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The Myth of U.S. Energy Independence and the Realities of Burden Sharing

The U.S. Strategic Partnerships with the Arab Gulf States Remain a Vital National Security Interest

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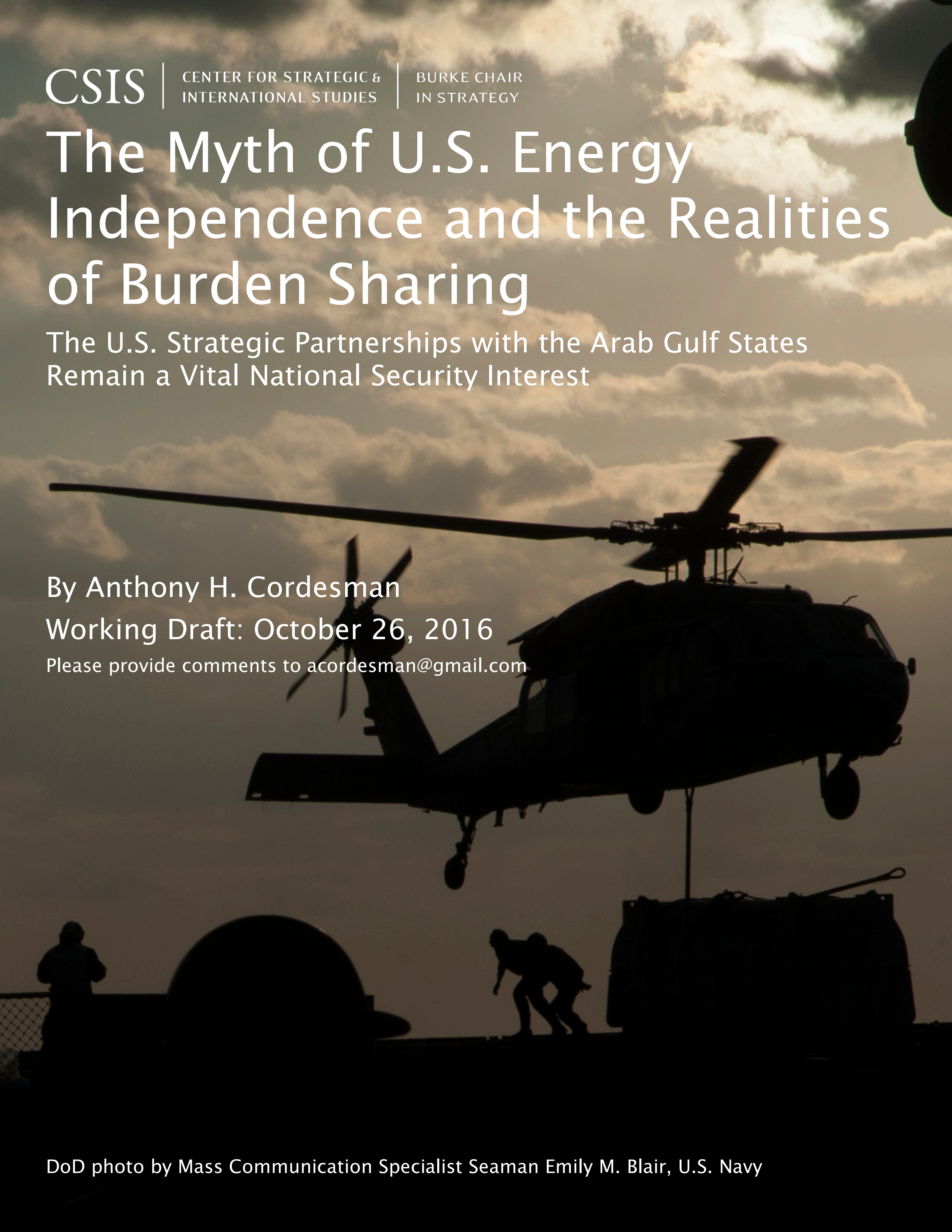

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The U.S. Strategic Partnerships with the Arab Gulf States Remain a Vital National Security Interest

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The U.S. election is taking place at a deeply troubled time for U.S. strategic relations with its allies in the Arab world. These problems go far beyond the Gulf. Egypt faces a serious crisis in terms of both economics and internal stability. Morocco and Tunisia remain under acute economic strain. Lebanon faces a refugee crisis, continuing internal instability, and the spillover of the civil war in Syria. Jordan faces the same problems with a refugee crisis and the spillover of the civil war in Syria, but is also challenged by the instability in Iraq and Iran, and is effectively part of both the Levant and the Gulf.

It is the Gulf, however, that presents the most serious challenges in terms of vital U.S. security interests. These challenges are coupled to a lack of broad U.S. understanding of the security challenges in the region and the importance of the Arab Gulf states as strategic partners. At the same time, there are growing questions in the United States about the strategic importance of the Gulf and MENA region in an era where the United States is approaching self-sufficiency in oil and gas production and where U.S. economic and federal budget problems put a new emphasis on burden sharing.

This analysis traces the key pressures that threaten the U.S. strategic partnership with the Gulf states, and show why they have reached a near crisis. It then focuses on the trends and data that show that the strategic importance of the stable flow of Gulf petroleum exports will not be reduced by increases in U.S. oil and gas production. Finally, it addresses the issue of burden sharing, and shows that the Arab Gulf states spend far more of their economies on national security and arms imports—most of which come from the United States and creates security forces that are interoperable with U.S. forces—than most countries in the world. In fact, the Gulf States cumulatively spend a larger portion of their economies on security than the United States spends on security This spending is so high in some Arab Gulf countries that it threatens their economic reform and development programs.

If the United States is to preserve and strengthen its strategic partnerships in the MENA region it needs to address these issues early in the next Administration. It needs to do so in ways that reflect a proper understanding of the needs and priorities of its Arab allies, of the strategic importance of playing a key role in security of the flow of Gulf energy exports, of the size of the burden the Arab Gulf states now bear in national security, and of the need to consider the Gulf States' broader concerns for internal stability and economic development.

Table of Contents

Growing Challenges to Gulf Stability and Security

The UN nuclear agreement with Iran, known as the Joint Comprehensive Plan of Action (JCPOA), may have eased the threat of Iranian nuclear proliferation, but has done nothing to improve the overall relations between Iran and the United States, or between Iran and its Arab neighbors.

The growth of other Iranian threats has included a major buildup of conventional armed Iranian missile forces and Iranian efforts to give them precision strike capability—advances which could make them "weapons of mass effectiveness" in striking critical military, petroleum, and infrastructure targets. Iran continues to build up its asymmetric naval-air-missile capabilities to strike at shipping inside and outside the Strait of Hormuz and "close the Gulf." Iran's Al Quds Force, Revolutionary Guards, and support of Hezbollah continue to expand Iranian influence in Iraq, Syria, and Lebanon, and it plays at least a limited role in the instability in Bahrain and Yemen.

In spite of some of the more extreme conspiracy theories within the Gulf, the United States has not established any détente or elements of a secret partnership with Iran. These developments have provoked a major arms race in the Gulf region, and are forcing the Arab Gulf States to steadily improve their capabilities to deter and defeat Iran in partnership with the United States.

At the same time, the fight against ISIS is only part of the broader struggle against violent Islamist extremism, and to bring some elements of stability to the Gulf and the MENA region. The growth of extremist movements in Syria, al Qaeda in the Arabian Peninsula—and local extremist cells—threaten the Gulf States at least as much as ISIS threatens the Gulf States, and any "defeat" of ISIS is certain to scatter large numbers of ISIS fighters into other extremist movements. This extremism cannot be separated from the risk of violent clashes between Sunni, Shi'ite, and other sects within the Gulf states, and what has become a broad ideological struggle for the future of Islam.

At the same time, the political upheavals since 2011 have demonstrated that the massive population growth since 1950 has created an extremely young—and potentially explosive — population that needs jobs and economic development as well as political reform. It also has shown the validity of the warnings the *Arab Human Development Reports* raised from 2002 onwards that a combination of poor governance, corruption, repression, and failed economic development were pushing many Arab states to crisis levels, and toward some form of political explosion.[1]

These problems have grown far worse as a result of the violence and political upheavals in the MENA region since 2011, crippling the economies of states like Tunisia, Egypt, Syria, Iraq, and Yemen and putting serious pressure on other states. The crash in oil prices and petroleum export revenues since 2014 has made these pressures even more urgent, and has done so at a time when many Arab Gulf states are forced to cut back government spending and job creation. In many ways, the civil challenges in the Gulf States are as serious as the security challenges posed by Iran, Yemen, terrorism, and extremism.[2]

The Challenges to U.S. Strategic Partnerships in the Gulf

These developments have made Arab Gulf military, internal security, and counterterrorism forces steadily more important strategic partners, while the United States has had to meet met these growing security challenges by expanding its own regional military and counterterrorism capabilities. The annual budget submissions of the U.S. Department of Defense have consistently stressed the need to improve U.S. military capabilities in the Gulf region, and the Department's FY16 budget submission changed its strategic focus from rebalancing in Asia to a broader focus on rebalancing on a global level.

The policy guidance in the FY17 summary budget request goes further and makes the continued importance of the Middle East and the Gulf even more clear,[3]

> The Department's response to recent events, which include the Islamic State of Iraq and the Levant (ISIL) offensive into Iraq and Syria, the Russian Federation's aggressive acts and attempts to intimidate neighboring countries, China's continued anti-access military modernization programs and its island-building and sovereignty claims in international waters, as well as high-profile cyberattacks, have placed additional pressures on DoD…
>
> For much of the past decade, the DoD focused on fighting terrorism and countering violent insurgencies. The Department will continue the fight as long as these threats exist. But the security environment is rapidly changing as warfare evolves across all domains. The defense strategy…supported in this budget focuses on a Joint Force with the ability to simultaneously protect the homeland; provide a global presence in support of U.S. interests; and project power against a range of adversaries and challenges across the spectrum of conflict.
>
> …The nation faces emerging challenges in particular from Russia and China, who continue to develop military systems and doctrine that could erode traditional U.S. military advantages in specific areas, as well as continuing challenges and threats from potential regional aggression posed by Iran and North Korea. The nation will also continue to confront terrorists around the globe, most immediately in Iraq and Syria as part of operations to counter the Islamic State in Iraq and the Levant (ISIL). Thus, the Department's strategic approach to resourcing and developing the Joint Force must be to ensure its ability to deter aggression posed by these priority threats while continuing to prosecute counter-terrorism operations…
>
> The defense strategy…demands that the Joint Force have the ability to simultaneously protect the homeland; provide a global presence in support of U.S. interests, particularly to assure allies and deter aggression in the Asia-Pacific, European, and Middle East regions; and project power against a range of adversaries and challenges across the spectrum of conflict… The Department must balance the Joint Force and adapt to changes in the security environment. The Secretary of Defense has directed the Department to prioritize the challenges presented by ongoing or possible future aggression from China, Russia, Iran, and North Korea, as well as maintaining the capabilities to conduct ongoing counter-terrorism operations. These five challenges are informative to balancing the Joint Force.

