Independent Study

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The purpose of this study is to analyze the history of trade and investment relations between Iran and the rest of the world. The study consists of two parts: (a) from about two decades prior to the 1979 revolution, and (b) the period since the revolution to the present time. The emphasis of the study will be on Iran's top trading and investment partners. The ultimate goal is to better understand the evolution of economic ties between Iran and its current major trading partners, in particular China.

Specifically, I am going to analyze the following key aspects of the Iran's economic history:

- 1. Trade and investment relationship between Iran and its major partners prior to the 1979 revolution.
- 2. The nature of disruptions experienced by the Iranian economy as a result of the revolution.
- 3. The evolution of the post-revolutionary economy of Iran.
- 4. The impact of sanctions, specifically, their effect, and the effect of other factors, on the reorientation of the Iranian economy in terms of its trade and investment relations.
- 5. The evolution of Iran-China economic relations
- 6. Conclusion

Introduction

Iran has a solid foundation for rapid economic growth and development, with the world's second largest petroleum reserves, a young, well-educated populace, and well-developed industrial and commercial infrastructure. Post-revolutionary Iran was subject to numerous international sanctions and trade restrictions since then. Although the Iranian officials as well as many economists have dismissed sanctions as ineffective, they kept Iran increasingly isolated from global trade and finance. Difficulties with banking, foreign exchange, and foreign investment evidently have had an impact on Iran's economy and its status. On the other hand, Iran's increasing trade relations with China have kept its imports as well as its Gross Domestic Product (GDP) rising.

Furthermore, Iran's ability to enrich Uranium to higher levels triggered worries about nuclear potential of the country in the Middle East; particularly in Saudi Arabia, which rivals with Iran for regional hegemony, and Israel. The United States, as a mediator as well as primary leader in sanctions on Iran, have had back and forth relationship with the leaders of the Islamic Republic since the 1979 revolution. In fact, the first president to recognize Iran as the Islamic Republic was Barack Obama when he first came to office. Internal differences between the two countries have prevented the US and Iran from cooperation before, however more recent efforts made by the Obama administration to reach out to Tehran, not sanctions, have a potential for improving the relationship between the two countries. In the following sections, I will discuss the dynamics of the US-Iran relations, the impact of sanctions on Iran's trade and track the evolution of Iran's relations with the "non-traditional" partners as the result of the Western sanctions.

Overview of the Iranian Economy before 1979: What Spurred the Revolution?

The period of Iran's gradual transformation from a largely agricultural economy to what through public planning, urbanization, industrialization, and infrastructural investment became a modernized state took place between 1946 and 1979, under the Pahlavi monarchy. It was during those years, and especially in the late 1960s and 1970s that Iran's economic, social, and military developments have progressed the most. This is reflected in its nearly 9.6 percent growth in the 1960-1977 period, twice the average of countries in the Third World, as reported by the World Bank. Further, despite the growth in consumption, investment, savings, and growing incomes per capita, inflation was low until the 1970's oil boom, when the inflation rates started crawling up from 1.67 in 1970, peaked to 14.3 percent in 1974, and reached 27.3 percent in 1977, as shown in *Figure 1* below.

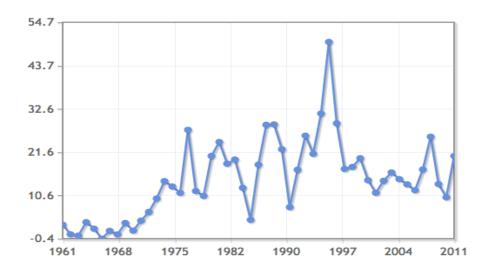


Figure 1 Inflation in Iran, (annual %) Source: IndexMundi

http://www.indexmundi.com/facts/iran/inflation

¹. World Development Report, 1979 (Washington, DC: World Bank, August 1979), pp. 128-9.

Moreover, government spending on social and public services: education and health, have significantly reduced absolute poverty levels, as well as infant mortality rates, malnutrition, and endemic diseases. At the same time life expectancy and literacy rates have measurably increased (Amuzegar, 1992 p. 414). But widening income gaps, inadequate investment in the agricultural sector, lack of attention to non-oil exports on one hand, and exploitation of the oil reserves to fund the military-industrial complex on the other hand, contributed to the growing dissatisfaction with the regime.

In his article "The Iranian Economy before and after the Revolution" former Minister of Finance and Minister of Commerce of Iran, Jahangir Amuzegar, highlights the positive growth and low unemployment during the Shah regime, while explaining the regime's shortcomings.

"Domestic income distribution while not ideal, was no worse than most developing, and some developed countries. Agriculture growth was higher than in all but a handful of nations. Industrialization was pushed through, not at the expense of agriculture, but thanks to oil revenues. Although oil income was used to purchase a sizable volume of sophisticated arms, it also served as the mainstay of foreign exchange needs for infrastructural expansion and for investments," he writes.

