

14 THE UNITED STATES' ENERGY TRANSITION: IMPLICATIONS FOR THE MENA REGION

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Introduction

Since the beginning of the recent oil and gas boom in the United States, it has become an article of faith among many foreign policy experts that reduced U.S. dependence on imported oil will erode its interest in the Middle East and North Africa (MENA) region, and as a result perhaps lead to gradual reduction in its military presence in the region. This leap of logic is based on a paradigm that has dominated U.S. strategic thinking since the 1973 Arab Oil Embargo, according to which the United States is heavily dependent on the Middle East for oil and must therefore reduce this dependency and strive for self-sufficiency in oil in order to reduce its exposure to the region's travails. However, this paradigm is based on some widely held misconceptions about the nature and dynamics of the global oil market as well as on a misunderstanding of the complexity of the United States' perception of the Middle East. The energy transition in the United States, which according to the International Energy Agency could make the United States the world's top oil producer over the next five years, is a welcome development that is likely to boost the U.S. economy at a time of prolonged global recession. This development is nonetheless unlikely to shield the U.S. economy from oil price fluctuations emanating from the MENA region

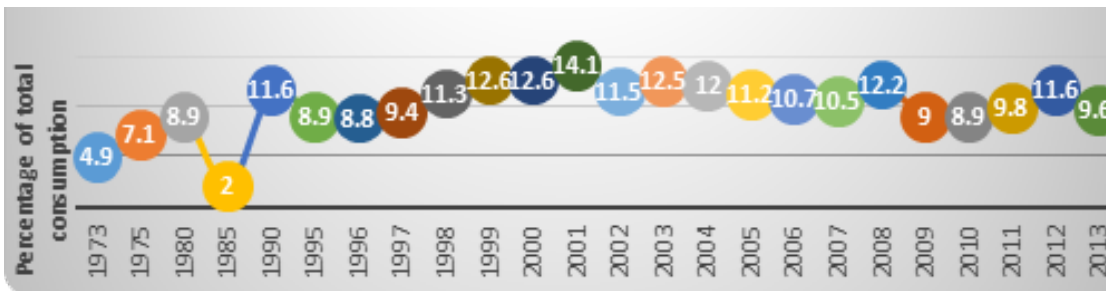
and even less likely to weaken U.S. diplomatic and military commitment to the region. In fact, one can expect the exact opposite to happen.

The United States is Dependent on the Persian Gulf for the Price of Oil, not Oil Itself

Contrary to popular belief, the United States is *not* dependent on the Persian Gulf for oil and has never been so. The region currently supplies fewer than 10 percent of U.S. oil demand, and as Figure 1 shows, never in history has the number surpassed 15 percent. In fact, most of U.S. imports come from the Western Hemisphere.

The United States is therefore much more dependent on the fluctuation of prices that may have roots in the Middle East than the oil itself. Oil being a fungible commodity with a global price, spells of political instability in the region have global consequences, regardless of the physical exposure of certain countries to MENA crude. For instance, between mid-February and April 2011, the war in Libya caused oil prices to spike by US\$25 per barrel for the United States despite the fact that it imported no oil from Libya. Even if the United States were to become self-sufficient in oil, it would still not be shielded from the world market, as was the case with other countries that enjoyed self-sufficiency in their history, such as Canada, the U.K., or Norway.

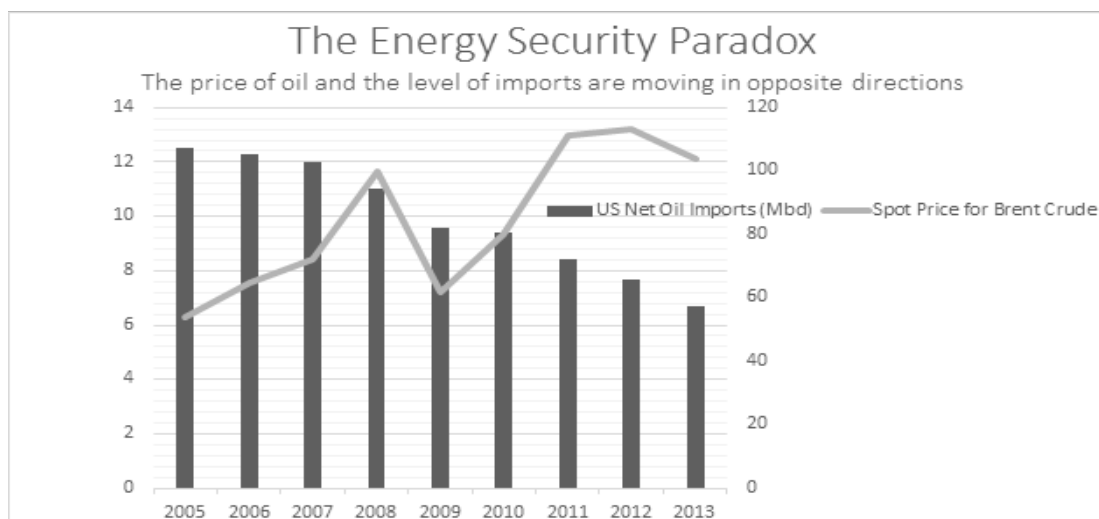
Figure 1: Oil Imports from the Persian Gulf 1973-2013 as a Percentage of Overall U.S. Consumption



