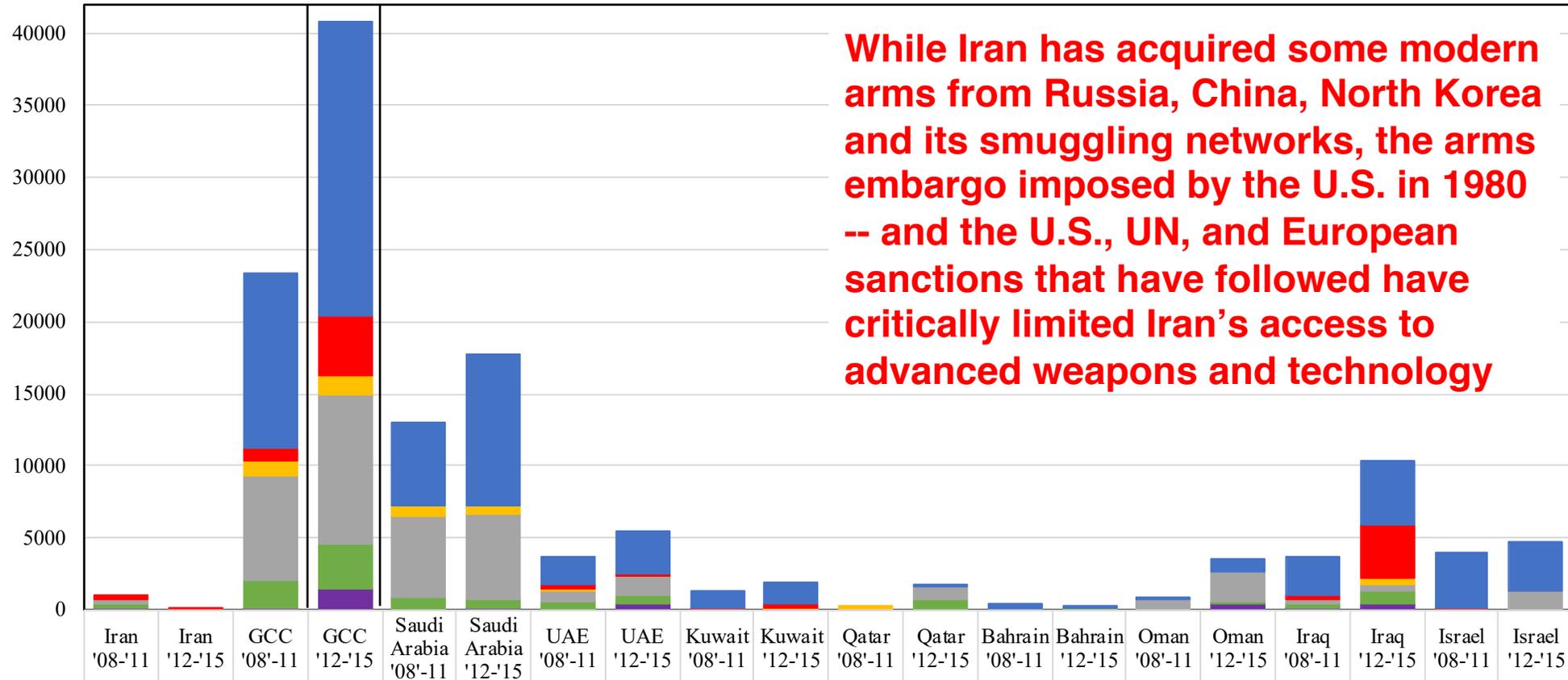
**Arab Gulf states placed \$199.7 billion in new orders during 2008-2015.
Iran placed \$900 million. The Arab states outspent Iran by over 22:1.**

(Gulf Arms Orders and Deliveries: 2008-2015 in millions of current U.S. Dollars)

Country	Arms Orders			Arms Deliveries		
	2008-2011	2012-2015	Total	2008-2011	2012-2015	Total
Saudi Arabia	52,500	41,000	93,500	13,000	17,700	30,700
Other GCC Countries						
Bahrain	400	500	900	400	100	500
Kuwait	2,400	4,400	6,800	1,300	1,900	3,200
Oman	1,600	3,300	4,900	500	3,500	4,000
Qatar	1,000	6,200	7,200	300	1,700	2,000
UAE	13,500	22,900	36,500	3,700	5,500	9,200
Sub-Total	21,300	28,600	49,900	4,500	12,800	17,300
Total GCC	92,700	106,900	199,700	23,700	43,200	120,700
Iraq	5,200	23,900	34,400	3,700	10,300	14,000
Iran	300	600	900	300	100	400
Yemen	800	100	900	400	200	600
Total	99,000	131,500	235,500	28,100	53,800	135,700

CRS: New Conventional Arms Transfer Agreements by Supplier, 2008-2015

(In current \$ U.S. million)



	Iran '08-'11	Iran '12-'15	GCC '08-'11	GCC '12-'15	Saudi Arabia '08-'11	Saudi Arabia '12-'15	UAE '08-'11	UAE '12-'15	Kuwait '08-'11	Kuwait '12-'15	Qatar '08-'11	Qatar '12-'15	Bahrain '08-'11	Bahrain '12-'15	Oman '08-'11	Oman '12-'15	Iraq '08-'11	Iraq '12-'15	Israel '08-'11	Israel '12-'15
■ U.S.	0	0	12100	20400	5800	10500	1900	3000	1200	1500	0	100	400	100	200	800	2600	4400	3800	3500
■ Russia	200	100	800	4200	0	0	400	200	100	300	0	0	0	0	0	0	300	3700	200	0
■ China	0	0	1100	1200	700	600	100	0	0	100	300	0	0	0	0	0	0	500	0	0
■ Major Western Euro.	300	0	7300	10400	5600	5800	700	1200	0	0	0	900	0	0	700	2100	300	400	0	1300
■ All Other European	300	0	1800	3200	900	700	600	700	0	0	0	700	0	100	0	200	300	800	0	0
■ All Others	200	0	200	1400	0	100	0	400	0	0	0	0	0	0	0	400	200	500	0	0

