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The Nuclearization of Iran: The America's Responses and Reactions

Dissertation Submitted in Partial Fulfillment of the Requirements for Master's Degree in Literature and Civilization

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Academic year: 2022/2023

Dedication

"Every worthwhile accomplishment, big or little, has its stages of drudgery and triumph: a beginning, a struggle, and a victory " .

MAHTMA GANDI

We dedicate this humble work to our beloved families for their tremendous support .

To ourselves too! For the sincere efforts expended in seeking the brilliance of the brines "knowledge" .

Acknowledgments

In the name of Allah, the Most Gracious The Most Merciful

All acclaim and glory should be directed first and foremost at *Allah*, without whom our endeavor would not have been possible and upon whom we rely for support and direction.

Our heartfelt gratitude and sincere thanks go out to our supervisor, Dr. SAOUD Ammar, who provided us with the chance to produce this work and finish our project with his constant assistance.

We also like to express our gratitude to the staff, and students of Hamma Lakhder University's English Department for their inspiration and support.

Abstract

Iran's relationship with the United States has been under tension in recent years because of Iran's intentions toward nuclearization. Iran signed the Nonproliferation Treaty and claimed that its nuclear activities were for peaceful and scientific purposes. When America realized its real intent, it started to respond and react in order to cease it. This study aims to offer an overview of the timeline of Iran's nuclear program, its motivations, the United States responses and reactions, and compare the effectiveness of diplomatic engagement with economic sanctions. This study suggests that the inquiry may have an impact on political decisions regarding how to deal with Iran's nuclear program. A qualitative methodology combining historical, descriptive, analytical, and comparative methods is used in this work. The study demonstrates that the development of the nuclear program in Iran is influenced by security concerns, domestic political priorities, Iran's interests, West-Middle East relations, Iraq chemical attacks, and Iran's economy. America has used two approaches to ending the program. First, economic sanctions through financial and energy, which have effects on the economy, humanitarians, and politics Second, diplomatic engagement through negotiations and the Joint Comprehensive Plan of Action Agreement, which has the effect of obstructing Iran's nuclear developments. Consequently, these strategies combined to delay Iran's nuclear program but were unable to stop it.

***Key words*:** Diplomatic engagement, Economic sanctions, JCPOA, The nuclear program of Iran ,US responses and reactions.

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List of abbreviations and acronyms

AIIB	Asian Infrastructure Investment Bank
EURODIF	French Uranium Enrichment Firm
FATF	Financial Action Task Force
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IAEA	International Atomic Energy Agency
ICBMs	Intercontinental Ballistic Missiles
IRGC	Iranian Revolutionary Guard Corps
INSTEX	Instrument in Support of Trade Exchanges
JCPOA	Joint Comprehensive Plan Of Action
NCRI	National Council of Resistance of Iran
NGOs	Non Governmental Organizations
NIKET	Russian Research and Design Organization
NPT	Non-proliferation Treaty
OFAC	Office of Foreign Assets Control
P5+1 or p3+3 Group	United States, Russia, China, France, United kingdom, and Germany
RMB	Official Currency of the People's Republic of China
UNSCR + UN	United Nations Security Council Resolution
WMDs	Weapons of Mass Destructions

List of Figures

Table of Contents

General Introduction

1. Background of the Study

Iranian dissidents alleged in 2002 that the regime was building two secret nuclear sites. Doubts were raised, UN verified the Natanz uranium plant and the Arak heavy-water plant. The rebels' claim about Iran's secret nuclear program was proven true. Iran said it was only using nuclear energy for peaceful purposes and following the International Atomic Energy Agency's (IAEA) supervision, while the monitoring group disagreed. In 2003, Iran agreed to sign the Non-proliferation Treaty's (NPT) additional protocol, allowing for tougher inspections, including at secret facilities developed over the past 18 years. However, by January 2004, new evidence emerged that Iran, by its own admission, had continued to build centrifuges for uranium enrichment, according to the defense research organization Global Security Organization. In this continuing game of cat and mouse, preventing Iran from utilizing its nuclear technology to develop and spread nuclear weapons has been one of the main priorities of the United states.

2. Statement of the problem

The acquisition of nuclear capabilities by Iran was not instantaneous but rather characterized by a prolonged timeline and by its own motives. Systematically, the US responded and reacted towards Iran's nuclear aspiration .

3. Research Questions

The study aims to investigate the following significant questions **.**

- How did Iran acquire its nuclear power ?
- What are Iran's motives behind this acquisition ?

- Which approaches have been employed by the United States in order to restrain Iran's nuclear aspirations and which one has shown the most effectiveness ?

4. Research Hypotheses

In light of the preceding inquiries, the following hypotheses are suggested **:**

- Iran nuclear acquisition may be based on western assistance.
- Iran's motives may be related to security concern and economic development .
- The U.S. possibly used two different approaches alongside .

5. Aims of the Study

The purpose of the study is to provide a brief history of the Iranian nuclear program and the driving motives behind , that supporting its pursuit of nuclear weapons. Additionally, it investigates America's responses and reactions towards this pursuit. In order to handle Iran's nuclear program, this study compares and contrasts the effectiveness of the used approaches.

6. Significance of the Study

The significance of this study lies in how the US has responded, reacted, and affected Iranian nuclear development activities. In addition, the analysis might be helpful in guiding political choices about how to best deal with Iran's nuclear program. Hence, to make future decisions regarding Iran's armament more conveniently.