Suzanne Maloney, from the Saban Center for Middle East Policy at the Brookings Institution, also acknowledges the rapid growth generated under the Pahlavi economic program, and in addition to Amuzegar, lists other reasons that galvanized the opposition to the monarch's governance. The Shah's economic program that introduced numerous land reforms, launched infrastructure development and huge investment projects in Iran's industrial base surged in the 1970s with the rise in oil prices. These reforms, as Maloney

reports, alienated influential constituencies: the clergy, landlords, and merchants. Moreover, the inflation in the 1970s, as discussed earlier, created hardship for many Iranians. "Economic grievances helped galvanize opposition to the monarchy," writes Maloney, "and revolutionary leaders such as Ayatollah Ruhollah Khomeini appealed to Iran's poor and its increasingly squeezed middle class." However, she doesn't think that the economy was the primary factor that mobilized opposition to the Shah. And Khomeini's statement after the monarchy collapsed that, "Iran's Islamic Revolution was not about the price of melons," backs Maloney's point.

Both Amuzegar and Maloney discuss social and economic aspects of Pahlavi's reign and suggest reasons for the societal dissent against the shah and the system. However, neither discussed the political factors that had an impact on the future developments in the political and economic spheres of the country. More specifically, the authors did not address the special relationship between Iran and the United States in the period of 1953-1979. Krysta Wise, of Southern Illinois University Carbondale, in her article on American-Iranian relations, addresses the 1953 coup against the democratically elected Prime Minister of Iran, Mohammad Mossadegh, by the British Secret Intelligence Service (SIS) and the American Central Intelligence Agency (CIA). In the following analysis of these "special relations," I will also address Iran's dismissal of the oil embargo in 1973, as I believe it had a direct impact on Iran's efforts to diversify trade partners after 1979.

Before the Islamic Revolution in 1979, the US had gained extensive control over Iran by supporting Western-friendly Mohammed Reza Shah. Mossadegh sought to nationalize the oil industry and to reduce the shah's power granted by the 1906

Constitution. The nationalization of the Anglo-Iranian Oil Company in 1951 that deprived Britain of multi-billion dollar oil revenues, faced a hostile response as Britain placed an embargo on Iran. In 1953, SIS and CIA staged a coup, known as Operation Ajax that removed Mossadegh and returned Shah to power. It was only in 2013 that the CIA acknowledged taking part in the coup.

CIA and SIS's efforts were not futile, and Shah proved to be a loyal ally. Throughout the Arab oil embargo 1967-1974, Iran (along with Venezuela and Indonesia) supplied US with its oil *Figure 2. Figure 3* demonstrates the exponential increase in the expropriation of its oil reserves.

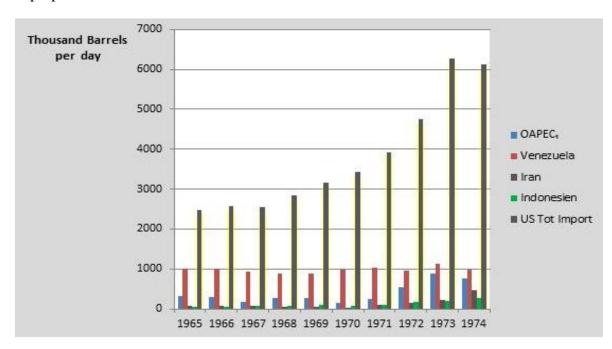


Figure 2 Oil export from OAPEC and other major oil exporting countries to the US

Source: the US Energy Information Administration (EIA) Annual Energy Review 2009, Table 5.4 Petroleum Imports by Country of Origin" 1960-2009, U.S Census Bureau, Statistical Abstract of the US: Table No 856, 1960-1973, Table No 910, 1965-1975.

History of Iran's Oil Production, 1913-2007

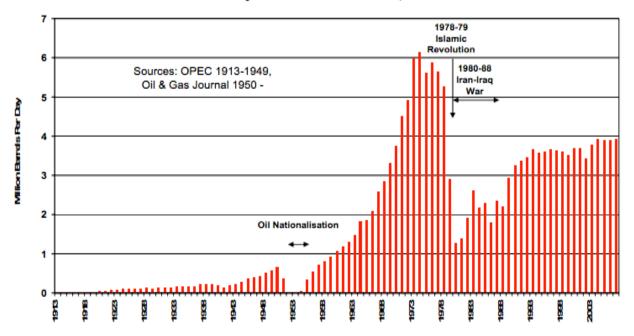


Figure 3 Iran's oil production over years

Source

< http://www.caspianstudies.com/article/maleki/Iran%20Oil%20Economies%20and%20Social%20Welfare%20CeSPI.pdf>

According to Amuzegar and Maloney, the criticism of Pahlavi's regime was mainly due to him adopting a pro-Western development model that made Iran's economy dependent on oil revenues, raw materials, and promoting a "consumerist" economy (Amuzegar, 1992 p. 415). But, the role of the US and Britain in removing Mossadegh is a noteworthy addition to consider when determining the reasons for the society's dissent. As for the post-revolutionary economic development, Amuzegar is critical of the revolutionary groups that opposed the shah, which according to him "had no clear economic agenda" beyond renouncing Pahlavi's strategies and policies. In fact, he states that the subsequent ability of the Islamic republic to defend its territory during the Iran-

Iraq war, and to sustain population growth, and to reduce its external debt was due to the capital accumulation during the Reza Shah's rule.