Source: Catherine A. Theohary, *Conventional Arms Transfers to Developing Nations, 2008-2015*, 30, Congressional Research Service, December 19, 2016, <https://www.google.com/search?q=Congressional+Research+Service%2C+data+on+arms+transfers&ie=utf-8&oe=utf-8>

SIPRI Estimates of Global Arms Sale Trends by Seller and Region: 1979-2018

- The five largest exporters in 2014–18 were the United States, Russia, France, Germany and China. Together, they accounted for 75 per cent of the total volume of arms exports in 2014–18.
- US exports accounted for 36 per cent of the global total in 2014–18. US arms exports in 2014–18 grew by 29 per cent compared with 2009–13.
- Russian arms exports decreased by 17 per cent between 2009–13 and 2014–18. French, German and Chinese arms exports in 2014–18 were higher than in 2009–13, with respective increases of 43, 13 and 2.7 per cent.
- The five largest importers in 2014–18—Saudi Arabia, India, Egypt, Australia and Algeria— together received 35 per cent of all arms imports.
- The main recipient region in 2014–18 was Asia and Oceania (accounting for 40 per cent of global imports), followed by the Middle East (35 per cent), Europe (11 per cent), Africa (7.8 per cent) and the Americas (6.2 per cent).
- Between 2009–13 and 2014–18 arms imports by states in the Middle East increased by 87 per cent.
- By contrast, overall imports decreased in the Americas (–36 per cent), Europe (–13 per cent), Asia and Oceania (–6.7 per cent) and Africa (–6.5 per cent).

SIPRI: Comparative Gulf Arms Imports, 2000-2018

(Current \$ U.S. Billions)

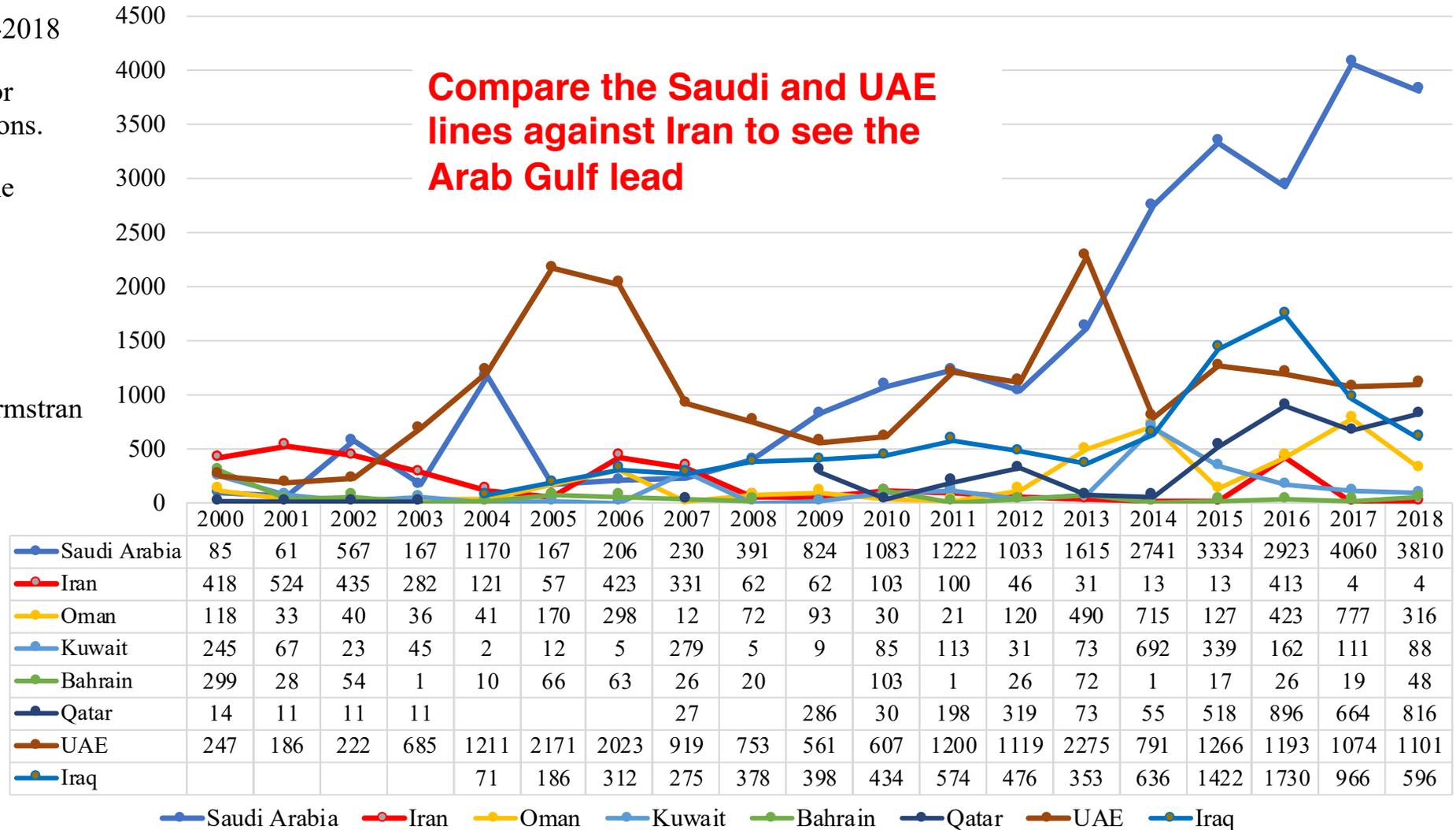
TIV of arms exports to all, 2000-2018

Figures are SIPRI Trend Indicator Values (TIVs) expressed in millions.

Figures may not add up due to the conventions of rounding.