7. Research Methodology

The study uses variety of methods for qualitative approach, including historical, descriptive, analytical, and comparative ones. Both chapters use historical and descriptive methods to present a brief history of Iran's nuclear program, motives, and the timeline of diplomatic engagement and economic sanctions. The second chapter's end uses comparative analysis to compare the use of economic sanctions and diplomatic engagement. The study makes use of articles, theses, PhD dissertations, academic journals, and online websites

8. Structure of the Study

The study opens with a general introduction that reveals the process of conducting. Followed by two chapters constitute the study's organizational framework in this piece of writing. The first chapter, "The Nuclearization of Iran", discusses Iran's nuclear program and the reasons behind its desire to develop nuclear weapons. While the second one, titled "America's responses and reactions" shows how America has responded to Iran's nuclear activities, and reacted through the use of economic sanctions and diplomatic engagement approaches. Concluding the chapter by comparing the effectiveness of the two approaches in dealing with Iran's nuclear program. The study closes with general conclusion that summarizes the main points and findings.

CHAPTER ONE

The Nuclearization of Iran

Chapter One: The Nuclearization of Iran

Introduction

Iran's nuclear program has made it a leading power in the Middle East. Iran is the first Muslim country in the Middle East with nuclear weapon capability. It has multiple nuclear facilities across four branches. The top nuclear research centers in Iran include Gorgan, Jaber Ibn Hayyan, Drumand, Sharif University, Bonab, and Kalayah. Moreover, the main uranium enrichment sites are: Ramandeh, Lashkarabad, Natanz, Darkhwin suspected of being enriched, and Ardakan for uranium ore purification, also Iran has two uranium mines. However, Locating Iran's nuclear facilities is a major challenge that could hinder military intervention. The key point is uranium enrichment by centrifugation, transforming raw gas into nuclear fuel through separation and concentration. 3.5% enrichment is required for energy production in the Iranian-Russian Bushehr reactor. Up to 20% enrichment used in reactors for research producing cancer treatments and agricultural fertilizers. Iran has a research reactor that can easily enrich uranium to weapon-grade levels. Iran's ability to reach 20% enrichment raises concerns about potential nuclear club membership. The IAEA found highly enriched uranium particles at Iran's Fordo site, close to weapons-grade level, per a 2023 BBC report. Hence, the Iranian nuclear program and technology have reached unexpected limits. Between the multiple motives of Iran to acquire nuclear power and the different causes and excuses of world power America to cease this Iranian aim, these achievements within the Iranian nuclear program did not occur in a blink of an eye; rather, they went through phases across the years. This chapter aims to shed light on the historical background and motives behind Iran's nuclear program .

1.1. Historical Overview

A sizable nation situated in the Middle East is recognized as Iran (formally called the Islamic Republic of Iran). The Caspian Sea bounds the northern side while the Persian Gulf confines the southern side. Ranked as the 17th biggest country globally, Iran covers 1,648,195 square kilometers of land. Tehran, Iran's most populous and biggest city, serves as the nation's capital. Isfahan, Shiraz, Tabriz, and Mashhad are among the major cities in the country, where Persian (Farsi) serves as the official language and is commonly used. A significant proportion of the population is proficient in languages such as Azeri, Kurdish, Luri, Arabic, Baluchi, Gilaki, Mazandarani/Tabari, and Turkmen (*About Iran*, n.d.).

The issue surrounding Iran's nuclear program did not arise from its outset; rather, cooperation between the United States of America, France, and Iran was the root from which this program sprouted. But this truth does not change reality, nor does it get Iran out of its current bind. Iran's nuclear energy ownership issue has been tied to the policies of the region's main powers, which changed with the changing of the reigning regime in Iran and the arrival of the Islamic Revolution and its conquest of power (Itawi, 2011).

However, Iran's right to acquire nuclear energy and use it peacefully is guaranteed. Yet, the issue revolves with skepticism around the Treaty on the Non-Proliferation of Nuclear Weapons, which Tehran signed on July 1, 1968, with continuous monitoring by IAEA. The international community is aware of Iran's ambitions as well as its concern that the Iranian nuclear program will have military elements through which it aspires to possess the nuclear bomb *(Iran and the NPT*, 2020) .

Furthermore, Itawi (2011) claimed that the Iranian nuclear program has undergone numerous transformations since its inception in the mid-twentieth century until today. The change in Iran's political government, as well as its domestic and foreign policies, had an impact on the growth of its nuclear program as well as the international community's attitude toward it.

As a result, the Iranian nuclear program went through two separate phases, the first of which was that it grew and flourished during the reign of Shah Mohammad Reza Pahlavi, who gained American and Western aid. That was fully inverted in Iran's second phase after the Islamic Revolution took power in 1979, to the point of enmity.

1.1.1. Nuclear Program under the Shah

The story began with the Atom for Peace initiative. Under the later program, the United States assisted Iran in developing its nuclear program in the 1950's. Iran was ruled at that time by Shah Mohammad Reza Pahlavi, who emerged as a key US ally in the Persian Gulf. President Eisenhower planned this program to assist developing countries in exploiting nuclear power for energy and other peaceful reasons. During the Cold War, the program also assisted the US in securing allies (Malus, 2018).