Source: U.S. Department of Energy

Figure 2: The Energy Security Paradox

The price of oil and the level of imports are moving in opposite directions.



Source: Institute for the Analysis of Global Security, 2013

Furthermore, it has become increasingly apparent in recent years that the level of imports and the price of oil are moving in opposite directions. While U.S. oil imports dropped from 60 percent of consumption in 2005 to 36 percent in 2013, over the eight same years, the price of oil more than doubled. The conclusion is that self-sufficiency does not yield low prices.

The reason that the price of oil and the level of imports have been moving in opposite directions is that the price of oil is becoming increasingly responsive to the fiscal needs of the major OPEC producers, whose economies are primarily dependent on oil revenues.

Increased financial obligations due to the Arab Spring have forced OPEC members to adjust their production downward in order to tighten the global supply-demand relationship and reach the fiscal break-even price of oil (the per-barrel price needed to balance their national budgets). Despite its control over three-quarters of the world's conventional crude reserves and despite

the blistering growth of the world economy over the past four decades, those countries currently produce much less oil than their reserves allow. OPEC currently produces the exact number of barrels it produced 40 years ago: 30 million barrels per day. No change in U.S. production habits could change this dynamic.

On the other side of the equation, the U.S. economy is highly susceptible to spikes in oil prices. As Figure 4 shows, every major hike in oil prices in the past 40 years was followed by a recession. Therefore, what Americans should care about is not the origin of its oil but its price. As long as oil does not face serious competition with other energy commodities in the global transportation fuel market, OPEC will continue to dominate global oil prices. Under these conditions, it is difficult to see how the United States could afford to withdraw from the MENA region, leaving the world's largest pool of oil in the hands of dangerous *predator* regimes and vulnerable autocracies.

Figure 3: World Demand for Crude is Growing, but OPEC's Production Isn't

	1973	2013
World population	4 billion	7 billion
Number of automobiles	250 million	1 billion
World GDP	\$5 trillion	\$70 trillion
Global oil demand	55 mbd	88 mbd
OPEC production	30 mbd	30 mbd
Share of global supply	54%	33%
Price per barrel (2012 \$)	\$13	\$100

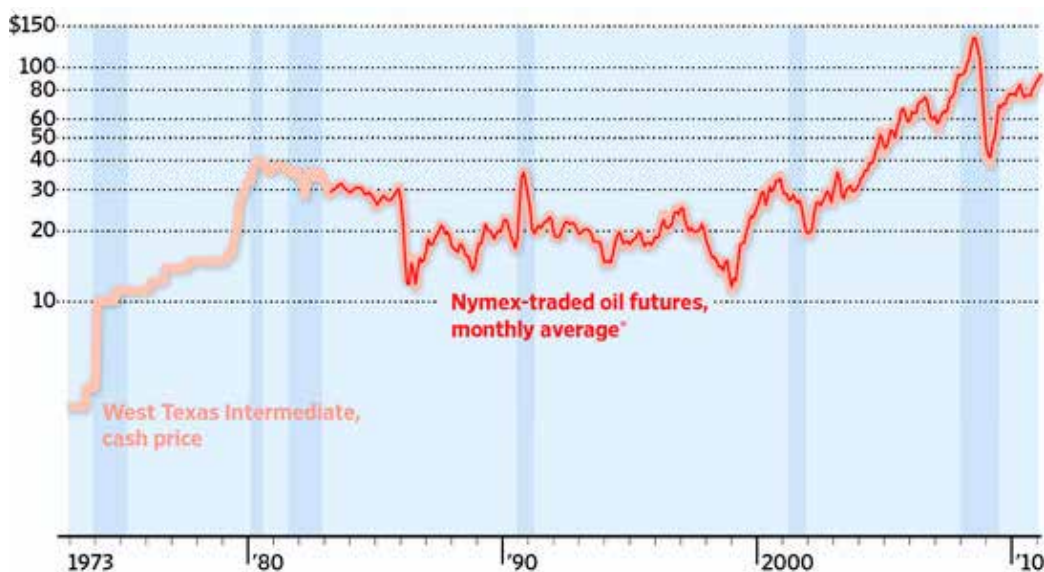
Will the United States Reduce its Military Commitments in the Region?