The United States has built up a major presence in Iraq, steadily improved its forward basing and power projection capabilities, improved its joint training and exercise with Arab Gulf forces, and provided extensive transfers of modern and interoperable arms and military technology to Arab Gulf forces. These developments, and their impact on the regional military balance is analyzed in detail in a CSIS report entitled ***Iran and the Gulf Military Balance, available on the CSIS web site at*** **https://www.csis.org/analysis/iran-and-gulf-military-balance-1.**

At a political and diplomatic level, however, situation is very different. The Arab Gulf states share a common concern about the way the United States has acted since its invasion of Iraq, its lack of decisive action in Syria and in dealing with Assad and Russia, its motives in negotiating the nuclear agreement with Iran, and its uncertain support of the Saudi-UAE-led coalition fighting in Yemen. There is steadily growing concern in the Gulf, in other parts of the MENA region, and among America's other allies that the United States may no longer be a reliable strategic partner, that it is not capable of decisive action or leadership when this decisive action and leadership is needed, and that the major increases in U.S. domestic energy production over the last half-decade have sharply cut U.S. strategic interests in the region.

These concerns are linked to long-standing tensions over the differences in U.S. and Arab Gulf views of human rights, religion, and systems of government. As is the case with many U.S.

strategic partnerships, common vital security interests scarcely mean a broader identity of interest in every aspect of politics, governance, and economics.

U.S. criticism of the Arab Gulf states has always been matched by Arab Gulf criticism of the United States—as well as a host of different Gulf conspiracy theories about U.S. motives and willingness to abandon the Arab Gulf states for Iran. Relations have also been strained by U.S. ties to Israel—although these tensions have declined sharply with the rise of a common terrorist and Iranian threat. Relations have been strained by the mistake the United States made in intervening in Iraq in 2003, and more recently by the U.S. failure to deal with the growing human tragedy in Syria caused by the Assad regime and the Russian intervention.

While the United States and Arab Gulf states have many security interests in common, they also differ sharply over some important aspects of regional security priorities. The United States and Europe tend to focus on ISIS because it presents the most direct terrorist threat to the West. This is particularly true at the policy, political, and media levels, and with the U.S. Congress.

Saudi Arabia and its Arab neighbors focus at least as much upon a broader range of threats and security interests. These include supporting rebels against Assad and Syria, Iraqi instability and the perception that its government is Shi'ite dominated and tied to Iran, the threat in Yemen, and the extremist threat from Al Qaeda in the Arabian Peninsula (AQAP). The Arab Gulf states see the combination of Iran's growing missile forces, Iran's threat to maritime shipping in the Gulf, and Iran's growing influence over Iraq, Lebanon, and Syria as critical, and see the United States as indecisive at best in dealing with both Iran and Russia.

Adding to these Arab Gulf concerns is a bitter and divisive 2016 U.S. Presidential campaign that has challenged many of the foreign policy goals that have underpinned U.S. strategic partnerships throughout the world. So has the speed and ease with which the U.S. Congress has passed the *Justice Against Sponsors of Terrorism Act* (*JASTA*) or PL 114–222. This congressional action occurred without any meaningful review of the validity of the charges involved, of the nature of Saudi and other Arab Gulf states' cooperation in counter terrorism before and after 9/11, or of the value of the Arab Gulf states as strategic partners. This legislation has potentially opened up years of U.S. litigation against Saudi Arabia by the survivors of the victims of 9/11, and has already led to considerable Saudi anger and threats of reprisals.

At the same time, members of Congress and many in the media have seen Saudi Arabia as having failed to limit civilian casualties and collateral damage in the Yemen war, and as having potentially involved the United States in "war crimes" in the form of Saudi air strikes on civilians. The Saudi management its air war in Yemen has raised serious questions about the damage done to Yemeni civilians, and about how this conflict can end.

At the same time, there is little U.S. understanding of the history of Saudi and Gulf tensions and clashes with Yemen, or of the strategic threat implied by a hostile set of forces with ties to Iran that could govern a country with a population of over 27 million, a 1,307 kilometer border with Saudi Arabia, and key strategic positions at the Bab el Mandab, the gate to the Red Sea and the flow of trade from the Suez Canal. There has been little coverage in the United States about why the UAE has partnered with Saudi Arabia to lead an Arab coalition to back the elected Yemeni government, and its critical role in fighting the Houthi, ISIS, and AQAP in Southern Yemen.

U.S tensions with its Arab Gulf partners have not reached the crisis level, but relations are certainly at their worst level since 9/11. This presents problems for both the United States and the Arab Gulf states, particularly because Saudi Arabia and the UAE provide the core of Gulf military and counterterrorism forces, and all of the Arab Gulf states must cope with drastic changes in their budgets and economies in the face of the massive cuts in petroleum export revenues.

Continuing U.S. Dependence on the Stable and Secure Flow of Gulf Energy Exports

Many of the current tensions in the U.S. and Arab Gulf strategic partnership seem to come from the failure on both sides to realize how important this partnership is to both sides, as well as to the stability and health of the global economy. On the U.S. side, this is compounded by a failure to properly update its assessment of the importance of the flow of Gulf petroleum exports to U.S. strategic interests.

The steady rise in U.S. oil and gas production has led many to feel that the United States has achieved true energy independence, and that it is no longer dependent on Gulf oil. In reality, the United States has done nothing to reduce the strategic importance of the stable and secure flow of exports through the Gulf, or to reduce the extent to which this flow of exports remain a vital U.S. national security interest.

Reductions in Direct U.S. Import Dependence

The United States is now far less dependent on direct imports of petroleum, and will almost certainly continue to become less dependent for the foreseeable future. An analysis of current trends in U.S. energy production and demand shows these developments will greatly aid the U.S. economy, but will do nothing to reduce the overall importance of a stable flow of exports to both the global economy and a U.S. economy that is becoming steadily more dependent on global trade and the economic health of other states.

There are many conflicting estimates of the trends involved, but the most reliable seem to be those of the U.S. Energy Information Agency, or EIA. An October 2016 report by the EIA, entitled "*How much petroleum does the United States import and export?*" states that: [4]

> In 2015, the United States imported approximately 9.4 million barrels per day (MMb/d) of petroleum from about 88 countries. *Petroleum* includes crude oil, natural gas plant liquids, liquefied refinery gases, refined petroleum products such as gasoline and diesel fuel, and biofuels including ethanol and biodiesel. About 78% of gross petroleum imports were crude oil….In 2015, the United States exported about 4.7 MMb/d of petroleum to 147 countries. Most of the exports were petroleum products. The resulting net imports (imports minus exports) of petroleum were about 4.7 MMb/d.

Experts disagree over the proper method of calculating import dependence, but there is no disagreement over the fact that direct energy imports have become is a small fraction of total U.S. import dependence, and are probably less than 5% of all U.S. imports by any of the major methods used to calculate import dependence.[5]

EIA data show that U.S. petroleum imports dropped from a recent peak of 13.7 million barrels per day (MMBD) in 2006 to 10.1 MMBD in the first eight months of 2016. Net imports (imports less exports), however, dropped from a peak of 12.5 MMBD in 2005 to a low of 5.1 MMBD in the first eight months of 2016. [6]

It is also important to note that there is little correlation between the size of U.S. imports relative to their cost. In 1974—the first year of price increases after the 1973 embargo—the total cost of U.S. petroleum imports was $24.7 billion and the net cost was $23.9 billion in current dollars. The total cost of all energy imports was $25.4 billion, or 25% of all U.S. merchandise imports of $103.3 billion.[7]

More recently, increases in oil prices and total U.S. demand for petroleum and energy have interacted with rising U.S. energy exports, although they have varied sharply by year both in volume and the steadily rising volume of total U.S. trade. The EIA estimates that the cost of petroleum imports peaked in 2008 at $449.8 billion, and the net cost was $388.2 billion. The total cost of petroleum was 21% of all U.S. merchandise imports of $2,103.6 billion in 2008, and the net total was 18%. The total cost of all energy imports was $491.9 billion, and the net cost was $415.8. The total cost of all energy imports was 23% of all U.S. merchandise imports, and the net total was 20%.[8]

If one looks at 2015, the last full year for which EIA data are available, increase in U.S. domestic production, and the crash in world oil prices, have produced radical changes. The cost of petroleum imports was $177.4 billion and the net cost was $92.2 billion. The total cost of petroleum was then 7% of all U.S. merchandise imports of $2,248.4 billion, and the net total was 4.1%. The total cost of all energy imports was $190.4 billion in 2015, and the net cost was only $70.5 billion. This made the total cost of all energy imports 8.4% of all U.S. merchandise imports, but the net total cost of all energy imports was only 3.1%.[9]

The portion of U.S. petroleum imports coming from the Gulf has always been a relatively limited portion of total U.S. petroleum imports. It peaked at 24.5% of all U.S. petroleum imports in 1990, but averaged closer to 20% during 1960-2013, and was still 16.0% of lower import levels in 2015.[10]

The trends in Gulf exports relative to total U.S. imports are shown by country in **Figure One**, and while it is clear that Saudi Arabia has been the largest Gulf exporter to the United States, neither Gulf nor Saudi exports have ever dominated U.S. imports.