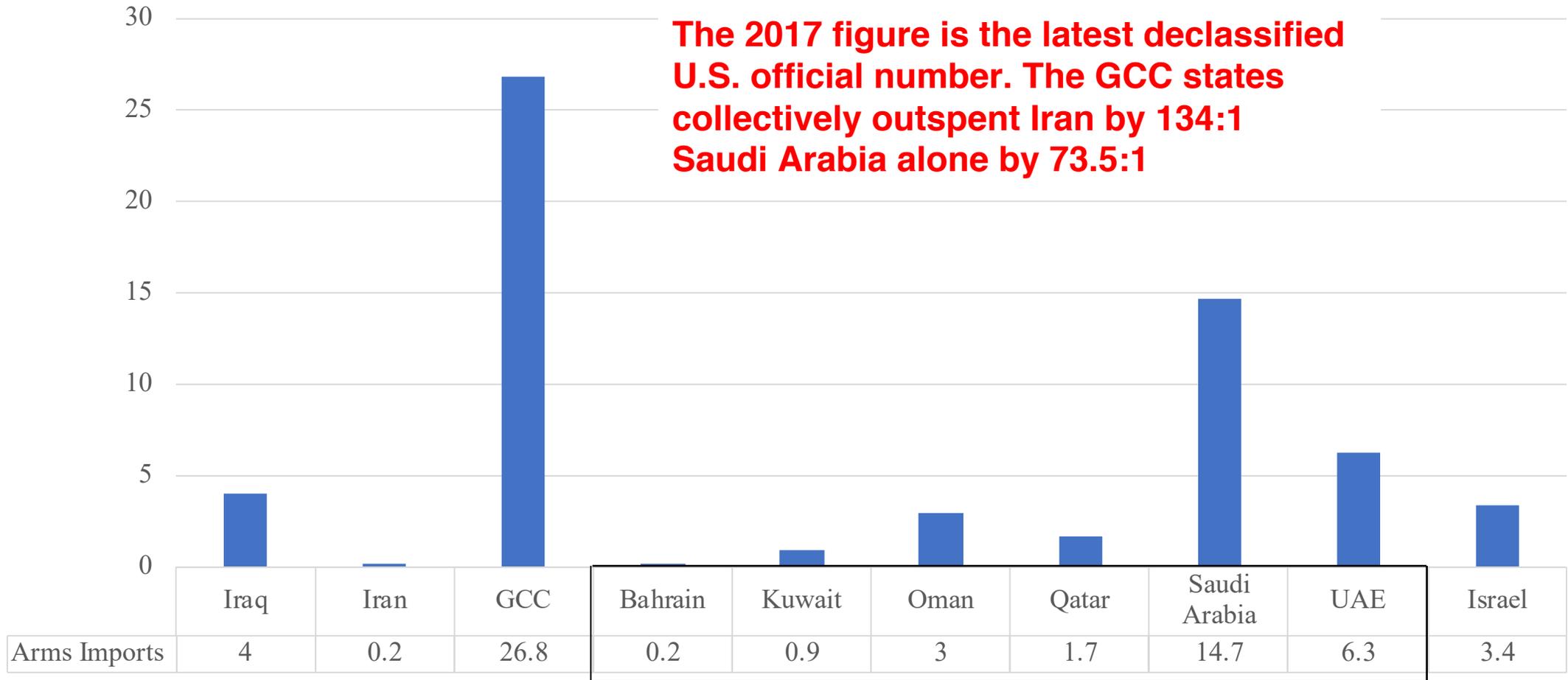
A '0' indicates that the value of deliveries is less than 0.5m

For more information, see <http://www.sipri.org/databases/armstransfers/sources-and-methods/>



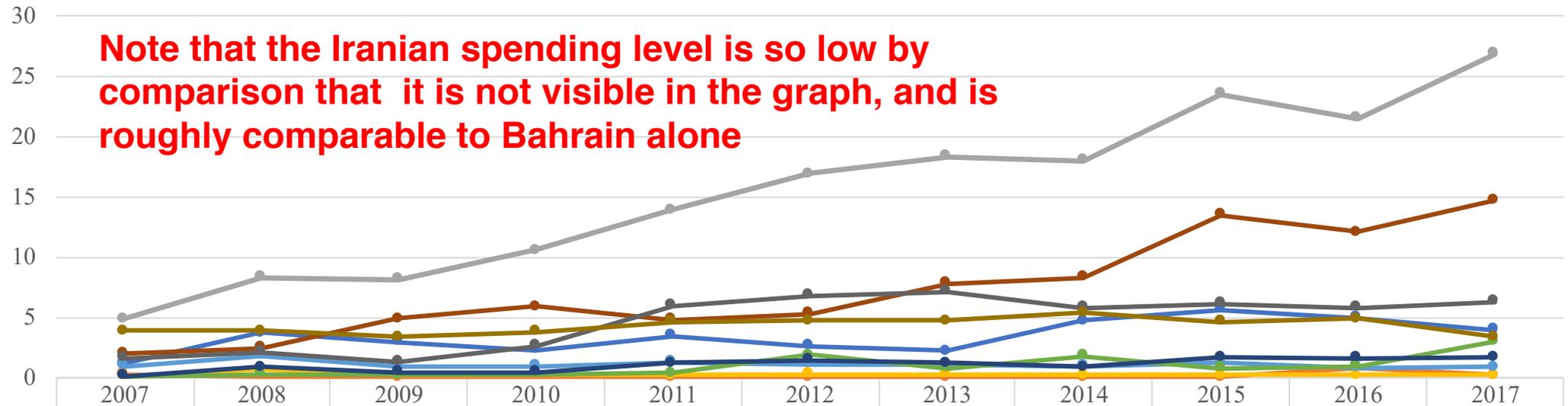
WMEAT: Total Value of Annual Arms Imports in 2017

(Current \$ U.S. billions)



Source: Bureau of Arms Control, “World Military Expenditures and Arms Transfers 2019 Tables II IV Arms Transfer Deliveries, 2007 2017,” Table IIe., *U.S. Department of State*, 2019, <https://www.state.gov/world-military-expenditures-and-arms-transfers-2019/>