Statistically, post-revolutionary Iran has never reached the growth rates it had prior to the revolution (*Figure 5*). However, it is important to take into account numerous sanctions that undeniably have had an impact on the country's growth, as reflected in the incredibly volatile growth rates depicted in *Figure 4*.

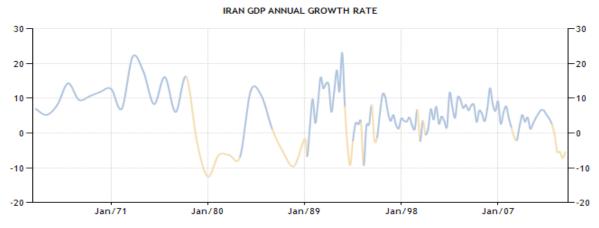


Figure 4 Iran's GDP growth rate 1963-2014

SOURCE: WWW.TRADINGECONOMICS.COM | CENTRAL BANK OF IRAN

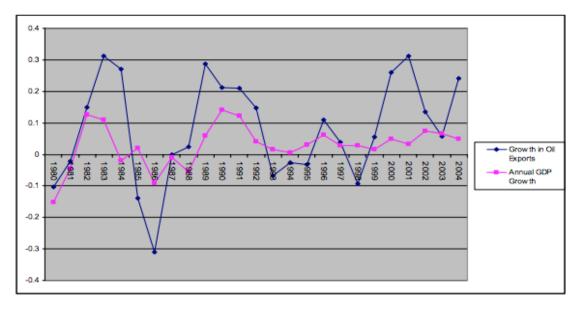
Average Annual Real GDP Growth Rate (%) ^(a)							
	Mean	STD					
Before the Revolution							
1960-72	10.6	3.5	Before the oil-boom years				
1973-77	8.0	7.6	The 1970s' oil-boom years				
1960-78	9.0	6.2	The Shah's years				
After the Revolution							
1980-88	-1.3	8.9	War years				
1989-93	7.5	5.4	First Plan				
1994-99	2.8	1.9	Second Plan				
2000-2004	5.4	1.7	Third Plan				
1989-2004	5.1	3.7	Post-war years				
1979-2004	2.5	6.7	All Islamic Republic Years				
1960-2004	5.3	5.3	Entire period				

⁽a) At constant 1997/98 prices.

Source: Central Bank of Iran.

Figure 5 Iran's growth before and after Revolution

Amuzegar mentions the deep recessions that followed the establishment of the Islamic republic in 1981 and 1986, and mild recessions in 1987 and 1989, as a sign of weakness of the new government. Further, he points to the regime's failure to reduce its dependence on oil revenues. In *Figure 6* below, one can see the evidence to this claim, as the troughs in the Islamic republic's economic cycles coincide with lower oil exports and peaks in the economic cycle follow higher exports. Thus, the economic growth line mimics the trend line measuring oil exports.



Note: Oil exports are measured in current US\$, three-year moving averages.

Source: Based on data from the Central Bank of Iran.

Figure 6 Iran's Cycles of Economic Growth and Oil Exports 1980-2004

Maloney, unlike Amuzegar, underlines Khomeini's consistency with the Shiite tradition: to defend property rights and the role of the private sector -- a view shared among the clerics and bazaaris or merchants. Further, the labor strikes and elite emigration that followed the collapse of the shah regime, according to Maloney, paralyzed the industrial sector and left the economy in chaos. Iran's constraints

intensified further after the 1979 Tehran hostage crisis, when fifty-two American embassy staff members were held captive for over a year. The event not only sparked international attention, but also propagated a series of other economic sanctions and political deterioration of the US-Iran relations. It can be argued that it led to Iran's isolation from global trade and finance.

Historical Overview of Sanctions against Iran

On November 14 of 1979, President Jimmy Carter declared an emergency and ordered "to block all property and interests in property of the Government of Iran." Given that up until 1978 the US has been Iran's major trading partner, and American goods accounted for 21% of all Iranian imports, this freeze of assets cost Iran nearly \$11 billion (Maloney, 2008). The series of sanctions against Iran continued up until summer 2013, as the U.S. House of Representative passed a bill tightening the existing sanctions.