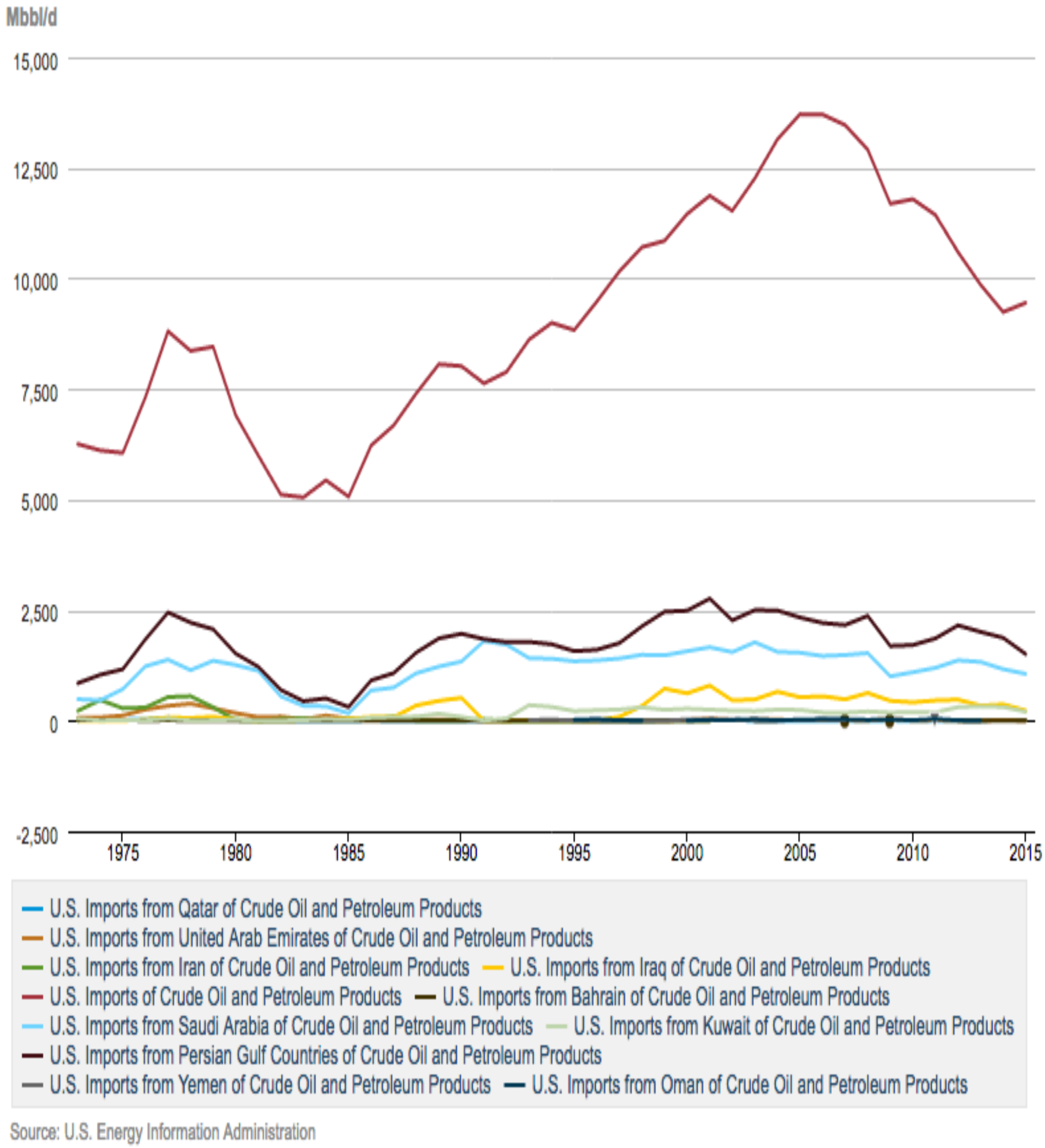
There are no certainties as to future trends, but the EIA's *Annual Energy Outlook* for 2016 projects that U.S. production will rise substantially for as far into the future as the EIA estimates. In terms of direct U.S. dependence on oil imports, the EIA projects the range of possible levels of dependence shown in **Figure Two**:[11]

The EIA reference case calls for rises in oil production from 8.6 MMBD in 2016 to 12-18 MMBD in 2014—depending on price and advances in technology, which would make direct net import dependence almost trivial compared to other trade issues. The EIA projects even more favorable trends data for natural gas that are shown in **Figure Three.**[12] It projects rises in dry natural gas production from 27.2 trillion cubic feet (Tcf) in 2015 to 42.1 Tcf in 2040.[13]

Once again, however, the problem with what is truly good news for the U.S. economy is that these increases in domestic energy production, and a major net reduction in petroleum imports and costs, will have great economic benefits, but will not have the same impact on U.S. strategic interests.

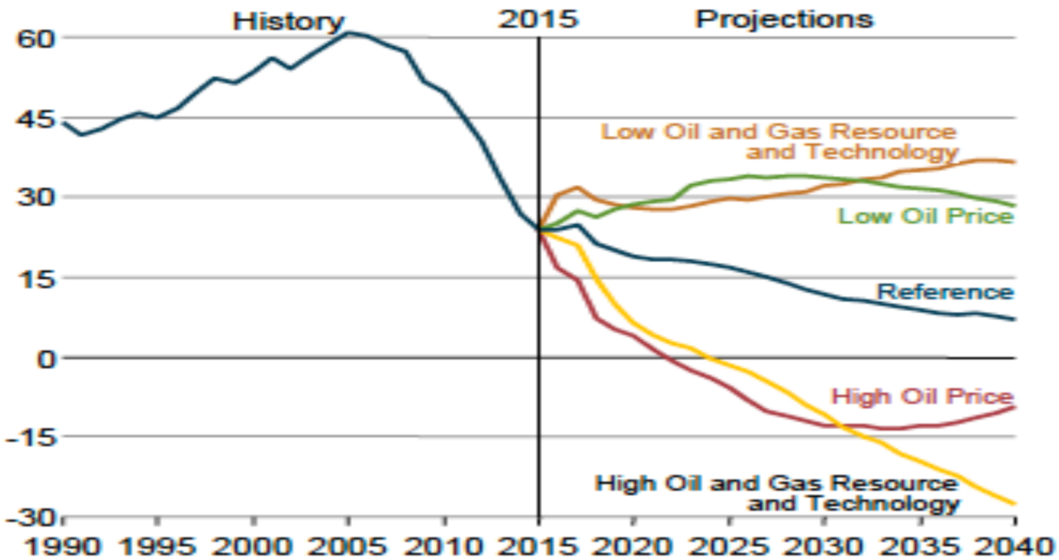
Figure One: U.S. Crude Oil and Product Imports from the Gulf

(In thousands of barrels per day)



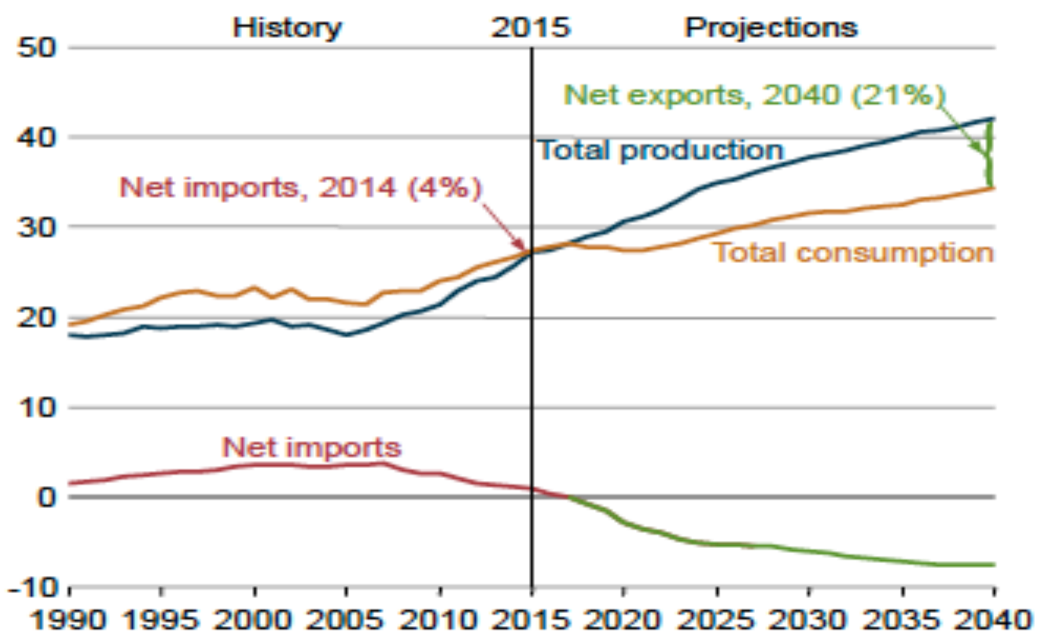
Source: Adapted from EIA, Petroleum and Other Imports, Liquids by Country of Origin, https://www.eia.gov/dnav/pet/pet_move_impcus_a2_nus_ep00_im0_mbblpd_a.htm.

Figure Two: Future Net U.S. Percent of Dependence on Imports of Petroleum and Other Liquid Fuels in 1990-2040



Adapted from U.S. Energy Information Administration, ***Annual Energy Outlook 2016***, p. MT30

Figure Three: Future Natural Gas Supply in TCF will Meet Domestic and Foreign Demand from 2020 Onwards



Adapted from U.S. Energy Information Administration, ***Annual Energy Outlook 2016***, p. MT24

The True Level of Strategic Dependence on Gulf Petroleum Exports

The volume and cost of direct imports to the United States is only one factor in measuring U.S. dependence on the stable flow of Gulf and other energy exports. Important as the direct level of U.S. dependence has been in the past, it is the level of indirect dependence—and direct U.S. dependence on the overall growth and stability of the global economy—that is now of far greater strategic and economic importance, and will remain so in the future.

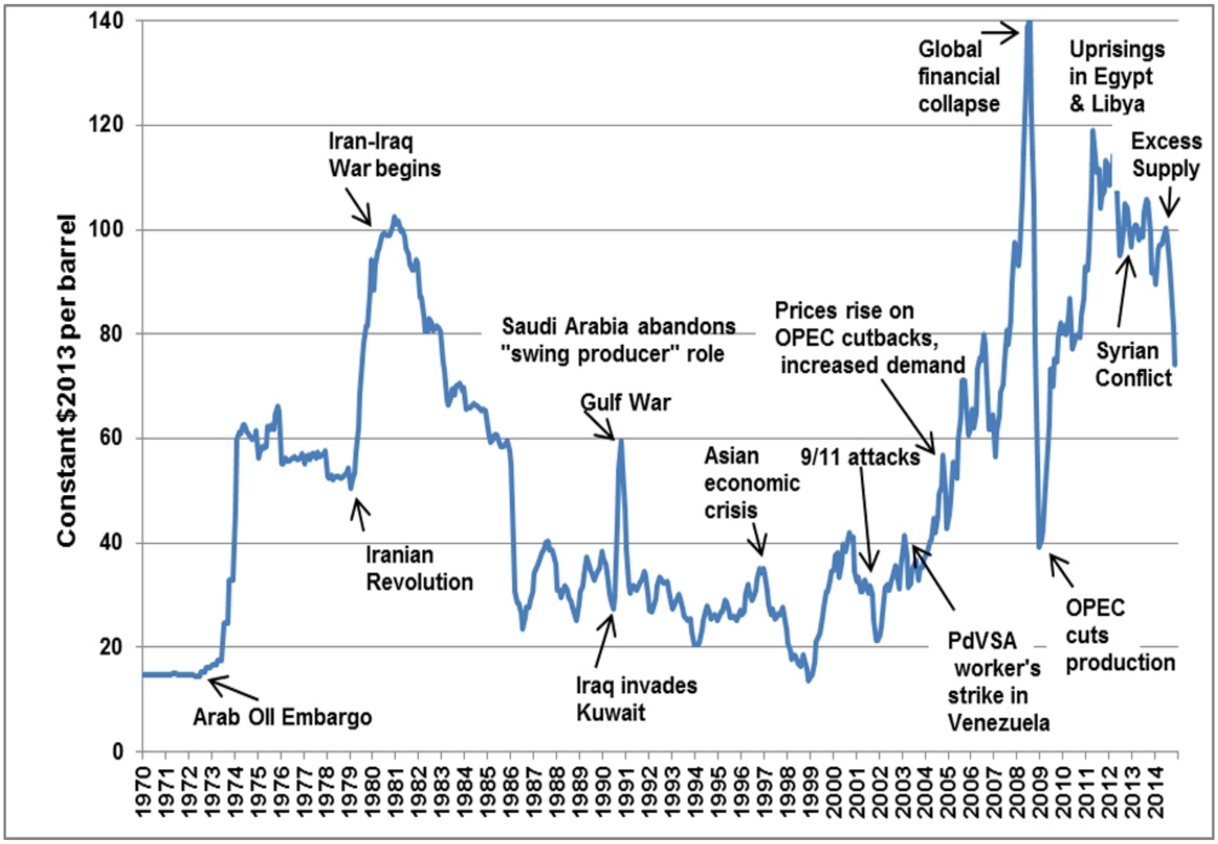
Four key factors are involved.