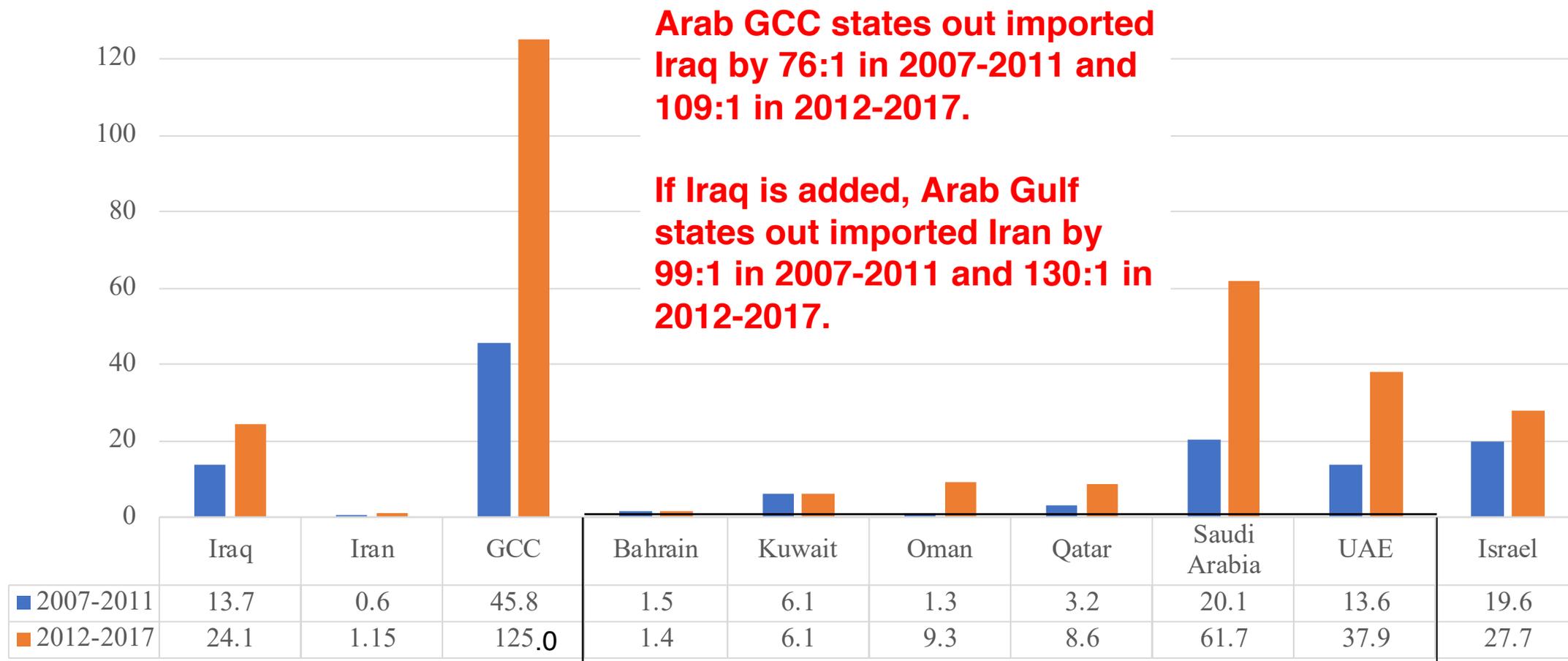
WMEAT: Trends in the Total Value of Annual Arms Imports from 2007 - 2017 (Current \$ U.S. billions)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Iraq	1.2	3.7	3	2.3	3.5	2.6	2.2	4.7	5.6	5	4
Iran	0.3	0.1	0.05	0.1	0.05	0.05	0.05	0	0.05	0.8	0.2
GCC	4.9	8.3	8.1	10.6	13.9	16.9	18.3	18	23.5	21.5	26.8
Bahrain	0.1	0.7	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2
Kuwait	1	1.8	1	1	1.3	1.1	1.1	1	1.2	0.8	0.9
Oman	0.1	0.3	0.2	0.3	0.4	1.9	0.8	1.8	0.8	1	3
Qatar	0.1	0.9	0.5	0.5	1.2	1.5	1.2	0.9	1.7	1.6	1.7
Saudi Arabia	2	2.5	4.9	5.9	4.8	5.3	7.8	8.3	13.5	12.1	14.7
UAE	1.6	2.1	1.3	2.6	6	6.8	7.1	5.8	6.1	5.8	6.3
Israel	3.9	3.9	3.4	3.8	4.6	4.7	4.7	5.4	4.6	4.9	3.4

WMEAT: Total Value of Annual Arms Imports in 2007-2011 and 2012-2017

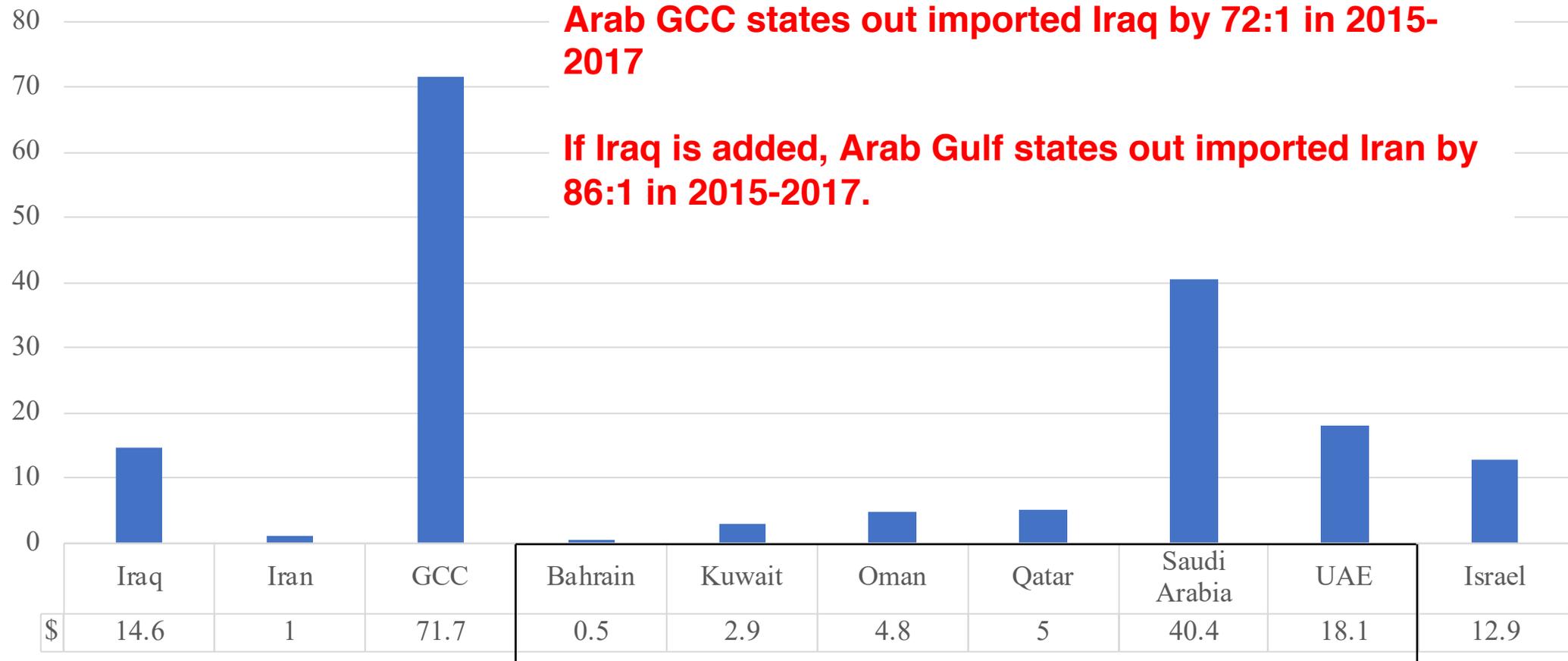
(Current \$ U.S. billions)