However, this was not the case with Iran, according to Itawi (2011), as the Iranian ambition towards getting this nuclear power came along with significant economic and social developments in the country as a result of the process of nationalizing Iranian oil in 1951 by Iranian Prime Minister Mohammad Mossadegh as a step towards controlling Iran's natural resources. Hence, the U.S. became afraid of the impact of this nationalization on the new map of potential allies in the region, as US Assistant Secretary of State for Near Eastern Affairs "George McGhee" expressed in his speech in June 1951, when the United States feared an Iranian-Soviet rapprochement.

Based on Quillen (2002), at least one study claimed that the Iranian program was developed expressly to counter the Soviet Union; however, this claim was mostly based on an overestimation of Iran's conventional strength. For all of that, the American administration tried to pull Iran's foot out and offered the Shah nuclear power so that Iran would be with the United States of America. In this context, the program "Atom for Peace" that the United States of

America sought after prevented countries that were not folded under the American wing from obtaining nuclear technologies.

Sergi (2017) stated that, in April 1957 Iran initiated its nuclear program by signing the Agreement For Cooperation Concerning Civil Uses Of Atomic Energy with the United States, so the construction of the first research nuclear reactor began in Tehran in 1960, with the assistance of the United States of America. As a condition for US nuclear collaboration, Iran joined the NPT in 1968 and ratified it in 1970. Additionally, Iran signed a safeguard agreement with IAEA in 1974, subjecting all of the country's nuclear facilities to IAEA inspections and supervision (Reardon, 2012).

During the Shah's rule, ties with the United States were at an all-time high; therefore, many Muslims attacked the Shah and became dissatisfied with the situation, accusing the Shah of being a puppet for the United States (Kanat, 2017). However, at the beginning, US-Iranian cooperation was limited to technical assistance, but it developed after that. The Nuclear Research Center of the Central Alliance Organization Treaty Central moved from Baghdad to Tehran in 1967. Additionally, Iran purchased a 5-megawatt small research nuclear reactor from the United States, which was located in the Amirabad Center in Tehran; moreover, in 1970, the United States of America decided to start establishing uranium enrichment fields in Europe. Iran has benefited from this step, as through its good relations with both France and America, it was able to benefit from this program (Sergi, 2017) .

Furthermore, there was another involvement between Tehran and Washington framed in the US National Security Adviser "Henry Kissinger" visit to Iran in 1974, during which a program of cooperation between the two countries in the nuclear field was launched based on supporting Iran to become the only country Islam is among the nuclear states in the world. This agreement included supplying the United States of America to Iran with more than six nuclear reactors, in addition to the reactors sold by France and Germany to Iran (Rastbeen, 2007, as cited in Atwi, 2011). A cadre of Iranian engineers trained at the Technology Institute of Massachusetts

in Massachusetts. The United States of America, based on a contract signed by this institute with the Iranian Atomic Energy Organization in 1975 (*Iran's Nuclear Program*, n.d.).

On the other side, European aid was also present in the foundation scene of Iran's nuclear program; for instance, Iran became a shareholder in EURODIF, a French uranium enrichment firm, in 1974, the same year Iran inked another nuclear cooperation deal with India. Also, the Iranian Atomic Energy Organization formed an agreement with the Massachusetts Institute of Technology in 1975 to teach Iranian nuclear specialists. Additionally, France and China assisted in building the Nuclear Technology Center at Esfahan in the 1970's. In 1976, Iran negotiated nuclear fuel deals with Germany. The Shah announced a plan to establish up to 23 nuclear power plants by the mid-1990s to supply the majority of the electrical electricity required by the civilian population (Quillen, 2002).

In essence, Rastbeen (2007, as cited in Itawi, 2011) stated that by 1975 four companies—France's Framatome, Germany's Siemens, and Union Kraftwerk, as well as Westinghouse Electric General and American—were working with Iran to increase its nuclear potential. The United States and Western European nations continued to assist and cooperate with Iran's nuclear development until the 1979 with the Iranian Revolution .

Finally, in February 1979, as mentioned by Itawi (2011), the foundation of the Iranian nuclear program came to an end, and the program began a new stage that differs from its predecessor in every way because of the end of the Shah Mohammad Reza Pahlavi era through the arrival of its opponents to the authority of the country with the success of the Islamic revolution, resulting in considering this date a watershed and a decisive point in the history of the region as a whole. Its events have changed the equation in the Middle East and changed policies and alliances. Here, Iran turns from an ally of the United States of America and the West into a prominent enemy of the axis of evil .

1.1.2. Nuclear Program after the Revolution

The Iranian Revolution, which established the new Islamic Republic on April 1, 1979, not only resulted in a period of tremendous chaos for the country but also for its nuclear program, as many foreign and Iranian nuclear workers departed the country in the lead-up to and during the Revolution (Malus, 2018). Meanwhile, after the Shah left Iran in January 1979, the new governing Ayatollah Ruhollah Khomeini seized control of the Shah's nuclear program (Quillen, 2002). Hence, along with the profound changes brought about by the new country, the nuclear program strategy passed through three stages: hibernation and suspension for five years, recuperation during the Iran-Iraq war, and an intense rush in the 1990's. Iranian officials positions have shifted from those who oppose the nuclear program and the possession of nuclear energy to those who embrace it wholeheartedly, supporting their right to own it and utilize it for peaceful reasons (Itawi, 2011).