First, the United States will pay global prices in the event of any major interruption or shortfall in global supply of the kind that could result from any conflict in the Gulf.

The United States is no more immune to the economic impact of a crisis than any other state. The net cost to the U.S. economy will be determined by international markets and total national demand, both for imports and domestic production. As past sudden rises in energy prices have shown, this can have a major impact on the U.S. economy.

There is nothing theoretical about these risks. **Figure Four** shows the impact of past crisis on world prices relative to the impact of trends in the global economy over the last 40 years that has been prepared by the Office of Energy Efficiency and Renewable Energy.[14] These global price trends have been matched by the swings in the price of U.S. crude and production costs of product, including gasoline. It is important to note that even during the sudden peak at the start of the Iran-Iraq War, they never were shaped by anything like the impact of a major war that affected Iran, and most or all of the Arab Gulf states, and that blocked or actively threatened maritime traffic throughout the Gulf and in the Gulf of Oman.

Figure Four: Impact of Crises and Global Economic Trends on World Oil Prices



Source: Adapted from Energy.gov, April 13, 2016, http://www.energy.gov/eere/articles/timeline-brief-history-oil-prices-and-vehicle-technologies.

Second, the United States is becoming steadily more dependent on the overall health of the global economy.

The CIA reports that the United States had $2.386 trillion in imports in 2014 and $2.273 trillion in imports in 2015. It had $151.0 trillion in imports in 2014 and $1,633 trillion in imports in 2015. To put these numbers in perspective, the United States had a $17.95 trillion GDP in 2015, and imports were both equal to roughly 13% of the total.[15]

The latest U.S. Census Bureau data show that six of the top 15 U.S. sources of imports are Asian states heavily dependent on Gulf petroleum exports: 20.5% of U.S. imports came from China, 6.0% from Japan, 3.4% from South Korea, 2.1% from India, 1.9% from Vietnam, and 1.7% from Taiwan.[16]

This is a total of 35.6% of all U.S. imports. It is about 10 times the net U.S. dependence on energy imports in 2015, includes critical high technology merchandise imports, and is only a fraction of the percentage of all U.S. imports dependent on Gulf oil exports. Moreover, all of the major industrial states in the world except Russia are dependent on oil and gas imports to a significant degree, and their economies would be just as affected by the resulting worldwide increase in a crisis-driven rise in oil and gas prices as the United States would be affected.

Third, Gulf exports are critical to the health and stability of the global economy of which the United States is a part.

The latest EIA report on World Oil Chokepoints notes that,[17]

> "In 2013, total world petroleum and other liquids production was about 90.1 million barrels per day (bbl/d). EIA estimates that about 63% of this amount (56.5 million bbl/d) traveled via seaborne trade. Oil tankers accounted for 30% of the world's shipping by dead weight tonnage…
>
> The Strait of Hormuz is the world's most important oil chokepoint because of its daily oil flow of 17 million barrels per day in 2013. Flows through the Strait of Hormuz in 2013 were about 30% of all seaborne-traded oil…EIA estimates that more than 85% of the crude oil that moved through this chokepoint went to Asian markets, based on data from Lloyd's List Intelligence tanker tracking service…Japan, India, South Korea, and China are the largest destinations for oil moving through the Strait of Hormuz.
>
> …Qatar exported about 3.7 trillion cubic feet (Tcf) per year of liquefied natural gas (LNG) through the Strait of Hormuz in 2013, according to BP's Statistical Review of World Energy 2014. This volume accounts for more than 30% of global LNG trade.
>
> … Most potential options to bypass Hormuz are currently not operational. Only Saudi Arabia and the United Arab Emirates(UAE) presently have pipelines able to ship crude oil outside of the Persian Gulf and have additional pipeline capacity to circumvent the Strait of Hormuz. At the end of 2013, the total available unused pipeline capacity from the two countries combined was approximately 4.3 million bbl/d

Figure Five shows the critical nature of Gulf petroleum exports to world supply, both through the Strait of Hormuz and through other associated chokepoints like the Bab el Mandab, the Suez Canal, and the Strait of Malacca. As noted earlier, key Asian importers are particularly sensitive to the secure flow of Gulf export—both in terms of manufactured goods and in export price. Almost all of the 15.2 million barrels per day of oil that flows through the Strait of Malacca is exported by the Gulf States.

Figure Six shows there are no meaningful pipeline alternatives, even if one includes the pipelines that could become targets—or be affected by—a major war in the Gulf region.

As EIA notes in separate 2015 reporting, the newest export pipeline, the Abu Dhabi Crude Oil Pipeline (ADCOP), began operation in June 2012, and runs 236 miles from Habshan to Fujairah.[18] It gives the UAE a direct link to the Gulf of Oman, and from there to global markets. It has capacity of 1.5 million bbl/d—which will rise to 1.8 million bbl/d in the near future. (96% of which go to Asia.)

The pipeline provides the UAE with the ability to export a significant portion of its daily production without passing through the Strait of Hormuz, but only if an export facility well within range of Iranian air and seapower is not attacked, and it will only have a small net impact on the flow out of the Strait of Hormuz shown in 2013 – when the pipeline was already partially operational.

Figure Five: The Global Importance of the Secure Flow of Gulf Petroleum Exports

Location	2009	2010	2011	2012	2013
Strait of Hormuz	15.7	15.9	17.0	16.9	17.0
Strait of Malacca	13.5	14.5	14.6	15.1	15.2
Suez Canal and SUMED Pipeline	3.0	3.1	3.8	4.5	4.6
Bab el-Mandab	2.9	2.7	3.4	3.7	3.8
Danish Straits	3.0	3.2	3.3	3.1	3.3
Turkish Straits	2.8	2.8	3.0	2.9	2.9
Panama Canal	0.8	0.7	0.8	0.8	0.8
World maritime oil trade	**53.9**	**55.5**	**55.6**	**56.7**	**56.5**
World total oil supply	**84.9**	**87.5**	**87.8**	**89.7**	**90.1**

Notes: All estimates are in million barrels per day. Data for Panama Canal is by fiscal years.
Sources: U.S. Energy Information Administration analysis based on Lloyd's List Intelligence, Panama Canal Authority, Eastern Bloc Research, Suez Canal Authority, and UNCTAD, using EIA conversion factor. Adapted from
https://www.eia.gov/beta/international/analysis_includes/special_topics/World_Oil_Transit_Chokepoints/wotc.pdf.

Figure Six: The Limited Capacity and Strategic Vulnerability of Pipeline Alternatives that Bypass the Strait of Hormuz in 2013

Pipeline name	Country	Status	Capacity	Throughput	Unused capacity
Petroline (East-West Pipeline)	Saudi Arabia	Operating	4.8	2.0	2.8
Abu Dhabi Crude Oil Pipeline	United Arab Emirates	Operating	1.5	0.6	0.9
Abqaiq-Yanbu Natural Gas Liquids Pipeline	Saudi Arabia	Operating	0.3	0.3	0.0
Iraqi Pipeline in Saudi Arabia (IPSA)	Saudi Arabia	*Converted to* natural gas	1.7	-	-
Total			**8.2**	**2.9**	**3.7**

Notes: All estimates expressed in million barrels per day (bbl/d). Unused Capacity is defined as pipeline capacity that is not currently utilized but can be readily available. Sources: U.S. Energy Information Administration, Lloyd's List Intelligence. Adapted from
https://www.eia.gov/beta/international/analysis_includes/special_topics/World_Oil_Transit_Chokepoints/wotc.pdf.

Fourth, the only alternatives to the United States in providing power projection forces and arms in the Gulf are Russia and eventually China.

Britain and France still play an important military role in the Gulf, but their power projection capabilities have been steadily cut as both nations have curbed their defense spending far more quickly than the United States has.

If the United States does not maintain its strategic partnerships in the region, Britain and France not only cannot project enough forces to decisively deter and contain Iran, they would lack the critical enabling and reinforcement capabilities provided by the global pool of U.S. power projection forces and would lack anything like the range of U.S. intelligence, reconnaissance, surveillance (IS&R) and targeting assets.

It is unclear whether Russia would seek to replace the United States as a strategic partner to the Arab Gulf states, or whether it might choose to play a spoiler role—playing the Arab states against Iran—or whether Russia might choose Iran, creating a whole new set of risks in the region. China may not yet be ready to try to assume the role, but the entire South China Sea crisis would pale to near insignificance if China became the de facto guarantor of Gulf stability.

The real world nature of U.S. influence and power in the Pacific would be massively cut, China's leverage over other major Asian economies like Japan and South Korea would be sharply increased, and the potential rise in tension between China and India—and cut in India's relative position—would have a massive impact on the balance of power in South Asia and the Indian Ocean.

Continuing and Growing Strategic Dependence

All four of these factors illustrate just how important the U.S. strategic partnership with the Arab Gulf states really is, and how enduring a vital strategic interest this partnership will be in the future. They make an equally strong case for a major effort by the next Administration and a new Congress to address the problems in this strategic relationship, and to understand that partnership is a far better route to seeking reform in key areas of difference like human rights than taking actions of the kind that can seriously undermine or even sever the current strategic partnership.

The Arab States More than Meet the Test of Burden Sharing

There is second area, however, where it has become all too clear that Americans need a better understanding of the benefits of this strategic partnership. Department of Defense and State Department reporting show that the Arab Gulf states have long been important partners in both counterterrorism, and in the military efforts to secure the Gulf. As noted earlier, the role the Arab Gulf states play in deterring and defending against Iran, instability in Yemen and extremist threat like AQAP is described in detail in ***Iran and the Gulf Military Balance,*** https://www.csis.org/analysis/iran-and-gulf-military-balance-1.

The critical role they play in supporting the United States in counterterrorism has been described annually in the U.S. State Department's *Country Reports on Terrorism* for 2004-2015, and in the earlier reports on the Patterns of Global Terrorism for 2000-2003 – all of which are available on the State Department's web site at (http://www.state.gov/j/ct/rls/crt/). Detailed chronologies of the threat they face from terrorism and extremism are available on the START Global Terrorism Database (GTD) database at https://www.start.umd.edu/gtd/.

What seems to be less clear at a U.S. political level, however, is the level of burden sharing provided by Arab Gulf states, just how committed various Arab Gulf states have been to building up their military capabilities, and just how committed they have been to doing so with U.S. weapons and military technology. This is exemplified in the way many have interpreted President Obama's statement in an interview by Jeffery Goldberg in the *Atlantic* that,[19]

> "Free riders aggravate me…You have to pay your fair share…We don't have to always be the ones who are up front…Sometimes we're going to get what we want precisely because we are sharing in the agenda. The irony is that it was precisely in order to prevent the Europeans and the Arab states from holding our coats while we did all the fighting that we, by design, insisted" that they lead during the mission to remove Muammar Qaddafi from power in Libya. "It was part of the anti–free rider campaign."