In his article "The Evolution of Iran's Reactive Measures to US Economic Sanctions," Hooman Estelami of Fordham University discusses the dynamics of the Iranian economic policy in response to the US sanctions on Iran in the period of 1979-1996. In elaborating on the history and the underlying reasons for the sanctions that have been imposed, he also discusses the changing paradigms in Iran's trade with the countries other than the United States and its allies.

The first formal sanctions imposed by the US against Iran took place in April 1980; all exports from the US to Iran have been terminated. However, these sanctions were lifted after a year, after the 1981 Algiers Accord that secured the release of the

register/codification/executive-order/121/0.ntml>.

³ Direction of Trade Statistics, International Monetary Fund, Washington DC: 1979

² "Executive Order 12170--Blocking Iranian Government Property." National Archives, 14 Nov. 1979. Web. 07 June 2014. http://www.archives.gov/federal-register/codification/executive-order/12170.html.

American hostages. However, new sanctions followed after just a couple of years, in 1984 under the Reagan administration. The Arms Export Control Act and Export Administration Act of 1984 restricted the list of products that could be exported to Iran: certain types of aircraft and vehicles, and potentially military applications were banned from being exported. While oil imports from Iran to the US oil companies were lifted, it was only in 1987-1988, following Iran's missile attacks on Kuwait's oil port. To protect a stable supply of oil, the US re-flagged Kuwaiti oil tankers in the Persian Gulf. In October of 1987, President Reagan issued an executive order banning the import of all goods and services from Iran, including oil. This resulted in a \$1 billion loss in export revenues (Estelami, 1998).

The early sanctions against Iran by the United States caused what Estelami calls "realignment of Iran's trade." Iran swiftly diversified its import supply sources. In doing so, Iran deliberately avoided traditional US allies: many Western European countries, such as Germany, France, and the UK as well as Japan. Instead trade and economic relations were developed with smaller European countries, specifically in Eastern Europe, and Islamic non-aligned nations.

In the period of 1979-1990s, Australia and New Zealand replaced the US role as the primary supplier of wheat to Iran. Meat, sugar, iron and other commodities were bought from Sweden, Denmark, Italy, as well as Soviet countries such as Yugoslavia, Poland, and Romania. Moreover, the Iranian government also undertook formal schemes that limited trade with Japan, Germany, and the UK.

Estelami distinguishes four periods of Iran's economic strategies in response to the US sanctions in the years 1975-1997: (1) Revolution and the Iran-Iraq War Years; (2) The Post-war Reconstruction Era; (3) Dual Containment and Trade Sanctions Renewal; (4) Iran-Libya Investment Sanctions.

The fist period discussed by Estelami encompasses the years from 1979 to 1988. According to him these years represent a difficult period for Iran: in addition to the costs associated with the war with Iraq, the 1979 hostage crisis resulted in trade sanctions and political isolation of Iran from its previous trade and political partners. Figure 7 shows the change in the sources of Iran's imports from countries other than the US, Japan, and Western Europe in the years following the revolution compared to the years before 1979. Imports from "other countries" increased from 17 percent to 37.4 percent in 1979-1988, while imports from the US dropped massively from 18.5 percent before the revolution to merely 1.8 percent in the following years. Iran's focus on recovering local production capabilities lost during the war, as well as attracting international investment and diversifying partners other than the US and Western Europe resulted in a nearly 20 percent decrease of imports from these countries compared to 1975-1979, and an over 20 percent increase in imports from other countries. The share of imports supplied by countries other than Iran's traditional suppliers continued till today, especially after the imports from the US equaled 'zero' after the sanctions were imposed in 1996.

In the years of post-war reconstruction, 1989 to 1992, Iran implemented more open foreign trade policies. Iran's effort to liberalize trade was supported in Washington (Amuzergar 1993). During the early years of the Bush administration, US trade restrictions on Iran were slightly relaxed, as about \$600 million of Iran's frozen assets in the US were released. Imports from the US to Iran increased slightly from 1.8 percent to 2.1 percent in this period. At the same time, American businessmen benefited from the

more relaxed sanctions and open trade—this was the boom time for them. American oil companies became Iran's dominant customer for crude oil (although, according to the Washington Post's 1987 article, * most of the oil was shipped to their subsidiaries overseas).

Time Period	United States	Western Europe	Japan	Other
Pre-revolution (1975-78)	18.5	48.7	15.8	17.0
Revolution and Iraq War (1979-88)	1.8	47.8	13.0	37.4
Postwar Reconstruction (1989-92)	2.1	52.1	11.4	34.4
Dual Containment (1993-96)	3.3	45.8	8.3	42.6
Iran-Libya Sanctions (1996)	0.0	44.9	6.4	48.6

Figure 7 Share of Iranian Imports Source Direction of Trade Statistics, International Monetary Fund, Washington DC; 1975-1997

Meanwhile Iran recognized the risks associated with being overly dependent on oil and gas reserves. Thus, the government concentrated on further diversifying its exports expanding from oil to other products, like rugs, dried fruit, leather and others. Besides, the damaged petrochemical facilities after the war with Iraq, and the unfriendly relations with the US in particular, also served as push-factors for Iran to seek new trade partners and new products for export. *Figure 8* below shows the export product array of Iran throughout these four periods. Dependence on oil decreased from almost 95 percent in 1979-1988 to 82.3 percent in 1993-1994. The latest data reports a slight decrease in the share of oil in Iranian overall exports from the 1993-1994's to 80.63 percent.