Source: Bureau of Arms Control, "World Military Expenditures and Arms Transfers 2019 Tables II IV Arms Transfer Deliveries, 2007 2017," Table IIe., *U.S. Department of State*, 2019, <https://www.state.gov/world-military-expenditures-and-arms-transfers-2019/>

WMEAT: Total Value of Cumulative Arms Transfer Deliveries in 2015-2017

(Current \$ U.S. billions)



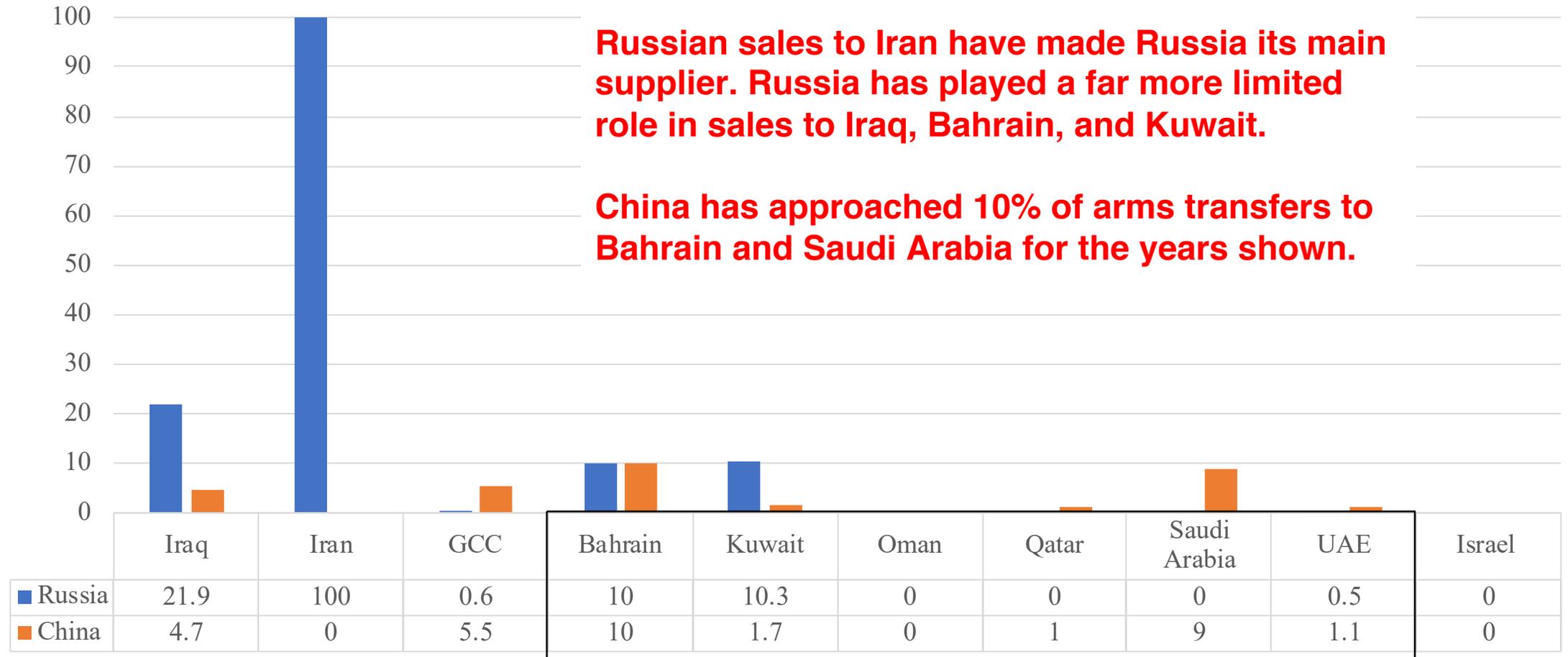
Source: Bureau of Arms Control, “World Military Expenditures and Arms Transfers 2019 Tables II IV Arms Transfer Deliveries, 2007 2017,” Table III, *U.S. Department of State*, 2019, <https://www.state.gov/world-military-expenditures-and-arms-transfers-2019/>

WMEAT: Total Value of Arms Transfer Deliveries from Russia and China between 2015-2017 (Current \$ U.S. billions)