As Goldberg's article makes clear, the President was not focusing on the Gulf or Arab world, but rather talking about Britain as a nation that spent less than 2% of its GDP on defense, and only referred indirectly to the Gulf "free rider" in terms of the U.S. effort to oust Qaddafi in Libya, and then explained that they had contributed under pressure. But the same article also quoted the President as saying that,

> Let's fight to make sure our so-called allies in the Middle East—the Saudis and the Egyptians—stop oppressing their own people, and suppressing dissent, and tolerating corruption and inequality." In the White House these days, one occasionally hears Obama's National Security Council officials pointedly reminding visitors that the large majority of 9/11 hijackers were not Iranian, but Saudi—and Obama himself rails against Saudi Arabia's state-sanctioned misogyny, arguing in private that "a country cannot function in the modern world when it is repressing half of its population." In meetings with foreign leaders, Obama has said, "You can gauge the success of a society by how it treats its women."
>
> …The competition between the Saudis and the Iranians—which has helped to feed proxy wars and chaos in Syria and Iraq and Yemen—requires us to say to our friends as well as to the Iranians that they need to find an effective way to share the neighborhood and institute some sort of cold peace," he said. "An approach that said to our friends 'You are right, Iran is the source of all problems, and we will support you in dealing with Iran' would essentially mean that as these sectarian conflicts continue to rage and our Gulf partners, our traditional friends, do not have the ability to put out the flames on their own or decisively win on their own, and would mean that we have to start coming in and using our military power to settle scores. And that would be in the interest neither of the United States nor of the Middle East.

The net effect was to ignore the security efforts of the Gulf states, lump their level of security efforts together with those of America's European allies, and make Saudi Arabia appear the near equivalent of Iran. Like a number of recent statements by members of Congress in both parties, it ignores the fact that Bahrain, Kuwait, Oman, Qatar, and the UAE provided the United States with basing and military contingency facilities, and that Saudi Arabia and the UAE had made massive investments in their own military and counterterrorism forces that were highly interoperable with U.S. forces.

Burden Sharing Measured in Military Expenditures as a Percent of GDP

It is not easy to provide accurate estimates of Gulf military efforts. The standard measure of burden sharing is the percent of the GDP assigned to national security expenditure, which is largely valid regardless of both the size and relative level of development of a given country. This figure is normally based on the GDP in market terms and only includes military forces.

Most Gulf countries either do not report the cost of their national security expenditures, or their data on military spending are often highly uncertain. Many—if not most—that do report some figure also sharply understate their level of national security effort by not including substantial spending on some or all aspects of arms imports, equipment, paramilitary and counterterrorism forces, and possible military construction—or by underpricing the real cost of given goods and services.

The International Institute for Strategic Studies (IISS), however, compensates in part for these problems by adjusting or substituting for country reporting by using estimates made by U.S. and British experts to show just how large the real burden of military spending has been. **Figure Seven** draws on data from the IISS's Military Balance for 2016 to show the burden military spending puts on two key Gulf Arab states: Oman and Saudi Arabia, relative to other states in the world.

The IISS data for Saudi Arabia, the de facto leader of the Gulf Cooperation Council and Arab Gulf states, puts Saudi military expenditures at $81.9 billion in 2015. (HIS Jane's estimates only $46 billion for 2015 and that Saudi Arabia only allocated 213 billion riyals ($57 billion) in its 2016 budget for defense spending, but this seems to omit arms transfers and war costs.)[20] The IISS estimates that Saudi spending was the third highest level of spending in the world in 2015, after $597.5 billion for the United States, and $145.8 billion for China. It was higher than $65.6 billion for Russia, $56.2 billion for the UK and $48 billion for India—the sixth ranking country and the only other developing nation in the top 10.[21]

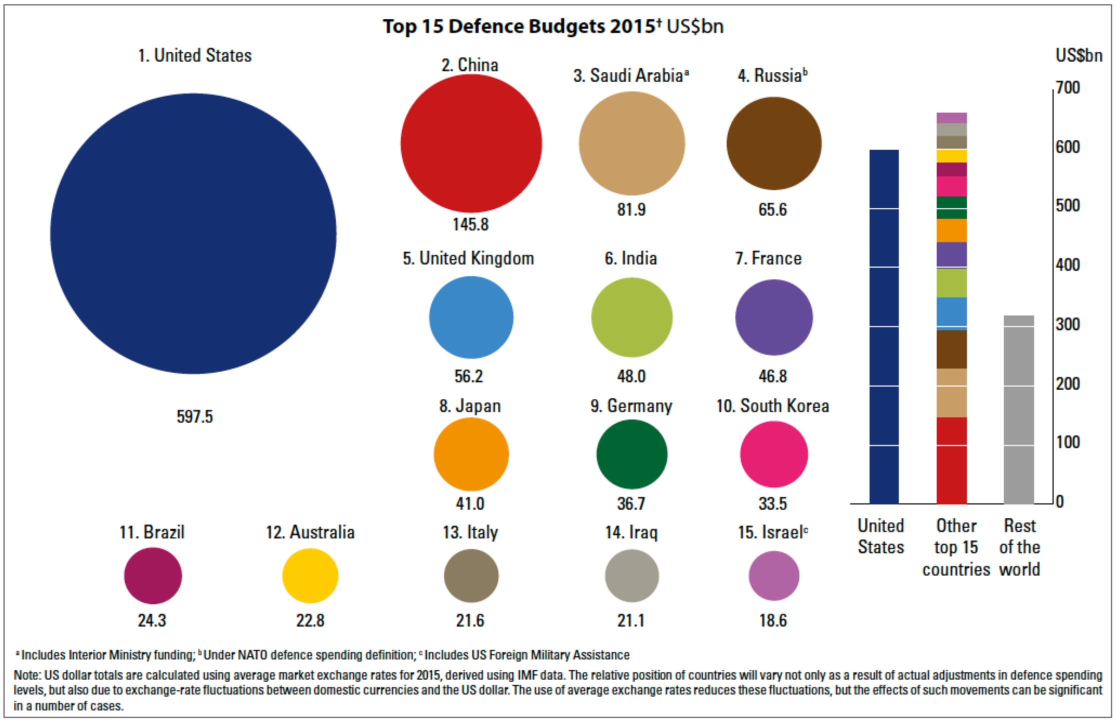
The IISS estimates also show that that military spending placed a tremendous strain on both the Omani and Saudi economies. In the case of Saudi Arabia, it spent 12.9% of its GDP by the IISS estimate and 13.5% by SIPRI estimate. This was the third highest burden on the economy in the world after Oman (16.4%) and Afghanistan (16.4%) and slightly above Iraq (12.8%). To put this burden in perspective, most NATO countries spent less than 2% and the United States spent around 3.5% to 3.6%. In spite of President Obama's remarks about the lack of Saudi and Arab Gulf burden sharing, the Saudi burden was 3.6 to 3.9 times higher than the U.S. burden[22]

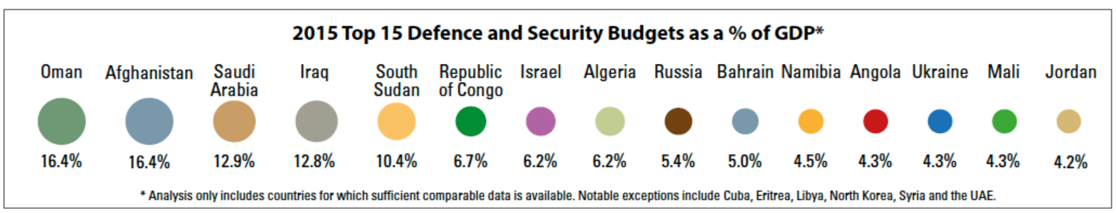
Figure Eight provides a broader comparison of the IISS data on the military efforts of all the Gulf states. The estimated percentages of GDP for the eight Gulf countries that were not included in **Figure Seven** are far higher than those of most NATO states (2% or less) and generally substantially higher than those of the U.S. (3.5-3.8% Put differently, the Saudi spending figure was some 5 times higher than that of Iran ($15.9). Equally important, the total GCC figure was some 7.4 times higher than Iran.[23]

These trends are largely confirmed by the Stockholm International Peace Research Institute (SIPRI) estimates for the decade between 2005 and 2015 shown in **Figure Nine,** which draw upon the SIPRI data in the risk assessment model developed by Dr. Abdullah Toukan. *The zeros shown reflect gaps in the data, and not a lack of national security effort*, but most of percentages of GDP are again higher than those of all NATO states, many major Asian powers, and the United States.

The first part of **Figure Nine** also shows the dominant role that Saudi expenditures play in the region, the importance of the UAE, and the recovering level of effort in Iraq. The Iranian totals seem to either understate the spending level for political reasons, or deliberately exclude large portions of military procurement, industry, and arms imports. These patterns are largely repeated in the last graph and table on military expenditure as a percent of total government expenditure.

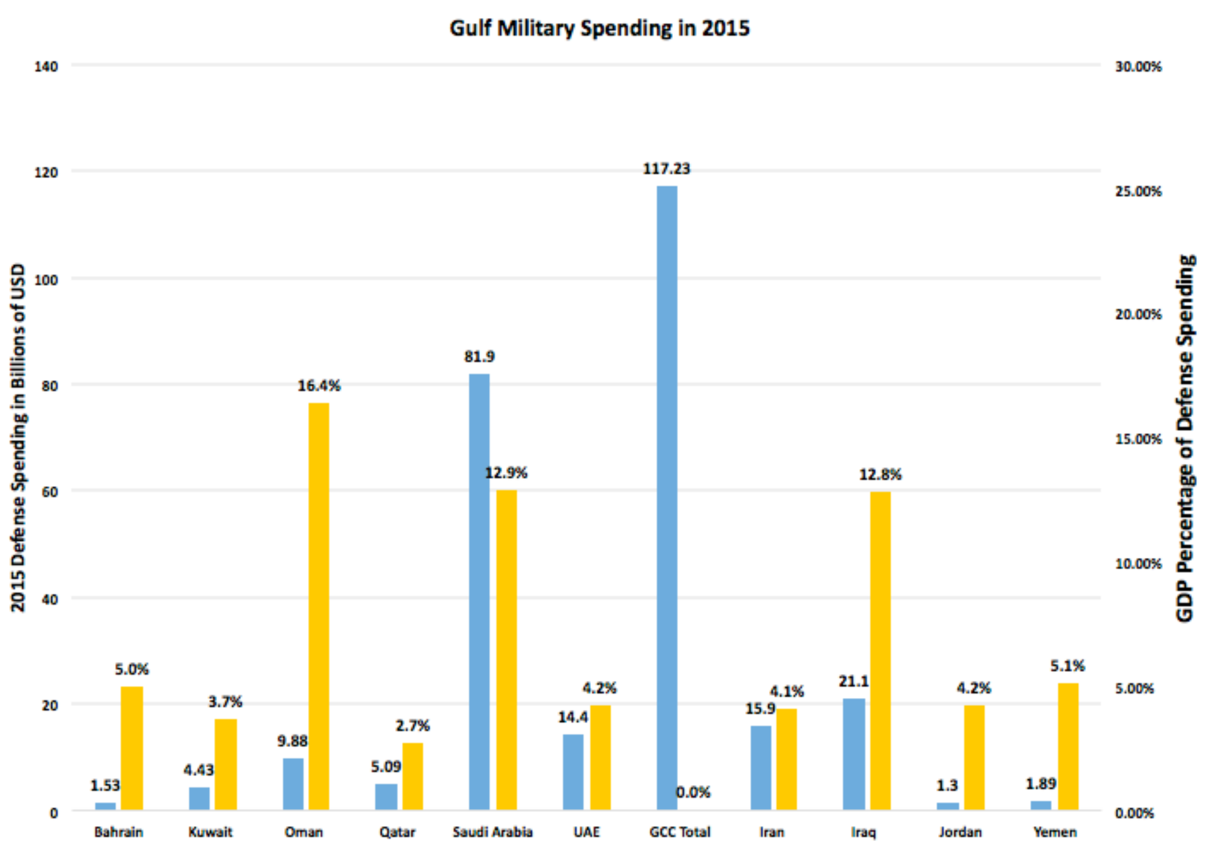
Figure Seven: IISS Estimate of Saudi and Omani Military Spending Relative to Other Military Powers





Source: IISS *Military Balance, 2016*, p. 19.