Product	1979-88	1989-92	1993-94
Oil and Gas	94.9%	89.2%	82.3%
Carpets	1.8	3.9	6.6
Fresh & Dry Fruits	1.0	2.3	3.3
Leather Products	0.4	0.4	0.5
Copper & Metals	0.2	0.3	0.7
Caviar	0.2	0.2	0.2
Textiles	0.1	0.1	0.2
Chemicals	0.1	0.2	0.1

Figure 8 Iran's Exports Products

During the period of "dual containment," trade sanctions imposed on Iran and Iraq by the Clinton administration aimed at containing the economic development in the two countries, as they were seen as the two major US adversaries in the Middle East. To achieve containment, the US began a series of diplomatic negotiations with Europe and Japan to limit trade with Iran. To slow down the momentum of dual containment, Iran offered lucrative contracts to American oil companies. Consequently, by 1994, the US had become Iran's 5th supplier of imports, while American oil companies had become the primary customers of Iran's oil.

In 1995 Iran implemented a strategy that would not undermine the legitimacy of the Constitution that forbade the production sharing in the oil sector with foreign investors, and instead encouraged foreign investment in oil projects (Estelami, 1998). This strategy offered foreign oil companies the ability to invest in an Iranian oil field and recover the investments and earned profits through the sale of the oil produced from the project. That year a tender was announced for a \$ 1 billion contract with the Iranian Oil Ministry for the development of the Sirri oilfield. The tender was awarded to the

American oil company Conoco, Inc. over the French oil giant Total that was earlier assured of winning the tender. Economic analysts called this "a calculated political move to test the reaction in the United States for greater economic cooperation" (New York Times, 1995). However, after two weeks when Iran signed a contract with Conoco, a Du Pont subsidiary, through a Dutch affiliate, the Clinton Administration renounced the contract, calling it "a threat to national security." Conoco said it would not proceed with the deal. This understandably created an outrage and further worsened US-Iran relations. In response to the Clinton Administration, Deputy Foreign Minister Mahmoud Vaezi said that the United States had "proven that they do not believe in free trade."

Following this, American companies were prevented by law from engaging in either oil or non-oil trade with Iran. Furthermore, the export of American goods and services to Iran, and brokering or financing of such trade has since been prohibited (Oil and Gas Journal, 1995). By 1996, dual containment was focused primarily on curbing Iran's economy, which could be done best by putting maximum pressure on its oil industry. The Iran-Libya Sanctions Act of 1996 (ILSA), the US Department of State report says, "was introduced in the context of a tightening of U.S. sanctions on Iran during the first term of the Clinton Administration. In response to Iran's stepped up nuclear program and its support to terrorist organizations (Hizbollah, Hamas, and Palestine Islamic Jihad." ILSA followed the Executive Order of 1995 that banned trade and investment in Iran.⁴ The imports from the US to Iran, as shown in *Figure 8* were completely eliminated by 1996.

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⁴ In 2006 the sanctions on Libya have been lifted and the act was renamed Iran Sanctions Act (ISA).

Iran's 'Non-Traditional' Trade and Economic Partners

Beginning from the 1990s Iran has developed closer economic relations with Russia. Russia supplied Iran with combat aircraft, three submarines, invested \$800 million into the nuclear power reactor in Bushehr province in the south of Iran, and planned through joint efforts to explore and produce Caspian Sea oil. Iran's trade and economic partnership with the former Soviet countries has become particularly dynamic following the break-up of the Soviet Union. Many of the relationships were developed strategically. Such was the case with Central Asia's energy-rich Kazakhstan and Turkmenistan. It would be unfair to say that the benefits would be unilateral. The geographic location of Iran would make it more cost efficient for Kazakh and Turkmen oil and gas to be delivered through Iran to Turkey and rest of Europe. Iran got its benefits too, such as the 'oil swap deal' it reached with Azerbaijan, Kazakhstan and Turkmenistan. Under oil swap arrangements, these countries each provide Iran with crude oil that is refined in northern Iran. Iran then sells an equal amount of its own crude oil in the Persian Gulf on the accounts of those countries, thereby facilitating their oil exports through Iranian territory (Bloomberg, 2011).