U.S. interests in MENA have to do with many factors. Of course, oil is one of them — and an important one — but geography, Cold War legacy, Israel, terrorism, religion, nuclear proliferation, and democracy promotion are some of the no less important factors guiding U.S. thinking on the region. Any suggestion that U.S. foreign policy is “all about oil” ignores the complexity and multitude of U.S. interests. When

Saddam Hussein invaded Kuwait, Persian Gulf oil represented less than 5 percent of U.S. oil consumption. While the United States could surely have survived without that oil, this did not stop it from embarking on a major war to liberate Kuwait and since then, the United States has maintained a prolonged and costly military presence in the region. According to some estimates, the annual financial burden of maintaining

U.S. military capabilities in the Middle East adds up to \$50-\$60 billion in a non-war year. Not only is this presence costly, but it has also fueled anti-Americanism and been a factor of radicalization. According to Osama bin-Laden’s writing, U.S. presence in the Arabian Peninsula was one of the main reasons for al-Qaeda’s attack on the United States on September 11, 2001. U.S. military deployment in the Persian Gulf may help stabilize the region, but it barely has benefits

Figure 4: Oil price spikes and economic recessions



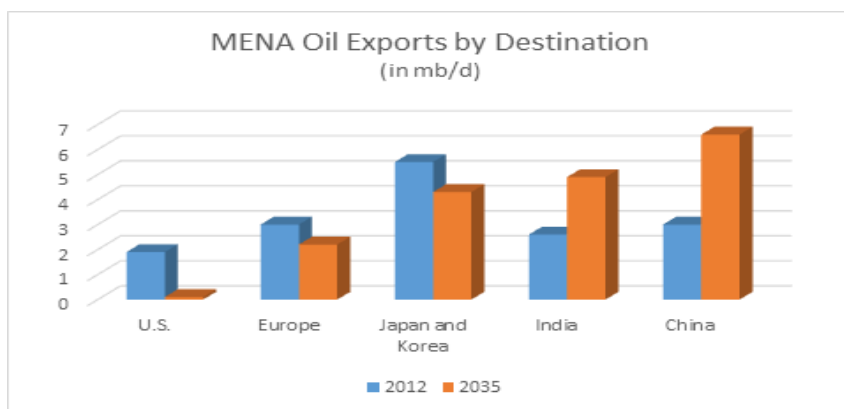
Source: *Wall Street Journal*, Feb 2011

on the actual supply of energy to the United States. A quick cost-benefit analysis shows that it actually has an inverse relation to the amount of MENA energy that flows into the United States. The case in point is Iraq, where the United States carried most of the burden of the liberation of Iraq in terms of blood and treasure, but yet the oil spoils are shared today by China and Russia with almost no contracts having been awarded to U.S. companies. Equally striking is the discrepancy between U.S. imports from MENA and the scope of its military investment in the region. Europe, China, India, Japan, and Korea are all importing more MENA oil than the United States, yet their financial contribution to the mission of protecting the region is still minimal. In essence, U.S. taxpayers subsidize oil protection services in the MENA region for the rest of the world, while their cars and trucks use the region's oil the least.

The United States could be pushed to reduce its military presence in the region as a result of two factors: either deep cuts in the defense budget, or a shift in global priorities toward other troubled regions, but not due to a change in its energy portfolio. There are at least three good reasons to assume continuous U.S. military commitment to the Middle East, even in the event of energy self-sufficiency. First, with Asia's growing dependence on MENA energy, a U.S. pullout from the region would essentially open the door to a stronger Chinese and possibly Indian and Russian military presence in the region, an outcome not viewed as being in U.S. strategic interests. Second, a sharp increase in U.S. energy production would