Figure Eight: Adjusted IISS Estimate of Gulf State Military Spending in 2015

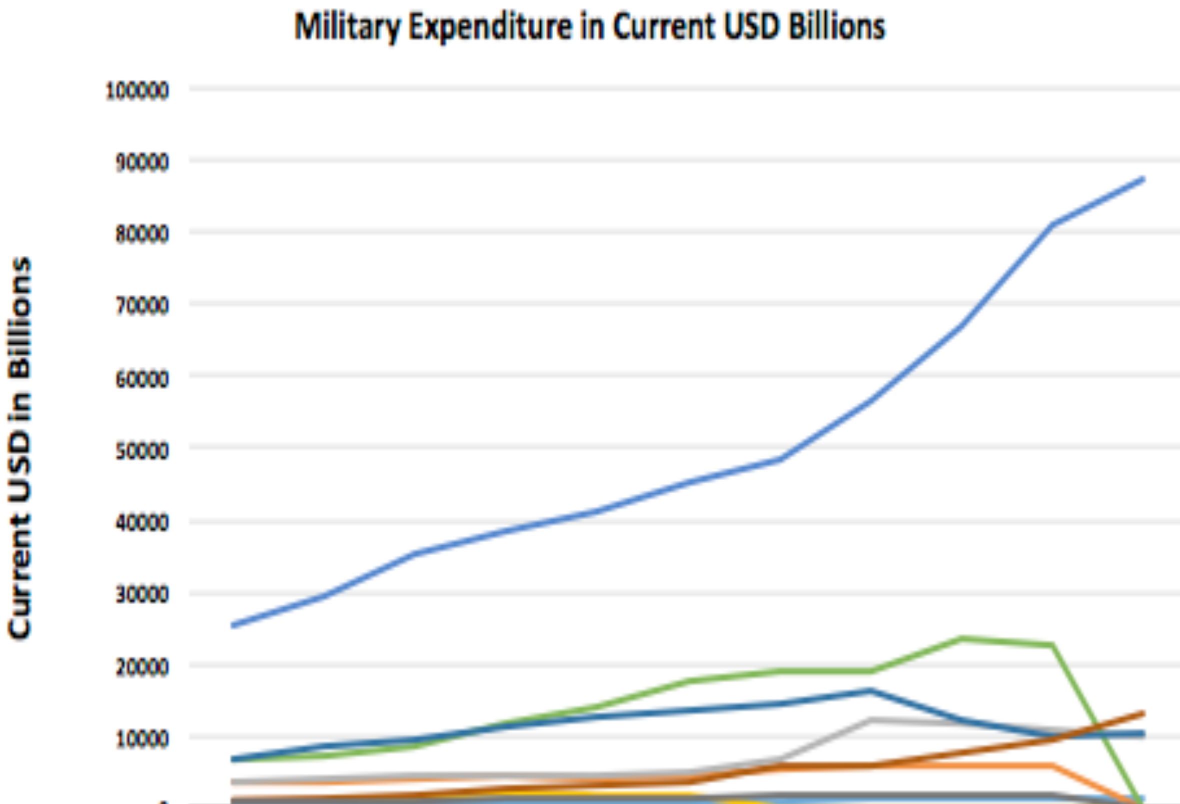


Source: Military spending data are adapted from the IISS, *Military Balance, 2016*. The GDP data are the GDP data provided by the IISS or the matching estimate of the official exchange rate GDP in the CIA *World Factbook.*

Figure Nine: SIPRI Estimates of the Burden of Gulf State Military Spending in 2005-2015 – Part One

(Note "0" = lack of any data)

Military Spending in Billions of USD

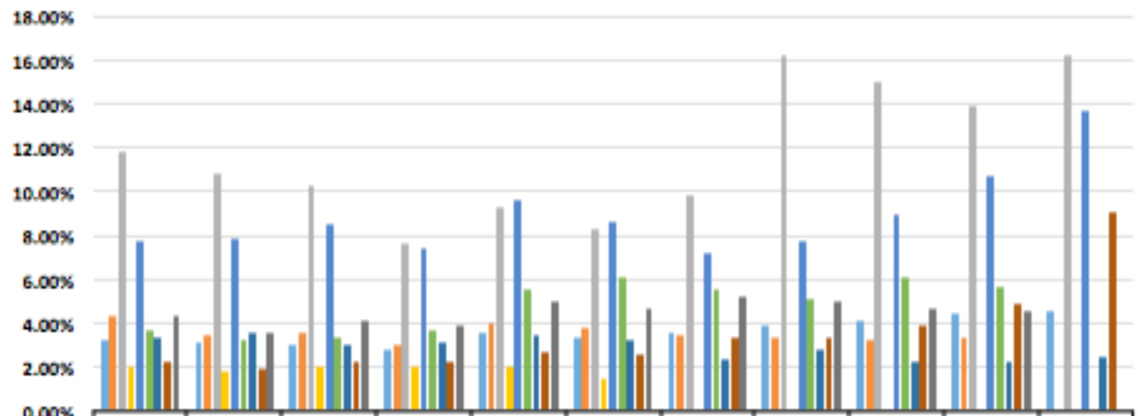


	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bahrain	513	574	643	720	828	843	1034	1182	1348	1475	1430
Kuwait	3509	3598	4116	4430	4209	4335	5394	5942	5698	5942	0
Oman	3652	4030	4326	4617	4490	4895	6668	12334	11688	10951	9883
Qatar	888	1066	1562	2317.5	1948	1877	0	0	0	0	0
Saudi Arabia	25392	29581	35470	38223	41267	45245	48531	56498	67020	80762	87186
UAE	6604	7165	8461	11572	13836	17505	19182	19024	23561	22755	0
Iran	6797	8751	9331	11082	12585	13561	14278	16494	11997	9901	10265
Iraq	1120	1236	1942	2873	2968	3581	5905	6055	7896	9516	13121
Yemen	816	822	1050	1196	1421	1448	1612	1619	1649	1715	0

Bahrain Kuwait Oman Qatar Saudi Arabia UAE Iran Iraq Yemen

Figure Nine: SIPRI Estimates of the Burden of Gulf State Military Spending in 2005-2015 – Part Two

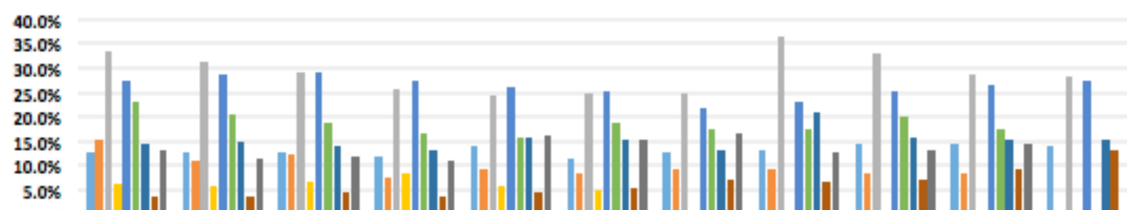
Military Spending as Percent of GDP



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bahrain	3.20%	3.10%	3.00%	2.80%	3.60%	3.30%	3.60%	3.90%	4.10%	4.40%	4.60%
Kuwait	4.30%	3.50%	3.60%	3.00%	4.00%	3.80%	3.50%	3.40%	3.20%	3.40%	0
Oman	11.80%	10.80%	10.30%	7.60%	9.30%	8.30%	9.80%	16.20%	15.00%	13.90%	16.20%
Qatar	2.00%	1.80%	2.00%	2.00%	2.00%	1.50%	0	0	0	0	0
Saudi Arabia	7.70%	7.80%	8.50%	7.40%	9.60%	8.60%	7.20%	7.70%	9.00%	10.70%	13.70%
UAE	3.70%	3.20%	3.30%	3.70%	5.50%	6.10%	5.50%	5.10%	6.10%	5.70%	0
Iran	3.30%	3.60%	3.00%	3.10%	3.50%	3.20%	2.40%	2.80%	2.30%	2.30%	2.50%
Iraq	2.20%	1.90%	2.20%	2.20%	2.70%	2.60%	3.30%	3.30%	3.90%	4.90%	9.10%
Yemen	4.30%	3.60%	4.10%	3.90%	5.00%	4.70%	5.20%	5.00%	4.70%	4.60%	0

Bahrain Kuwait Oman Qatar Saudi Arabia UAE Iran Iraq Yemen

Military Spending as Percent of Total Government Expenditure



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bahrain	12.9%	12.9%	12.7%	11.8%	14.1%	11.5%	12.9%	13.0%	14.4%	14.4%	14.2%
Kuwait	15.4%	11.2%	12.3%	7.4%	9.5%	8.4%	9.4%	9.3%	8.4%	8.3%	0.0%
Oman	33.6%	31.5%	29.2%	25.8%	24.3%	24.6%	24.9%	36.5%	33.1%	28.9%	28.2%
Qatar	6.4%	5.8%	6.6%	8.4%	5.8%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Saudi Arabia	27.5%	28.8%	29.0%	27.6%	25.9%	25.3%	21.7%	23.1%	25.3%	26.6%	27.4%
UAE	23.2%	20.6%	18.6%	16.7%	15.6%	18.7%	17.5%	17.4%	19.9%	17.4%	0.0%
Iran	14.4%	15.1%	14.1%	13.3%	15.9%	15.5%	13.0%	20.8%	15.7%	15.5%	15.2%
Iraq	3.5%	3.8%	4.7%	3.8%	4.5%	5.2%	7.3%	6.5%	7.0%	9.4%	13.3%
Yemen	13.2%	11.5%	12.0%	10.8%	16.1%	15.5%	16.5%	12.6%	13.2%	14.3%	0.0%

Bahrain Kuwait Oman Qatar Saudi Arabia UAE Iran Iraq Yemen

Source: Adapted from the SIPRI Military Expenditure Database, https://www.sipri.org/databases/milex using a computer model developed by Dr. Abdullah Toukan.