In the mid-1990s Iran's President Rafsanjani also strengthened the relationship with South and South-East Asia. His visit to New Delhi in 1995 launched an India-Iran chamber of commerce, thereby increasing trade and economic activity between the two countries. By 1995 the countries also formed a joint shipping company, planned a \$400 million fertilizer project in Iran, and worked on an extensive pipeline project to India and Pakistan, which would help export gas from Iran to the region. However, more recently India has made clear its strong strategic and economic ties with the US and the West, as

well as voiced its stance against Iran's nuclear program in the International Atomic Energy Agency (IAEA) in 2005 and 2009, and abstained from the vote at the UN General Assembly that condemned Iran on its alleged plot to assassinate a Saudi envoy in Washington (Times of India, 2011).

On the other hand, close and long-time allies of the United States, United Arab Emirates and Turkey, have proven to be effective in dodging Western economic sanctions on Iran. In 1978-1996 the volume of imports from UAE to Iran quadrupled, despite the fact that most of these products are Western-made and re-exported to Iran. Iran's relations with Turkey have pivoted on shared security concerns over the Kurds. Despite the 1996 ILSA, Turkey signed a \$23 billion natural gas supply agreement with Iran, despite pressure from Washington (Economist, 1996). Additionally, in East and South-East Asia, Iran built closer relations with China and Malaysia. China cooperated to help Iran build Tehran's subway system and is a key supplier of the military hardware, while Malaysia played a key role in Iran's petroleum sector. By becoming a partner with French oil company, Total, mentioned above, Malaysia developed two Iranian off-shore oil and gas fields in the Persian Gulf (Eselami, 1998). Also, South Africa, beginning from 1994, began purchasing Iranian crude oil and now sources most of it from Iran.

In 1997, under the administration of President Khatami, there were more reconciliation efforts with the United States and the West. And although some initial progress has been seen, internal difference in Tehran plagued the efforts. In 2001, after 9/11, Iran again attempted to re-build its relations with the US. However, this time US President George Bush titled Iran as one of the "axis of evil states." It was not until recently, with the election of Hassan Rouhani and Barack Obama as the US Presisdent,

that the two states are put efforts toward mutual cooperation. Perhaps, it is symbolic that "Obama" in Persian literally translates "he is with us." The countries may finally find common ground.

The Observatory of Economic Complexity project, run by the Massachusetts Institute of Technology, reports the following facts on Iran's trade: Iran's top five exported products are crude petroleum (81%), petroleum gas (3%), ethylene polymers (1.4%), refined petroleum (1.3%), and acyclic alcohols (1.1%); it's top 5 imported products are iron ingots (3.5%), hot-rolled iron (3.4%), corn (3%), vehicle parts (2.3%), and semi-finished iron (1.9%); the first five destinations for Iran's exports go to some of the Asian countries (26%), China (14%), some of the European countries (14%), Japan (6.3%), and India (6%); most of the Iran imports come from the UAE (23%), China (14%), South Korea (7.8%), Germany (6.2%), and Turkey (4.9%).

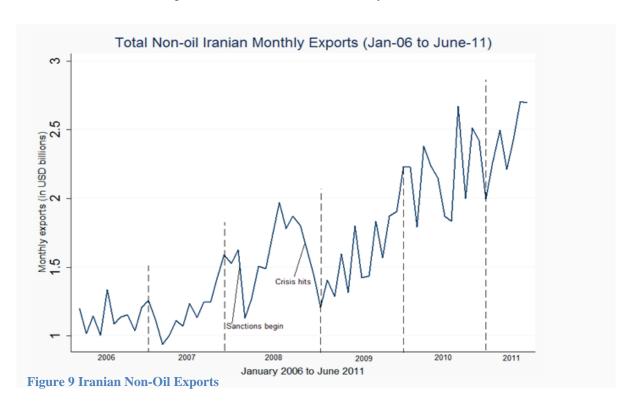
The array of products imported suggests that Iran has become self-sufficient or substituted the goods and services it used to import prior to sanctions. Its partnership with China constitutes 14% of Iran's both total imports and exports. This is only 4% less than the volume that the US exported to Iran prior to the revolution. This demonstrates that China is a strong ally and partner to Iran, potentially diminishing Iran's motives to put efforts into lifting Western sanctions.

The Impact of Sanctions

A number of economists argue the futility of US and EU-imposed trade sanctions on Iran (Hufbaer et al., 2009). In his paper, Jamal Haidar (2014) of Paris School of Economics, claims that sanctions imposed on Iran were ineffective. Iranian exporters, according to him, have successfully diverted trade from the US and EU to Asian, African,

and Latin American destinations. Hufbauer and others argue that it's not about whether sanctions work but about "what types of goals are relatively more likely to be advanced with economic sanctions," ""which targets are most vulnerable," and "how should sanctions be imposed to maximize effectiveness?"