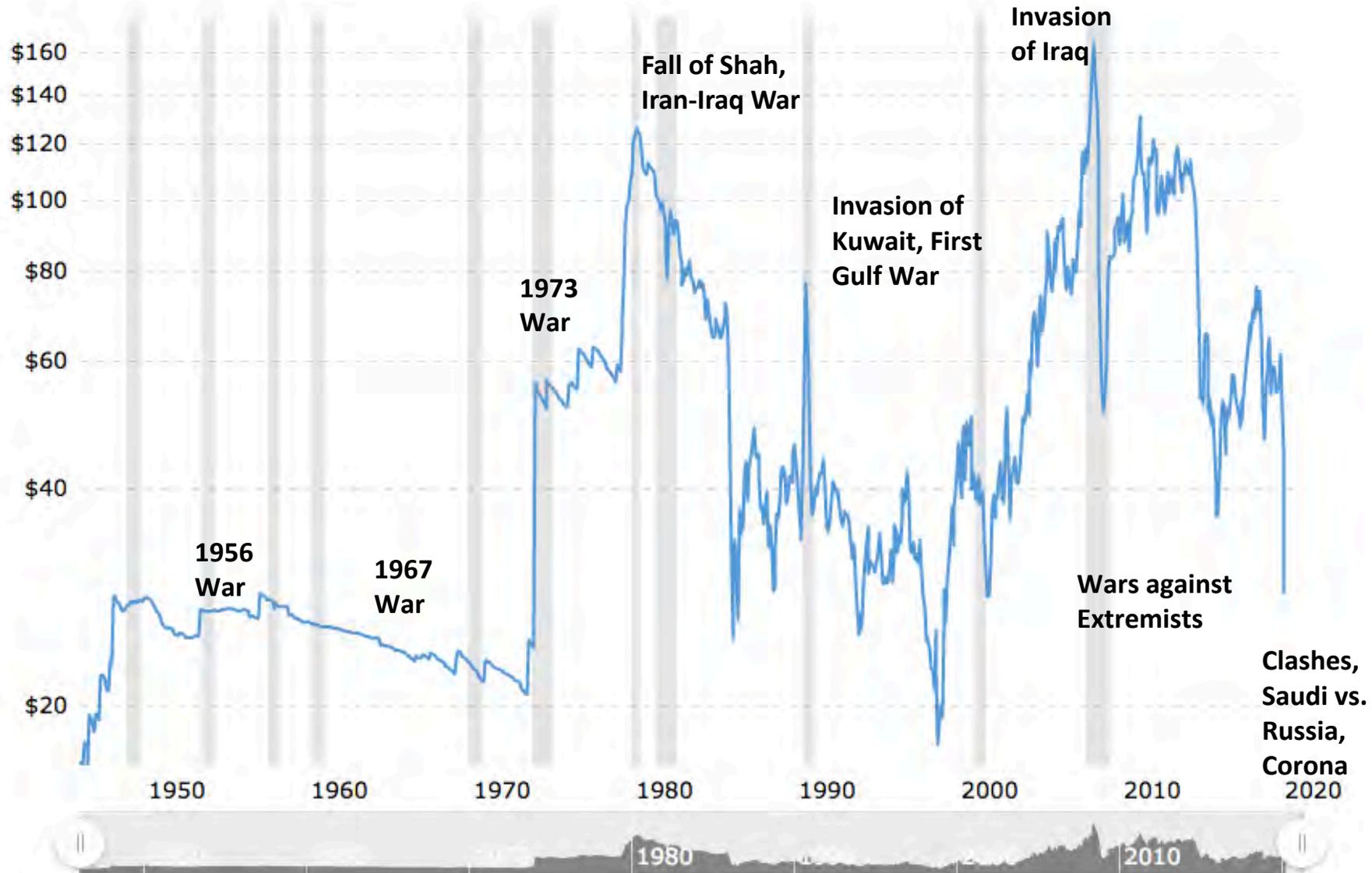
Source: Bureau of Arms Control, “World Military Expenditures and Arms Transfers 2019 Tables II IV Arms Transfer Deliveries, 2007 2017,” Table III, *U.S. Department of State*, 2019, <https://www.state.gov/world-military-expenditures-and-arms-transfers-2019/>

WMEAT: Value of Arms Transfer Deliveries from Russia and China as Percent of Total Value of Arms Transfer Deliveries between 2015-2017



Source: Adapted by author from Bureau of Arms Control, “World Military Expenditures and Arms Transfers 2019 Tables II IV Arms Transfer Deliveries, 2007 2017,” Table III, *U.S. Department of State*, 2019, <https://www.state.gov/world-military-expenditures-and-arms-transfers-2019/>

Economics. War, and Uncertainty in Global Oil Prices: 1950-2020



Source: West Texas Intermediate (WTI or NYMEX) crude oil prices per barrel back to 1946. The price of oil shown is adjusted for inflation using the headline CPI and is shown by default on a logarithmic scale. The current month is updated on an hourly basis with today's latest value. The price of WTI crude oil as of March 16, 2020 was **\$28.70** per barrel; Adapted by Anthony H. Cordesman from Marcotrends, <https://www.marcotrends.net/1369/crude-oil-price-history-chart>

Sudden Swings and Radical Differences in National “Oil Wealth”