Figure 1.1

Shah Mohammed Reza Pahlavi and Empress Farah Leaving Iran for the Last Time on Jan. 16, 1979.

Note. Adopted from Woollacott, M. (2020, March 26). Frenzied rejoicing in Iran as Shah leaves - archive, 1979. The Guardian. https://www.theguardian.com/world/2019/jan/17/frenzied-rejoicing-in-iran-as-shah-leaves-archive-1979

Figure 1.2

Ayatollah Ruhollah Khomeini Descending From the Air France Plane that Returned him to Tehran after 15 Years in the Exile.

Note. Adopted from Timeline on the Relationship Between the United States and Iran. (2012, April 7). Timeline - NYTimes.com. https://archive.nytimes.com/www.nytimes.com/interactive/2012/04/07/world/middleeast/iran

1.1.2.1 . Hibernation and Suspension Phase (1979- 1983)

The period of hibernation and suspension began soon after Imam Ruhollah Mustafa Ahmad al-Musawi Khomeini took power in Iran and changed the country's governance structure from a monarchy to an Islamic republic (Itawi, 2011). At the beginning, his government considered this nuclear program an anti-Islamic tradition; by definition, it is unethical and evil. Others, however, claim that his administration planned to continue the nuclear program, only on a smaller scale (Quillen, 2002). According to a BBC interview with the father of Iran's nuclear program, Akbar Etemad stated, "at the beginning, the revolutionaries thought that nuclear technology [was] one of the tactics of the US to put a hand on Iran. Later on, they realized it was a successful program, and they had to continue it." (Malik, 2013).

Consequently, the Shah's ambitious idea was scaled back considerably. Almost all projects affiliated with the Shah were judged unsuitable and cancelled, including most contracts for nuclear reactors, but a tiny research reactor at Amirabad was retained under international oversight. All arsenal agreements with the US and other foreign countries were canceled, as were

at least $34 billion in significant civilian development projects, including four nuclear power plants. Despite the Bushehr nuclear reactor plant being around 77 percent finished, the project encountered serious technical challenges as well as huge financial overruns. The Islamic regime was unable to cover the financial expenditures required to finish the work at Bushehr and was hesitant to request, and was unlikely to receive, the required outside aid (Quillen, 2002).

Alternatively, Kanat (2017) reported that the United States and the West did not welcome Iran's new system . With the revolution, which was unsupported by the US, and the hostage crisis in 1979, ties between the US and the Islamic Republic came to a halt. The United States not only withdrew its support and collaboration but also began imposing sanctions on the Islamic Republic, in addition to practicing pressure on other world countries in the form of a campaign of not dealing with Iran's nuclear program in order to discourage it from further developing its nuclear program, prompting Iran to seek assistance from governments and actors over whom Americans have no influence and power. As a result, Iran was subjected to a strategy of isolation from both the United States and the West. Thus, the nuclear program was left without finance, talent, foreign cooperation, or initiative (Reardon, 2012).

1.1.2.2. Recuperation phase (1983 1989)

This phase is characterized by the actual new acceptance of the nuclear program by the Islamic regime, as thinking about developing and using this program has revived again and seems to be a persistent need for the country. One of the reasons behind this acumen is that Iran in the early 1980s wanted to exploit nuclear energy to generate electricity, where Iran was suffering from serious electrical constraints coupled with a substantial population increase. In addition to the attacks and blows that Iraq aimed at Iran the Western community's neglect toward Iran, which began in 1983 when Iran complained to the UN that Iraq applied chemical weapons against it during this war, which was answered passively, that left marks in the minds of Iranian officials of the need to have a deterrent force against a potential war against it (Kanat, 2017).

The latter is considered the main and essential reason for returning to the nuclear program. Indeed, the work on the nuclear program actually recuperated under the rule of President Ali Khamenei under the leadership of the Speaker of the Iranian Majlis (Parliament) at that time, Ali Akbar Hashemi Rafsanjani (Spector 1990, as stated in Itawi, 2011). In more practical terms, they opened the Isfahan Nuclear Research Center (Al-Rawi, 2006, as stated in Itawi, 2011). Moreover, President Khamenei in 1984 formed a group headed by Reza Amrullah in order to study the recuperation of the reactor plants in Darkhorin and Bushehr, which was targeted many times by Iraq and resulted in huge damage resulted in an obvious decline in the progress of the nuclear project (Ali, 2006, as stated in Itawi, 2011).

Nevertheless, Iran desired German enterprise Siemens to complete the plant's construction, but American pressure and the seriously damaged structure of the plant prevented them from agreeing to finish the plant. Also, because of enormous US demands, Iran was unable to propose the identical initiative to Poland and the Czech Republic. Iran was unable to get assistance from the West due to US influence, so it was forced to turn to the East. Consequently, work on the Iranian nuclear program was resumed in 1985, with extensive technological assistance from Pakistan and China in this phase (Kanat, 2017).