For the past century, Iran had 174 sanctions imposed on it by different countries (Hufbauer et al., 2007). Despite this, Iran, according to Haidar (2014), fruitfully explored alternative markets. Using Iranian Customs data, Haidar (2014) used a disaggregated dataset for the daily customs transactions for the period of January 2006 to June 2011. Haidar (2014)'s two goals were (1) to measure the effect of sanctions on exporters' total sales at the destination level, (2) to detect whether exporters quit the export market or shifted to different destinations given sanctions. *Figure 9* below shows the development of non-oil exports in Iran in the years 2006-2011. The upward trend indicates either that trade diverted following sanctions, or sanctions actually caused it.



Haidar (2014) constructs a new graph that tracks exports to the countries that imposed sanctions, compared to the exports to the countries that did not impose sanctions on Iran. As expected, exports meant for destinations that did not impose sanctions continued an upward trend even at a higher rate, while the exports to the destinations imposing sanctions plummeted when sanctions hit (*Figure 10*).

Figure 10 Iranian Non-Oil Exports: Sanction-imposing countries and other destinations

Figure 11 and Figure 12 look at the entry and exit rates of Iranian exporters and exported products to destinations imposing sanctions and those not imposing sanctions. The entry and exit rates of exporters and products follow the same trends. Exit rates of exporters and products increased in destinations imposing sanctions, while they decreased in destinations not imposing sanctions. According to Haidar (2014) calculations, the probability of exporters diverting and exiting a destination imposing sanctions is 52%, while the probability of entry to a destination that does not impose sanctions is 37%. Therefore, it is evident that sanctions triggered Iranian exporters to divert trade and to establish new trade relationships. Haidar (2014) also performs a series of econometric analyses in his paper, to test for causality. His results share the conclusion stated above, and provide more technical evidence to it.

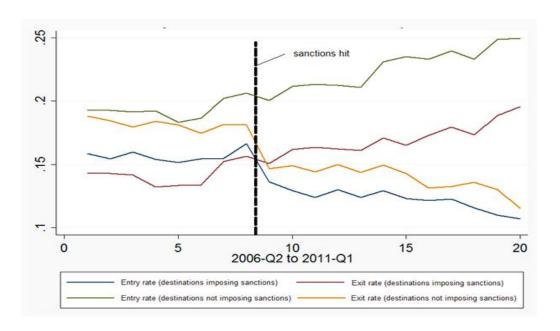


Figure 11 Entry and Exit Rates of Iranian Exporters

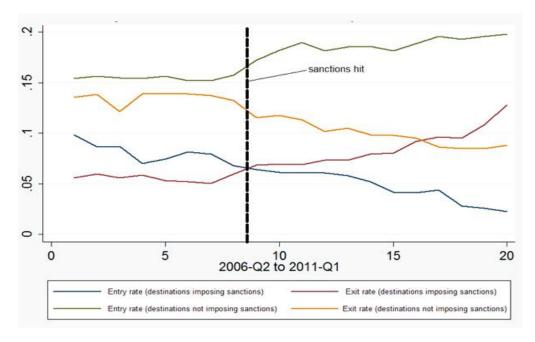


Figure 12 Entry and Exit Rates of Iranian Products

In addition, Haidar (2014) finds that the new destinations have shown to be more profitable: "The new destinations, which diverting exporters targeted, are larger and closer markets, destinations with higher imports, income, and FDI growth rates, as well as destinations with fewer import restrictions and lower tariff rates." *Figure 13* below

shows the increase in Iranian's exports. Its exports peak in the late 2000s, showing a much higher volumes compared to even to the period before the Islamic revolution.

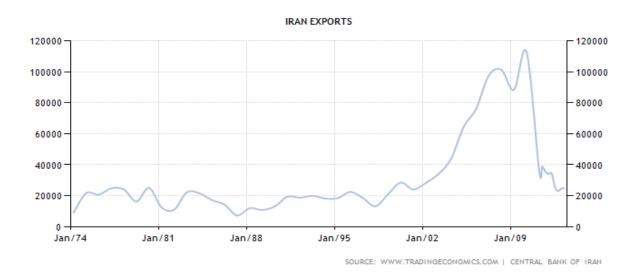


Figure 13 Iranian Export Volumes 1974-2011

Iran Trade and Economic Relations with China

Iran's increasing volume of exports is reflected in its GDP over years. *Figure 14* shows an exponential increase in Iran's GDP following the period from 1990s. Despite a number of sanctions that have been imposed on Iran in the period from 1990-2012, the

trend is upward sloping with a relatively low deep in 2009 in the aftermath of the global financial crisis.