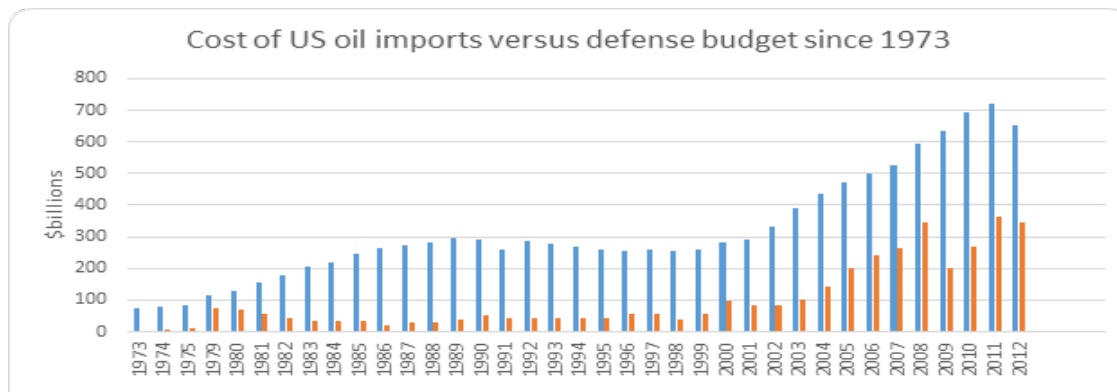
strengthen the United States' economy, bolstering its currency, reducing its debt, and improving its balance of payments in ways that would allow it to maintain its military budget and hence its presence in the region. As Figure 6 shows, in the past four decades, due to the sharp rise in oil prices, the ratio between the cost of oil imports and the defense budget has been shrinking. In 1973, the United States paid an amount equal to 2 percent of the defense budget at that time for oil imports. This figure today has gone up to about half of the defense budget. This means that any policy that could reduce the financial burden of oil imports on the U.S. economy might free up resources and reduce the need to cut defense expenditures. Third, the United States exports aerospace and defense products to the tune of \$100 billion per year, and more than half of the products go to MENA countries. The centrality of aerospace and defense industries to the U.S. economy means that the United States remains engaged in the markets where its products are needed most and where the strongest growth in demand is likely to be.

Figure 5: MENA Oil Exports by Destination (in mb/d)



Source: IEA, 2012 World Energy Outlook

Figure 6: Cost of U.S. Oil Imports vs. Defense Budget Since 1973



Source: Institute for the Analysis of Global Security

What Does All this Mean for U.S. Strategic Posture and the Future of Transatlantic Relations?

There are several changes in the energy resources map that could play a role in reshaping MENA geopolitics. Among them is the discovery of vast natural gas reserves in the Eastern Mediterranean and the construction of new energy corridors to circumvent the Strait of Hormuz. However, as discussed above, the boost in U.S. oil production is not one of them. The Middle East will continue to exhibit chronic instability due to the rise of militant Islam, weapons of mass destruction proliferation, and the acute and deep-rooted rivalry between Sunnis and Shiites. Such challenges will continue to consume large parts of Washington’s attention and, at times, significant military resources. Europe’s preoccupation with its own internal economic challenges is likely to preclude a new transatlantic division of labor and new responsibilities for Europe in the MENA region. If there were to be a new division of labor, it is more likely to be between the United States and major Asian clients of MENA energy. But a more likely scenario is that the North American energy boomlet will be a shot in the arm to the U.S. economy and the harbinger of an industrial renaissance and increased prosperity relative to other parts of the world. Such an economic

upturn is likely to make it easier for U.S. leaders mobilize the financial resources and public support needed to address global problems. In short: a prosperous United States means an omnipresent United States.

Natural Gas: A Game Changer

If there is one aspect of the United States’ energy transition that could potentially have a significant impact on the future of the MENA region, it is the development of new technologies to extract natural gas from shale formations and other non-conventional sources. This technology has matured and is now spreading throughout the world to other countries in Europe and Asia with similar geological shale formations. As a result, the domestic price of U.S. natural gas has collapsed, and the United States is transitioning from a net gas importer to an exporter. The decoupling of oil and gas prices offers a historic opportunity for the United States to challenge oil’s hegemony over the transportation fuel market. A variety of natural gas-derived fuels have arisen that will upset this balance: natural gas can be used directly as fuel in the form of compressed natural gas; it can be used to generate electricity, which can power pure electric vehicles and plug-in hybrid electric vehicles; and it can be converted to methanol, a liquid fuel that

today sells for one dollar less than gasoline on an energy-equivalent basis and can power flexible-fuel vehicles that cost manufacturers an extra \$100 to make compared to gasoline-only cars. With these developments, the United States will be able to pit a cheap and abundant commodity against one whose price is inflated and controlled by a cartel. Outside the United States, technologies to unlock even larger reserves of non-conventional natural gas such as methane hydrates are also making progress, and could create the same economic rationale to shift from oil to natural gas in China, Japan, and the EU. At this point, oil would be priced globally in relation to natural gas and other energy commodities from which transportation

fuels can be made. Such commodity arbitrage will reduce the strategic status of oil and limit MENA countries' ability to manipulate crude prices through production cuts. The implications for the petrodollar-dependent MENA economies could be profound, and at the very least will require them to embark on painful political reforms and a fast expansion of the non-petroleum sectors of their economies. Even then, the convulsions the region will go through during this long transition period will be closely observed from the deck of a U.S. aircraft carrier.

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