The assistance of Pakistan was obvious in the nuclear cooperation agreement signed in 1987. That included training Iranian experts specialized in the nuclear field in Pakistani nuclear facilities, such as the Institute of Technology and Nuclear Sciences in Islamabad and the Institute for Nuclear Studies in Naulur, the same year Iran found a uranium mine with a stockpile of 5,000 tons in the Safand area of Yazd province, declaring a plan to develop a plant for the production and processing of raw uranium at the location (Ali, 2006, as stated in Itawi, 2011). In addition to the technical drawings of a P-1 centrifuge, a nuclear technology used to enrich uranium that Dr. Abdul Qadeer Khan provided to Iran in 1985 ,China also entered the Iranian nuclear scene in 1985. A bilateral deal with Iran was signed, which included the training of

fifteen Iranian nuclear engineers in China to develop and operate nuclear reactors (Rowberry, 2016).

However, Rastbeen (2007, as stated in Itawi, 2011) noted that contrary to popular belief, Western assistance to Iran in the nuclear industry continued after the revolution, although indirectly. Germany inked an arrangement with Argentina in 1987 to provide the latter with the uranium needed to finish Bushehr Station. The US government did the same thing under President Reagan's tenure, providing Iran with nuclear-related technology assistance via China, as did France, which was holed up behind Pakistan.

1.1.2.3. Intense Rush phase (1989 2000's)

This phase launched with the death of Ayatollah Ruhollah Khomeini along with the arrival of Iranian President Ali Akbar Hashemi Rafsanjani and his takeover of power in August 1989, the man who brought life to the nuclear project when he was a Speaker of the Parliament. President Rafsanjani's rule saw an intense surge in Iranian efforts toward its nuclear program, with Iran allocating about 1.1 billion dollars from its 1992 budget for the energy industry and about 160 Iranian technicians graduating from the College of Nuclear Energy in Bushehr. Moreover, more than three uranium milling plants were opened in Tehran in June 1995, according to the official Iranian radio, to join the service in addition to the Safand region's existing facilities. Iran reportedly developed the ability to produce uranium hexafluoride gas in March of the same year (Al-Rawi, 2006, as stated in Itawi, 2011).

Also, in this phase, Iran sought assistance not from the west but from the east, which is mainly Russia and China. After years of looking for a source in the West to finish her first nuclear power plant, Iran sought assistance from the Soviet Union and subsequently Russia. In March 1990, she signed her first contract with the Soviet Union on the Bushehr project. The arrangement called for Moscow to complete the Bushehr project to construct two more reactors in Iran, but financial issues caused the deal to fall through. However, in 1995, Iran and Russia

agreed to complete the Bushehr reactors, which could produce up to 180 kg of plutonium per year in their spent fuel, and to supply a 1000 megawatt thermal light-water research reactors, and training for around 20 Iranian nuclear specialists every year. Iran and Russia have agreed to debate the establishment of a gas centrifuge uranium enrichment plant in Iran, which was met with strong opposition from the United States (Ezgi, 2011).

Conversely, Iran's nuclear capabilities were augmented by China's collaboration in this phase too. Back in 1991, China, a non-signatory of the Nuclear Nonproliferation Treaty, secretly supplied Iran with a significant amount of uranium hexafluoride, or "yellowcake," a substance used for enrichment purposes. The shipment included 500 kilograms of uranium tetrafluoride and 400 kilograms of uranium dioxide, which were not declared to IAEA. From 1992 to 1995, the Chinese provided the biggest nuclear research facility in Iran, known as the Esfahan nuclear technology center, with two subcritical reactors. These include a miniature reactor with 27 kilowatts of thermal capacity and a heavy water reactor that operates at zero power (Rowberry, 2016).

Although the country had made significant advancements in nuclear energy, these were kept confidential until 2002. Ali Reza Jafarzadeh, a member of the People's Mojahedin Organization of Iran, which is an opposition group, and also a part of the National Council of Resistance of Iran in exile, revealed the existence of two nuclear facilities in Iran in August 2002. These undisclosed facilities were for uranium enrichment in Natanz and heavy water in Arak. As a result, the IAEA intervened in the matter by visiting Iran and inspecting both facilities (Ezgi, 2011).

The scrutiny of Iran's nuclear facilities has commenced vigorously. Dr. Mohammad El Baradei, the head of the IAEA, visited Iran in late February, with a group of inspectors. The team of inspectors identified a breach of the nuclear non-proliferation treaty that had been signed by Tehran during the inspection. El Baradei was surprised by the significant advancements Iran had made in their program (Ezgi, 2011). A preliminary report was released in July, and a follow-

up study was released on August 26. On September 12, 2003, the IAEA issued a deadline to Iran, demanding that it provide all information of its nuclear programs by October 31, 2003 (*Iran's Nuclear Program*, n.d.).

1.2 . Motivations for Iran's Pursuit of Nuclear Weapons Development

Normally, countries acquire nuclear weapons for one of three reasons: "to protect themselves against an external security threat, to satisfy the parochial interests of domestic actors, or to acquire an important status symbol" (Andersen, 2007, p.4). The most recent situation involving nuclear weapon projects that warrants worry is Iran's efforts to continue its development of a nuclear program despite repeated requests from the United Nations to stop (Andersen, 2007). Motives behind states' decisions about whether to have nuclear weapons or not are a major concern among different political theorists and academics. So that, they created several theories in order to fit with different factors in the states (Kanat, 2017).