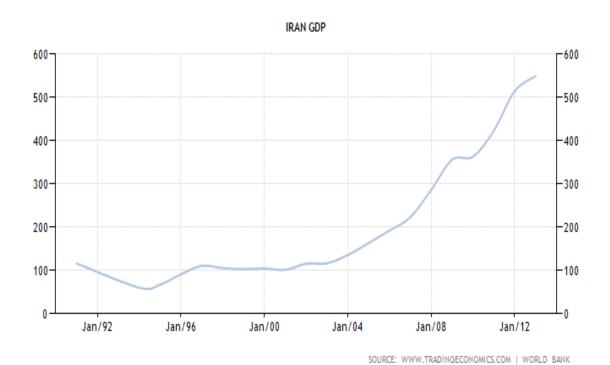


Figure 6 Iran's GDP over the period of 1990 to present Source http://www.tradingeconomics.com/iran/gdp

In the period from 1990, most notable trade partnership has developed between Iran and China. As the People's Republic started taking off, Iran's natural resources were essential, while Iran's isolation from its traditional partners was quite timely. Besides, sharing mutual discontent with the Western practices and policies, Iran and China have had deep-rooted trade relations ever since the Silk Road. In the period from 2003 to 2012, the trade between Iran and China has shown significant progress. *Figure 15* and *Figure 16* show increasingly dynamic relationship between the two countries.

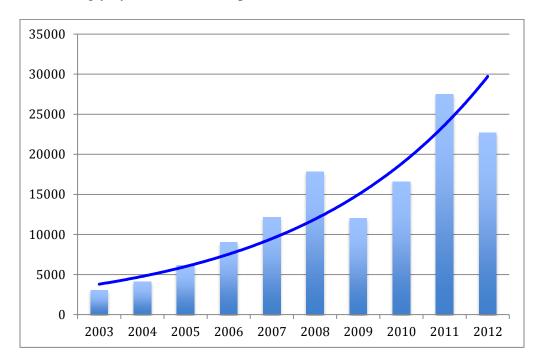


Figure 15 Iran-China exports 2003-2012, Direction of Trade Statistics, IMF 2012

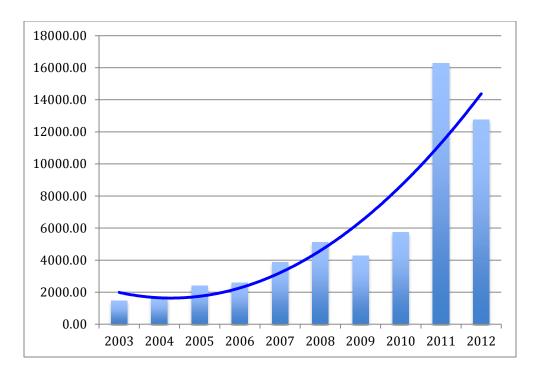


Figure 16 Iran-China Imports 2003-2012, Direction of Trade Statistics IMF 2012

Given that the increase in the Iranian GDP starts from 2004 onward (*Figure 14*) coincides with the increase in Chinese-Iranian trade, as shown in *Figure 15* and *Figure 16*, it could be argued that China shows a greater economic reliance and servers as a non-sanctioning magnet for Iran to trade with.

Figure 17, constructed by Haidar (2014) in 2014, below compares the trade of Iran with the US and China in the period from 2006 to 2011. The deep fall in Iran's export to the US and China happened during the 2008 and 2009, respectively. However, while the exports to China peaked after 2009, they remained relatively low to the US in the following years.

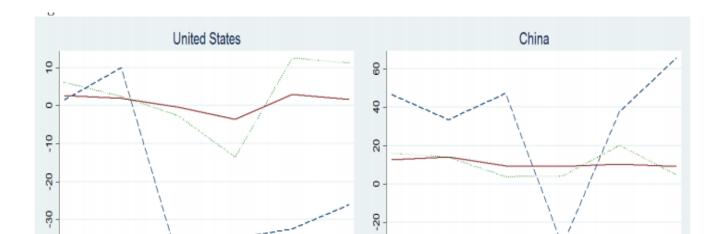


Figure 17 Comparing US and China as Iran's trade partners in the mid-2000s

Conclusion

Economic sanctions were deployed frequently in the 20th century, and more often than one it might seem. However, historically sanctions did not prove to be effective on changing the behavior of the countries they were imposed on. Countries like Cuba, North Korea, Russia, and Iran (until recently) all dismissed sanctions and do not show signs of readiness to respond to the Western demands.

In her article published by the renowned foreign policy magazine, Trita Parsi, writes (and I agree) that "reaching out to Tehran, not smashing its economy," is what brought Iran to the negotiating table. Despite, China's economic and trade partnership with Iran that filled the gap of the Western consumers of oil, in particular, Iran has been increasingly isolated from the financial sector of the global economy. Financial flows, such as investment, and remittances, which constitute increasingly larger share of global financial flows, have been diverted from freely flowing to Iran. Therefore, not only Iran's re-entry to the global market may result in the growth of its own domestic product,

but can significantly contribute to the overall rise in the world's GDP, which has suffered in the aftermath of the global 2007 financial and 2008economic crises.

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