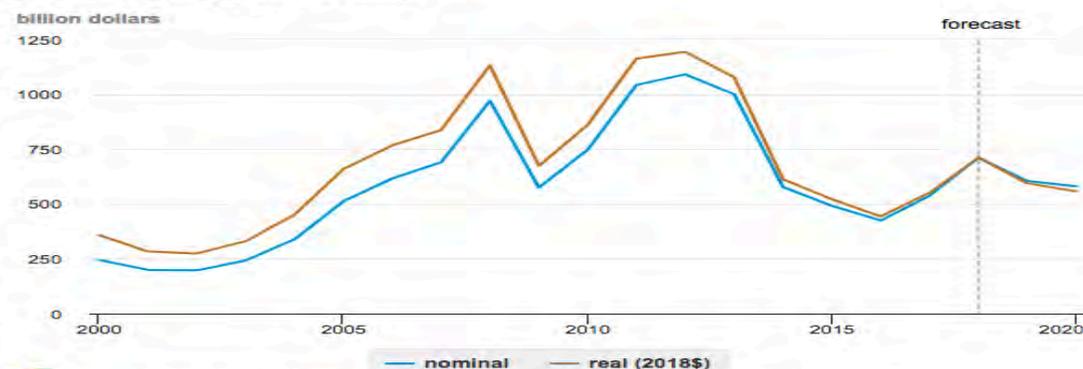
OPEC net oil export revenues

Country	Nominal (billion \$)				Real (billion 2018\$)					
	2017	2018	2019	2020	Jan-Jul 2019	2017	2018	2019	2020	Jan-Jul 2019
Algeria	\$24	\$30	--	--	\$16	\$24	\$30	--	--	\$15
Angola	\$30	\$37	--	--	\$19	\$31	\$37	--	--	\$18
Congo (Brazzaville)	\$5	\$8	--	--	\$5	\$5	\$8	--	--	\$5
Ecuador	\$5	\$6	--	--	\$3	\$5	\$6	--	--	\$3
Equatorial Guinea	\$4	\$5	--	--	\$2	\$4	\$5	--	--	\$2
Gabon	\$4	\$5	--	--	\$3	\$4	\$5	--	--	\$3
Iran	\$55	\$67	--	--	\$20	\$57	\$67	--	--	\$19
Iraq	\$66	\$91	--	--	\$52	\$67	\$91	--	--	\$51
Kuwait	\$45	\$61	--	--	\$34	\$46	\$61	--	--	\$33
Libya	\$13	\$21	--	--	\$13	\$14	\$21	--	--	\$13
Nigeria	\$32	\$42	--	--	\$23	\$33	\$42	--	--	\$22
Saudi Arabia	\$172	\$237	--	--	\$120	\$176	\$237	--	--	\$118
United Arab Emirates	\$56	\$74	--	--	\$42	\$57	\$74	--	--	\$41
Venezuela	\$28	\$27	--	--	\$9	\$29	\$27	--	--	\$8
OPEC	\$538	\$711	\$604	\$580	\$359	\$551	\$711	\$593	\$556	\$353

OPEC per capita net oil export revenues

Country	Nominal (\$)				Real (2018\$)					
	2017	2018	2019	2020	Jan-Jul 2019	2017	2018	2019	2020	Jan-Jul 2019
Algeria	\$579	\$709	--	--	\$370	\$593	\$709	--	--	\$363
Angola	\$1,011	\$1,208	--	--	\$586	\$1,036	\$1,208	--	--	\$576
Congo (Brazzaville)	\$859	\$1,561	--	--	\$828	\$880	\$1,561	--	--	\$813
Ecuador	\$280	\$348	--	--	\$198	\$287	\$348	--	--	\$194
Equatorial Guinea	\$3,108	\$3,540	--	--	\$1,632	\$3,184	\$3,540	--	--	\$1,602
Gabon	\$1,753	\$2,223	--	--	\$1,212	\$1,796	\$2,223	--	--	\$1,190
Iran	\$685	\$820	--	--	\$240	\$701	\$820	--	--	\$235
Iraq	\$1,715	\$2,304	--	--	\$1,292	\$1,757	\$2,304	--	--	\$1,269
Kuwait	\$10,965	\$14,683	--	--	\$8,003	\$11,232	\$14,683	--	--	\$7,858
Libya	\$2,096	\$3,214	--	--	\$1,949	\$2,147	\$3,214	--	--	\$1,914
Nigeria	\$166	\$212	--	--	\$112	\$170	\$212	--	--	\$110
Saudi Arabia	\$5,248	\$7,098	--	--	\$3,529	\$5,376	\$7,098	--	--	\$3,465
United Arab Emirates	\$5,911	\$7,797	--	--	\$4,343	\$5,376	\$7,797	--	--	\$4,264
Venezuela	\$875	\$834	--	--	\$262	\$897	\$834	--	--	\$258
OPEC	\$1,094	\$1,416	\$1,180	\$1,109	\$702	\$1,121	\$1,416	\$1,158	\$1,065	\$689