History has shown that Iran has spent time, money, and resources in order to produce nuclear weapons (Da Cruz, 2020). In 1968, Iran signed the Nuclear Non-Proliferation Treaty and two years later affirmed it, on the condition that it was allowed to keep the reactor and use it for peaceful purposes (*US-Iran relations: A brief history*, 2020). After that, in 2002, US President George W. Bush indicted Iran for having a secret program to produce nuclear weapons. As Iran is a member of the Nuclear Non-Proliferation Treaty, the treaty's provisions are violated by any efforts to establish a nuclear weapons program, and the United Nations may take diplomatic or military action as a result (Andersen, 2007). Given that ambition never materializes in the absence of a motivating factor, what drove Iran to continue its pursuit of the nuclear weapon despite the perilous circumstances and numerous challenges it encountered on the way to weaponization? Iran's decision to acquire nuclear weapons was therefore influenced by a number of factors, such as Scott Sagan's Three Models, security concerns, national security priorities, and Iranian interests.

1.2.1. Scott Sagan’s Three Models in Three Levels of Analysis

John M. Deutch's argument that states pursue nuclear weapons to improve national security is challenged by Scott Sagan, who examines three theoretical frameworks called the models (Deutch, n.d, as cited in Kanat, 2017). The security model states that any state that wants to preserve its national security must balance any rival state that has nuclear weapons by gaining a nuclear deterrent for itself. Nuclear weapons are seen as powerful sources of security, and the behavior of states toward nuclear power is in direct proportion to the existence of threats. Nuclear restraint emerges due to the lack of an external military threat, and states can prefer to maintain a nonnuclear posture when they find themselves a nuclear ally to take advantage of its nuclear deterrent (Kanat, 2017).

Kanat (2017) stated that The domestic politics model, a second model, concentrates on domestic actors that have a direct effect on state nuclear proliferation behavior. Governments occasionally fail to make choices on their own; other parties can have an impact on whether a state decides to acquire nuclear weapons or not. Sagan thinks about three types of organizations—military organizations, state nuclear establishments, or political figures—that can influence the development of nuclear capacity. Domestic players must be considered when deciding whether to purchase nuclear weapons. They can advocate for increased military spending or spread perceptions of potential threats by allying with politicians .

The third and ultimate model is the norms model, which emphasizes norms that are useful in influencing a state's nuclear behavior. Sagan considers things from a social angle and gains from the notions put forth by new institutionalism. This model and new institutionalist scholars contend that while actors may have interests, these interests are influenced by the social roles that they are expected to perform. There are some modernist symbols that are the product of shared ideals; as a result, flags, Olympic teams, airlines, and other symbols serve the same purpose as military organizations and weaponry. Sagan uses airlines as an illustration because they are thought to be an essential component of a modern state. The author emphasizes "nuclear

symbolism" in this approach. Arguments from sociologists emphasize the potential that nuclear weapons programs serve symbolic functions that reflect leaders' views on proper and contemporary behavior. Additionally, it should be remembered that norms are disseminated not just through ideas but also through the use of force and coercion. Nuclear nonproliferation norms, which have evolved over time to take on new meanings, cannot be established without the backing of the most powerful nations in the world (Kanat, 2017).

1.2.2 . Security Concerns , National Security Priorities, and Iranian Interests

The connection between Iran and the West and the Middle East, the economic crisis in Iran, and the development of nuclear technology all reflect security concerns, national security Priorities, and Iranian interests.

1.2.2.1. Iran and Israel's Relationship

The inimical relations between Iran and the nuclear-armed Israel drive Tehran toward the atomic option. For confirmation, the ongoing invocation of the Israeli threat was revealed by a cursory examination of the clerical oligarchs' rhetoric. In fact, for a generation of Iranian clerics, Israel remains an illegal state that practices corruption in different forms, usurping Islamic lands and acting as an agent of US imperialism in the Middle East. Such ideological animus has led Iran to support terrorist organizations and Palestinian rejectionist forces plotting against Israel. However, both Iran and the Jewish state have been careful to regulate their low-intensity conflict and have assiduously avoided direct military confrontation. According to the Islamic Republic, Israel may be an ideological affront and a civilizational challenge, but it is not an existential threat mandating the provision of nuclear weapons (Takeyh, 2004).

Israel and Iran's connections, which throughout the period of the Shah's rule were founded on a security alliance, were fundamentally altered by the Islamic Revolution of 1979.

Prior to the start of the conflict with Iraq, Iranian nuclear concerns were limited to Israel's non-membership in the NPT and Iraq's violations of the NPT. Israel's exclusion from the NPT served as a bulwark against criticism of Iran's nuclear program. Iranian officials emphasized the use of unfair comparisons between the nuclear programs of Israel and India, even though neither country has ever broken an NPT promise due to its longstanding non-membership (Kanat, 2017).

1.2.2.2. The Iran-Iraq War and The Gulf War

The dramatic memories of the war and the chemical attack have led to cries of "never again," as shown in figures 1.3 and 1.4 below. This war motivated Ayatollah Khomeini to back off his fatwa regarding the prohibition of nuclear weapons because he thinks that nuclear weapons contradict Islamic religion. As the debate regarding the evanescence of Iraqi weapons of mass destruction continues, another proliferation crisis looms in the Middle East (Takeyh, 2004). After this war, Iran realized that the world is dangerous and it should be ready for any technological development in terms of military. Iran despairs of the support of international organizations and finds itself lonesome in this dangerous world (Kanat, 2017). Under the guise of a civilian research program, Iran is gradually accumulating the technology and the expertise necessary for the construction of nuclear weapons. Iran’s accelerated path to the bomb will confront the next US administration with another difficult challenge in the Persian Gulf (Takeyh, 2004).