Burden Sharing Measured in Arms Transfers

Another way of measuring burden sharing is to examine the level of military modernization within the Gulf states and the extent to which they are dependent on U.S. arms and military equipment. **Figure Ten** uses declassified U.S. estimates to show the patterns in total new arms agreements and actual arms deliveries during 2007-2014. **Figure Eleven** shows the source of new Gulf arms sales agreements and actual arms transfers by supplier country for 2007-2014.[24]

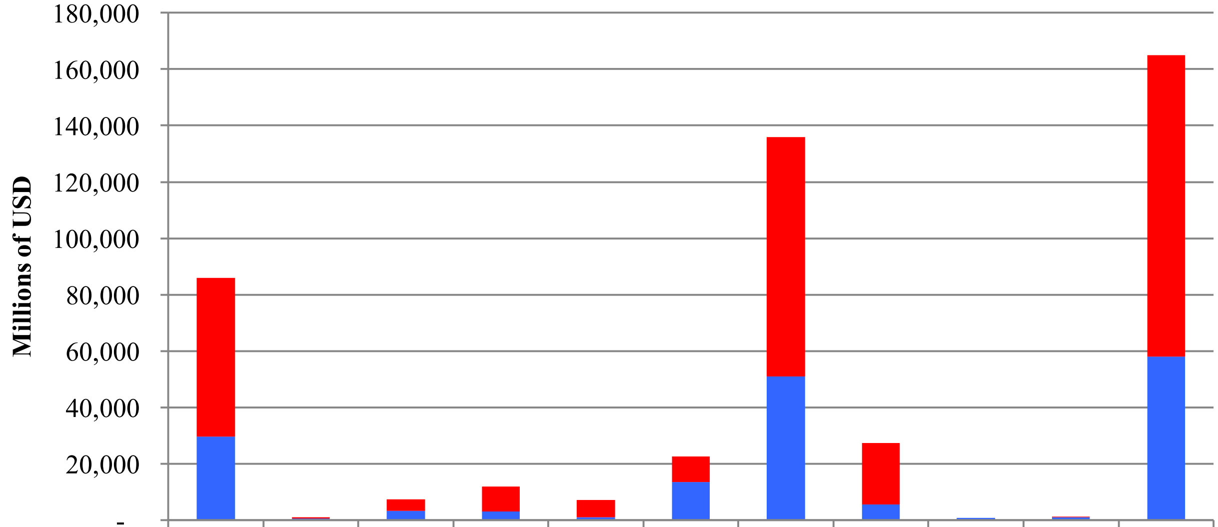
Figure Twelve shows the data for the last ten years of Arab Gulf arms purchases from the United States during the decade from 2006 to 2015—as reported in the Defense Security Cooperation Agency (DSCA) database. These figures provide a slightly more up-to-date picture of U.S. arms transfers.[25]

The data show that each of the Arab Gulf states has made a major investment in U.S. arms relative to its size as a military power, and just how much of an investment two key states—Saudi Arabia and the UAE—have made. They also show that the Arab Gulf states in the GCC collectively have more than three times as many arms on order ($110.2 billion) as they have taken in actual delivery ($30.7 billion)—which is a good measure of the steady increase that will take place in interoperability with U.S. forces.

This steady shift to dependence on U.S. arms, and the resulting improvement in interoperability, is also a good reason for the Congress to avoid cutoffs in U.S. arms deliveries to Saudi Arabia. Arms deliveries such as M-1 tanks cannot affect the Saudi use of force in Yemen, but will directly affect the forces that help deter and defend against Iran. The Saudi military have $67.2 billion worth of arms on order that is 3.7 times the $17.97 billion in actual deliveries received in the last decade. The Saudi Ministry of the Interior—the key Saudi counterterrorism force—has $215.6 million worth of arms on order which is also 3.7 times the $57.6 million in actual deliveries.

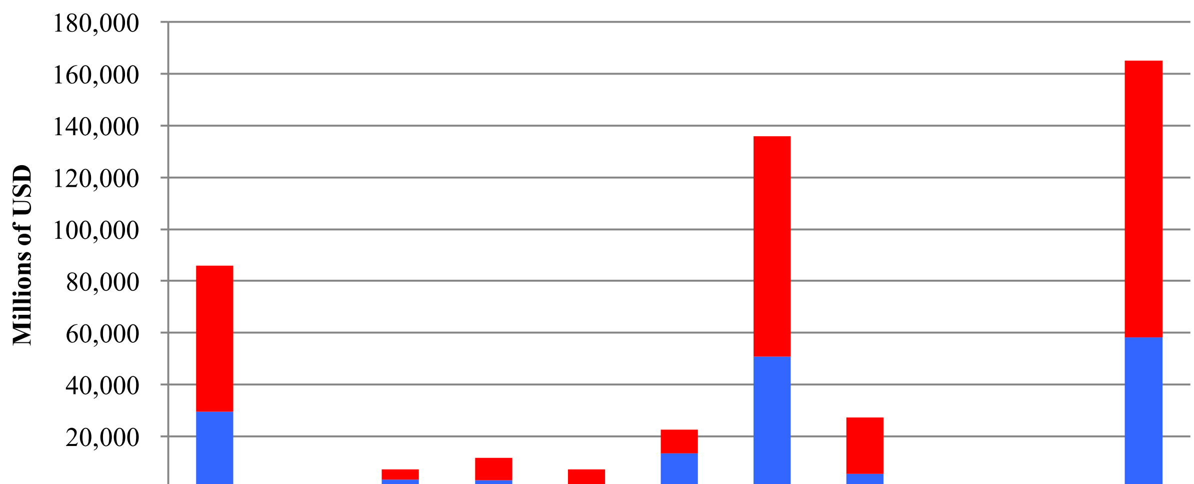
Figure Ten: Total Gulf State Arms Orders and Deliveries in 2007-2014

New Arms Orders



	Saudi Arabia	Bahrain	Kuwait	Oman	Qatar	UAE	GCC	Iraq	Iran	Yemen	Total
2011-2014	56,400	500	4,000	8,800	6,200	9,100	85,000	21,700	-	200	106,900
2007-2010	29,600	500	3,300	3,000	1,000	13,500	50,900	5,600	700	900	58,100

Actual Arms Deliveries

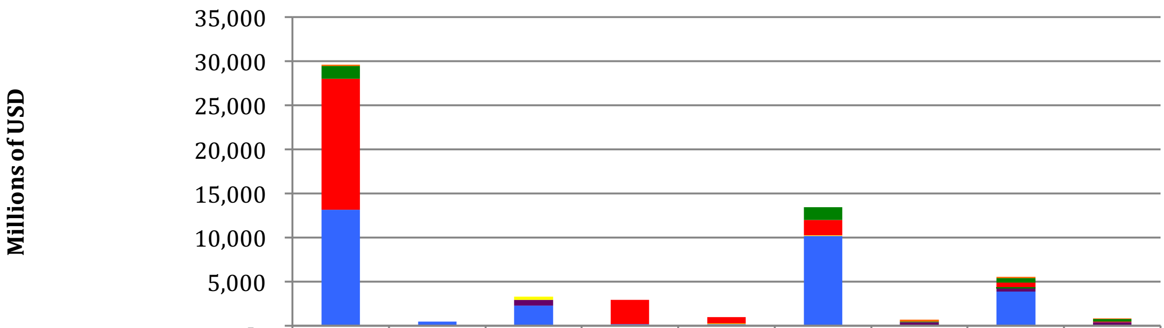


	Saudi Arabia	Bahrain	Kuwait	Oman	Qatar	UAE	GCC	Iraq	Iran	Yemen	Total
2011-2014	56,400	500	4,000	8,800	6,200	9,100	85,000	21,700	-	200	106,900
2007-2010	29,600	500	3,300	3,000	1,000	13,500	50,900	5,600	700	900	58,100

Source: Catherine A. Theohary, *Conventional Arms Transfers to Developing Nations, 2007-2014*, Congressional Research Service, December 21, 2015, pp. 37-38. "0" represents any value below \$50 million or nil. All data are rounded to the nearest \$100 million .

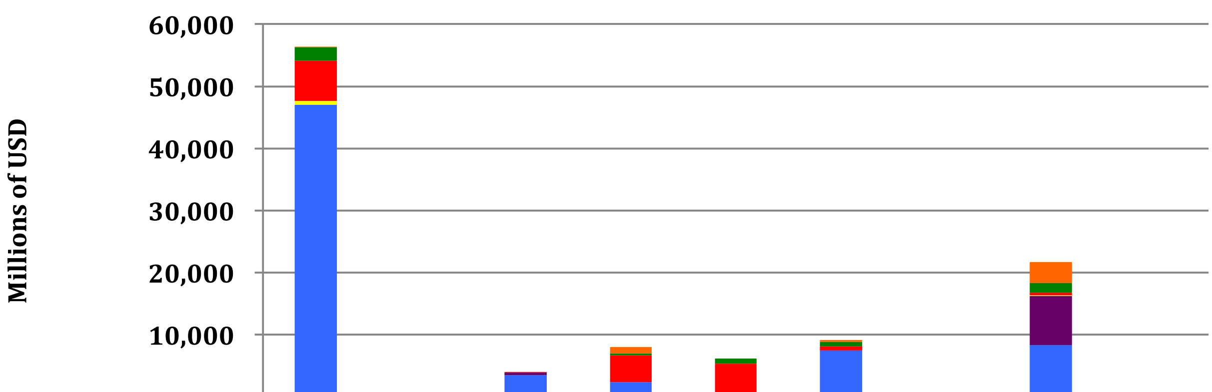
Figure Eleven: Gulf State Arms Orders and Deliveries by Supplier Country in 2007-2014

New Arms Orders in 2011-2014



	Saudi Arabia	Bahrain	Kuwait	Oman	Qatar	U.A.E.	Iran	Iraq	Yemen
All Others	100	-	-	-	-	-	200	200	100
All Other European	1,500	-	-	-	-	1,500	100	500	300
Major West European	14,800	-	-	2,800	700	1,700	-	500	100
China	-	-	300	-	100	100	-	100	-
Russia	-	-	700	-	-	-	400	400	400
U.S.	13,200	500	2,300	200	200	10,200	-	3,900	-