OPEC net oil export revenues

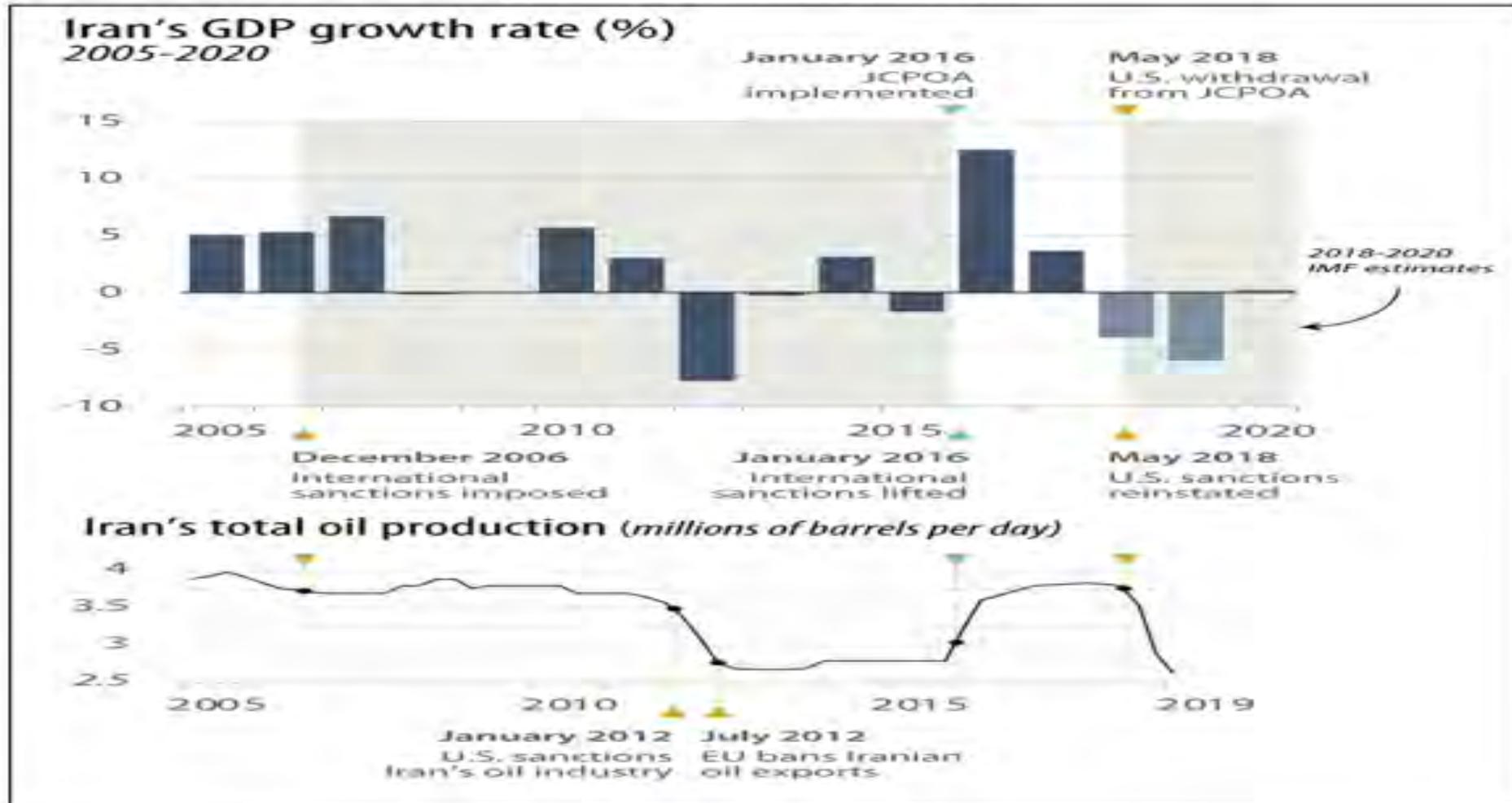


Sources: EIA, derived from data published in the August 2019 Short-Term Energy Outlook.

OPEC per capita net oil export revenues



Initial Impact of Renewal of Sanctions on Iran (Congressional Research Service)



Sources: IMF 2019, U.S. Energy Information Administration, OPEC.

Impact of Sanctions on Iran Unplanned Petroleum Production Outages

EIA defines spare crude oil production capacity—which only applies to OPEC members adhering to OPEC production agreements—as potential oil production that could be brought online within 30 days and sustained for at least 90 days, consistent with sound business practices.

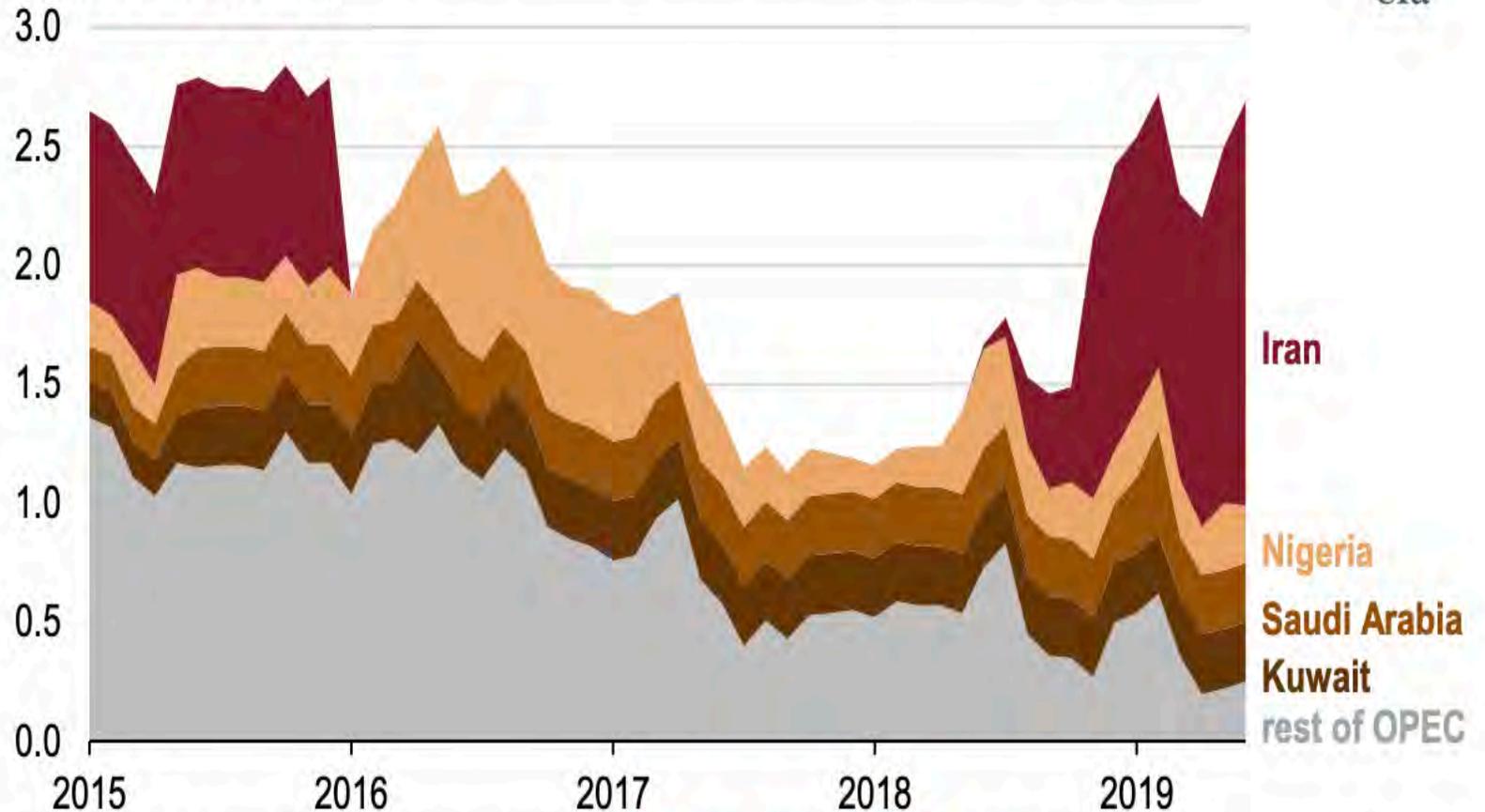
EIA does not include unplanned crude oil production outages in its assessment of spare production capacity.

As an example, EIA considers Iranian production declines that result from [U.S. sanctions](#) to be unplanned production outages, making Iran a significant contributor to the total OPEC unplanned crude oil production outages.

During the fourth quarter of 2015, before the [Joint Comprehensive Plan of Action](#) became effective in January 2016, EIA estimated that an average 800,000 b/d of Iranian production was disrupted.

In the first quarter of 2019, the first full quarter since U.S. sanctions on Iran were re-imposed in November 2018, Iranian disruptions averaged 1.2 million b/d.

Unplanned OPEC crude oil production outages (January 2015 - June 2019)
million barrels per day



Source: U.S. Energy Information Administration, [Short-Term Energy Outlook](#), July 2019

Note: OPEC disruptions include crude oil only.