Figure1. 3.

Iran- Iraq war.

Note: Retrieved from *Alfred Yaghobzadeh Photography | The Iran–Iraq War*. (n.d). Alfred Yaghobzadeh Photography. http://www.alfredyaghobzadehphoto.com/m/-/galleries/gallery/iran/the-iraniraq-war/-/medias/f2c2f364-ba72-448e-8554-6d0befb9ee71-the-iran-iraq-war

Figure 1.4

The Use of Chemical Weapons by Iraqi Forces Against The Iranian People

Note: Retrieved from Jadaliyya. (2017). The Forgotten War. *Jadaliyya* https://www.jadaliyya.com/Details/23513

Kanat (2017) commented that The Gulf War was a significant catalyst in Iran's understanding of the value of contemporary weapons systems. Coalition troops led by the United States accomplished what Iran could not in eight years. In this conflict, the US used Patriot missiles for the first time (see figure 1.5). Iranian leaders learned from this conflict that attacking the United States militarily would be foolish and that they should take precautions against any potential risk that this threat—the United States—might pose.

Figure 1.5

The United States Army First Cavalry's Multiple Launch Rocket System firing a rocket during the gulf war.

Note. Retrieved from Ismay, J. (2020, January 15). A Myth That Won't Die About a Gulf War Weapon, and Why It Matters. *The New York Times*. https://www.nytimes.com/2020/01/15/magazine/steel-rain-army-artillery.html

The precise security reasons for Iran to create nuclear capability are not urgent or overpowering. As one can see, nuclear weapons would be of little use in dealing with the mujahedin's local security danger, which is more time-sensitive. For its more pressing security worries, like Iraq and the United States, it would only be marginally significant. Therefore, the desire for nuclear weapons is primarily driven by "political" as opposed to "security" reasons; the desire for global status is more significant than any particular national security danger. The need for a nuclear arsenal is thus made plain to be driven less by a sense of urgency or necessity and

more by ambition, free will, and historical lessons from the Gulf War and the eight-year war against Iraq (Hanna, n.d.).

1.2.2.3. The Economic Crisis of Iran

Given Iran's dire macroeconomic condition, the economic component of this argument should not be discounted. The prevailing clerics are unable to reverse the command economy's stagnation in Iran, which is characterized by double-digit inflation and jobless rates, an overburdened bureaucracy, deteriorating industries, and onerous subsidies. The Iranian youth surge, which could present the Islamic Republic with a volatile political issue, is even more urgent. In Iran today, for every million job seekers who join the market each year, 400,000 new jobs are created. Overlying all of this is the clerical leadership's reluctance to implement fundamental economic reforms out of concern for the upheaval and public opposition that such initiatives may at first bring about. By luring in foreign money, the regime hopes to solve its numerous issues (Takeyh, 2004). According to Iran's Ministry of Economy and Finance, the country requires about $17 billion in foreign investments every year to deal with all of its issues . The need for caution in pursuing the nuclear option is reinforced by the dire state of Iran's economy as an Iranian state that needs significant international assistance. Iran cannot afford to be isolated from its trading partners due to the dire condition of its economy, the need for cautious investment, and multilateral sanctions (as cited in Takeyh, 2004).

There would be two main obstacles in the way of a conventional war between Iran and the United States. First off, equipping the military with expensive, modern weapons is not inexpensive, especially given the Iranian economy ,which encounter economic instability as seen in figure 1.6 .The government is unable to put aside a sizable budget to supply state-of-the-art equipment to its armed forces. Furthermore, despite the fact that their soldiers are skilled professionals who can keep up with the United States, Iranian forces lack the manpower to properly instruct their troops on how to use these brand-new, high-tech modern weapons of war. Bringing in unqualified soldiers is a big issue for a country like Iran (Kanat, 2017).

The Iranian government has also consistently worried about the potential economic instability of invasions from bordering countries, particularly those that are disintegrating, like Iraq and Afghanistan.(Hanna, n.d). As stated by Ahmed Hashim, "Iran's recent economic problems are the greatest threat to its national security and the first priority for the Tehran leadership" (as cited in Hanna, n.d).

Figure 1.6

Development of the nominal exchange rate between the U.S. dollar and Iranian rial.

Note. Retrieved from Ghodsi, M., & Fathollah-Nejad, A. (2020, November 30). The Geopolitical Roots of Iran's Economic Crisis. *Carnegie Endowment for International Peace*. https://carnegieendowment.org/sada/83350

1.2.2.4. Iran's Relations with the United States

The history of the relationship between Iran and the United States was hostile after the overthrow of the Shah in the 1979 Iranian revolution. This relationship had an impact on Iran's national security options. In contrast, the United States has a strong partnership with Israel and Saudi Arabia in which they are under the protection of the USA, which provides them with military aid to achieve balance and stability in the Middle East. When the United States revealed

that Iran revamped its nuclear weapons program for national security purposes, the tension between the two nations increased. The nuclear power of Iran would be a threat to the United States and Israel's security and destabilize the balance of power in the region (Marline, 2020,).

Nuclear weapons spreading to the Middle East could be an imminent risk to both international stability and national security in the United States (Hanna, n.d) Furthermore, Iran still considers the American presence in the Persian Gulf region as a possible security risk that should be removed. The Iranian government is aware that the United States' presence in the area is a security concern with strategic relevance to the realization of its international goals and objectives, even though this threat is not immediately present (Hanna, n.d).