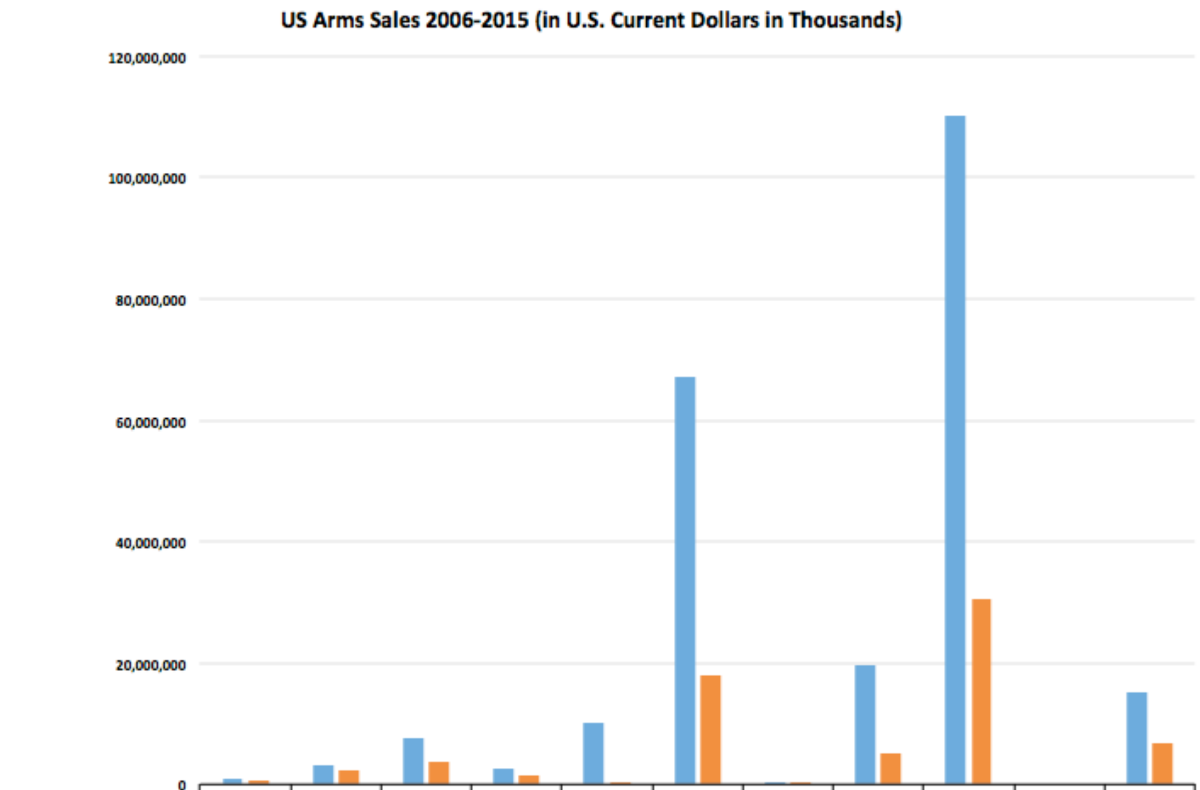
Actual Arms Deliveries in 2007-2014



	Saudi Arabia	Bahrain	Kuwait	Oman	Qatar	U.A.E.	Iran	Iraq	Yemen
All Others	100	-	-	1,000	-	300	-	3,400	-
All Other European	2,200	100	-	300	900	700	-	1,500	100
Major West European	6,500	-	100	4,400	5,200	600	-	400	-
China	600	-	-	-	-	-	-	200	100
Russia	-	100	400	-	-	100	-	7,900	-
U.S.	47,000	300	3,500	2,300	100	7,400	-	8,300	-

Source: Catherine A. Theohary, *Conventional Arms Transfers to Developing Nations, 2007-2014*, Congressional Research Service, December 21, 2015, pp. 37-38. "0" represents any value below $50 million or nil. All data are rounded to the nearest $100 million .

Figure Twelve: DSCA Reporting on Arab Gulf State Arms Orders and Deliveries from the U.S. in 2006-2015



	Bahrain	Jordan	Kuwait	Oman	Qatar	Saudi Arabia	Saudi Arabia MOI	UAE	GCC	Iran	Iraq
Total Sales Agreements	869,136	3,070,684	7,521,778	2,526,434	10,172,808	67,213,105	215,560	19,530,175	110,250,544	0	15,225,882
Total Sales Deliveries	706,048	2,370,105	3,665,762	1,410,402	118,861	17,972,363	57,612	5,055,198	30,650,303	0	6,651,545

Total Sales Agreements Total Sales Deliveries

Source: Defense Security Cooperation agency (DSCA), http://www.dsca.mil/print/319.

Stability versus Burden Sharing

If there is any clear message from these figures, it is that the United States has gotten major benefits out of its strategic partnerships from states that have taken on larger national security burdens relative to their size and economies than the U.S. national security burden. These efforts, however, present risks to U.S. interest as well as advantages.

Several Arab Gulf states with comparatively large populations – notably Iraq, Oman, and Saudi Arabia—have spent more than they can continue to spend at a time they have seen their export revenues cut nearly in half. Events since 2011 have shown that their internal stability is as critical as their ability to deal with outside threats, and that reform plans like Saudi Arabia's Vision 2030 or the UAE's adjustments to its spending may be more important to U.S. national security interests than "burden sharing" in terms of increase or sustained allied military spending and force development.

Preserving and Rebuilding the U.S.-Arab Gulf Strategic Partnership

The Arab Gulf states will never be as close to the United States in cultural and political terms as its European allies are, but this scarcely makes them less valuable as strategic partners, and the modern world is scarcely being forged in a Western image. If the United States is to remain the world's leading military power, it must shape its relations with its strategic partners on the basis of mutual interests, and not by focusing on areas of difference.

The United States must also understand that partnership is a far better route to seeking reform in key areas of difference like human rights than taking actions of the kind that can seriously undermine or even sever a strategic partnership. It needs to show the Arab Gulf states that it understands that it cannot serve its own interests without taking account of those of its partners.

The preceding analysis of U.S. dependence on stable energy exports, and burden sharing shows how the common interests that underpin the U.S. strategic partnership with the Gulf States can be. It helps illustrate just how important the U.S. strategic partnership with the Arab Gulf states already is, and how enduring a vital strategic interest this partnership can be in the future.

At the same time, it makes a strong case for the next Administration and a new Congress to make a major effort to address the problems that now limit the U.S. strategic relationship with the Arab Gulf states. The U.S. cannot paper over the problems described at the start of this analysis, or count on strong military relations to overcome the current level of political and strategic differences.

The United States also needs to work with the Arab Gulf and its key European ally states to examine options for building up effective deterrent, defense, and counterterrorism forces that are more affordable for all concerned, that seek to limit the present arms race in the Gulf, and put the proper focus on civil stability as a key element of security.

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[1] For copies of the *Arab Human Development Reports* from 2002 to 2011, reports, see the UN web page at http://www.arab-hdr.org/.

[2] For a detailed picture of the increases in the problems and risks affect MENA and Gulf states today, see:.

- *Stability and Instability in the Gulf Region in 2016* , https://www.csis.org/analysis/stability-and-instability-gulf-region-2016;
- *The "OPEC Disease": Assessing the True Impact of Lower Oil Export Revenues*, https://csis-prod.s3.amazonaws.com/s3fs-public/publication/160920_OPEC_Disease.pdf
- *The Underlying Causes of Stability and Instability in the Middle East and North Africa (MENA) Region, Part One, Analytic Survey and Risk Assessment,* http://csis-prod.s3.amazonaws.com/s3fs-public/160419_MENA_Stability_II_Country_01.pdf .
- *Stability in the MENA Region: Beyond ISIS and War, Part Two: Country-by-Country Trends* , http://csis-prod.s3.amazonaws.com/s3fs-public/160419_MENA_Stability_I_Regional_0.pdf .
- *Clash For Civilization: Creating an Effective Partnership in Fighting Extremism Between the West and the Muslim World,* https://www.csis.org/analysis/clash-civilization.

[3] Excerpted from key portions of OSD Comptroller, *Defense Budget Overview, FY2017,* http://comptroller.defense.gov/Budget-Materials/ .

[4] (http://www.eia.gov/tools/faqs/faq.cfm?id=727&t=6, October 4, 2016).

[5] See EIA, "Measuring U.S. Dependence on Foreign Oil: The What, Where, and When Factors," *This Week in Petroleum*, October 29, 2008, http://www.eia.gov/petroleum/weekly/archive/2008/081029/twipprint.html; "U.S.

Oil Import Dependence: declining no matter how you measure it," *This Week in Petroleum, May 25,2011, http://www.eia.gov/petroleum/weekly/archive/2011/110525/twipprint.html*.

[6] EIA, Table 3.3a Petroleum Trade: Overview, http://www.eia.gov/totalenergy/data/monthly/pdf/sec3_7.pdf.
[7] EIA, Table 1.5 Merchandise Trade Value, ttp://www.eia.gov/totalenergy/data/monthly/pdf/sec1_13.pdf
[8] EIA, Table 1.5 Merchandise Trade Value, ttp://www.eia.gov/totalenergy/data/monthly/pdf/sec1_13.pdf
[9] EIA, Table 1.5 Merchandise Trade Value, ttp://www.eia.gov/totalenergy/data/monthly/pdf/sec1_13.pdf
[10] EIA, Table 3.3a Petroleum Trade: Overview, http://www.eia.gov/totalenergy/data/monthly/pdf/sec3_7.pdf
[11] EIA, *Annual Energy Outlook 2016*, http://www.eia.gov/forecasts/aeo/, pp. MT-26 to MT-30.
[12] EIA, *Annual Energy Outlook 2016*, http://www.eia.gov/forecasts/aeo/, pp. MT-22 to MT-25.
[13] EIA, *Annual Energy Outlook 2016*, http://www.eia.gov/forecasts/aeo/, pp. ES-3 to ES-4, IF-31.
[14] See Energy.gov, April 13, 2016, http://www.energy.gov/eere/articles/timeline-brief-history-oil-prices-and-vehicle-technologies.
[15] CIA, World Factbook, "United States," https://www.cia.gov/library/publications/the-world-factbook/geos/us.html, accessed October 21, 2015.
[16] See U.S. Census Bureau, *Top Trading Partners, August 2016*, https://www.census.gov/foreign-trade/statistics/highlights/toppartners.html. For a fuller list of annual trade volumes in goods in recent years, see https://www.census.gov/foreign-trade/statistics/highlights/toppartners.html, and https://www.census.gov/foreign-trade/statistics/country/index.html for imports by product.

[17] EIA, *World Oil Transit Chokepoints*, Last Updated: November 10, 2014, https://www.eia.gov/beta/international/analysis_includes/special_topics/World_Oil_Transit_Chokepoints/wotc.pdf.

[18] https://www.eia.gov/beta/international/analysis.cfm?iso=ARE
[19] Jeffrey Goldberg, The Obama Doctrine, The Atlantic, April 2016, http://www.theatlantic.com/magazine/archive/2016/04/the-obama-doctrine/471525/.

[20] See the IISS, *Military Balance, 2016*, pp. 19; the SIPRI Military Expenditure Database, https://www.sipri.org/databases/milex; and the IHS Jane's Sentinel series.

[21] See the IISS, *Military Balance, 2016*, pp. 19; the SIPRI Military Expenditure Database, https://www.sipri.org/databases/milex; and the IHS Jane's Sentinel series.

[22] See the IISS, *Military Balance, 2016*, pp. 19.

[23] See the IISS, *Military Balance, 2016*, pp. 19, 316-318, 320-361, 487. GDP data not in the IISS Military Balance are taken from the CIA World Factbook. Some adjustments to the military spending data are made by the author.

[24] The data are taken from Catherine A. Theohary, *Conventional Arms Transfers to Developing Nations, 2007-2014*, Congressional Research Service, December 21, 2015, pp. 37-38. These data are provided to the CRS by U.S. government experts.
[25] Defense Security Cooperation agency (DSCA), http://www.dsca.mil/print/319.