1.2.2.5. Implementation of Nuclear Technology

President Khatami rejected Iran's intention to build a nuclear weapon, and Foreign Minister Kamal Kharrazi also denied that when he said on October 5, 1997:

We are certainly not working to develop a nuclear weapon, because we do not believe in nuclear weapons we believe in and seek to support the idea of establishing an East and Middle East free of nuclear weapons and other weapons of mass destruction. But we are interested in developing our own nuclear technology. We need to diversify our energy sources. In several decades, our oil and gas reserves will run out and we will need other sources of energy... There are other uses of nuclear energy in medicine and agriculture. Our situation in Iran is no different from the American situation. The United States has large reserves of oil and gas and has built several nuclear power plants. (n.p.)

Kharrazi (1997) emphasized that "There is no harm in developing nuclear technology, especially if it is for peaceful purposes" (as cited in *Iranian Nuclear Motives and International Efforts to Contain It*, 2005, n.p.).

Iran wants to construct nuclear power plants to meet 20% of its energy requirements. The ambitious Iranian program is seen by the West as posing a double threat because it not only makes it possible for Iran to obtain plutonium but also gives it access to the knowledge needed to build its own nuclear reactors, opening the door for Iran to evade any restrictions placed on the international market to stop the spread of nuclear technology. Iran would be on the verge of developing a nuclear weapon if such technological advancements became available to it, particularly given its political aspirations (*Iranian Nuclear Motives And International Efforts To Contain It*, 2005).

Many believe that cultural, nationalistic, and hegemonic factors led Iran's nuclear program to the current stage, along with national pride and the wish to dominate the region. When Iranian leaders discuss the growth of the nation and ambitions to become a global force, they frequently make reference to technological progress. They also draw correlations between Iran's cultural heritage, civilization, and current technological aspirations. Iran's long-standing culture and civilization are what make its nuclear program a symbol of its advancement and claim to be an international power (Kanat, 2017).

Conclusion

Iran's nuclear program under the Shah rule saw the light of its existence in reality and its gradual growth with the help of the west until the Islamic revolution landed in the country, where the nuclear program ambition turned into another way. The program went through three stages during the Islamic Revolution: hibernation and suspension, recuperation during the reign of President Ali Khamenei, and intense rush with President Ali Akbar Hashemi Rafsanjani's initiatives. This program became known to the public after the election of President Mohammad

Khatami in 2002. The United States focuses on Iran's program in order to prevent it from shaping risk in the Middle East, while the Iranian government claims that it is for peaceful purposes and scientific studies. The reasons for Iran's motivation to produce nuclear weapons include the security model, domestic politics, and norms model. The most important details in this text are the security concerns, national security priorities, and Iranian interests that led Iran to support the nuclear program. These include the hostile relationship between Iran and Israel, the Iraqi chemical attack against Iranian civilians, the Gulf War, the terrible status of Iran's economy, Iranian-American relations, and the desire to establish nuclear technology to make various energy sources and use it in medicine, agriculture, and to be a strong force in the region and the world. These are the main reasons behind Iran's desire to build a nuclear arsenal.

CHAPTER TWO

The America's Responses and Reactions

Introduction

Since 2003, the US has attacked Iran for violating the Treaty on the Non-Proliferation of Nuclear Weapons. Efforts have been made to prevent Iran from acquiring nuclear capabilities. The initiative aims to prevent Iran from obtaining nuclear weapons, as they could pose a threat to allied nations and nearby allies in the Middle East, such as Israel, which faces great danger from Iran due to their frequent statements about eliminating Israel. Yet this threat posed by a nuclear-armed Iran would raise the risk of a regional arms race, which would be ended by the fact of nuclear proliferation in the region. Therefore, this could destabilize an already unstable and significant area, which is of great importance to the United States and the global community to uphold peace and stability in the Middle East. Despite the fact that the US has transitioned into a net oil exporting country, its economy is still highly reliant on the stability of global oil markets. In addition, Iran is a member of the NPT, which limits nuclear weapons to the US, Russia, China, France, and Great Britain. Nuclear arms exist in Israel, Pakistan, India, and North Korea, as well as the US. These countries' choice not to sign the NPT is deliberate. Allowing Iran to have nuclear weapons would harm the NPT and global efforts against nuclear proliferation. Hence, the U.S., as a world leader, has responded and reacted with economic sanctions and diplomatic engagement against Iran's nuclear program. Nonetheless, there was a debate among the policymakers regarding which approach has been effective in restraint Iran's nuclear ambitions. This chapter conducts an analysis of the economic sanctions approach and the diplomatic engagement approach to curbing Iran's nuclear ambitions, along with a comparative assessment of the two approaches .

2.1 . Economic Sanctions Approach

Instead of resorting to military actions and hostilities, nations can utilize economic sanctions as a political instrument for modifying or impacting the conduct of other nations. One

way that states exert their political influence over other states is by leveraging their economic power. Typically, when imposing sanctions, the financial interactions between the recipient and the issuer are either restricted or completely halted, alongside demands or prerequisites, until the issuer is satisfied with the reforms made by the recipient (Hufbauer et al., 2007,as cited in Blad, 2019, p. 10). Economic sanctions have a lengthy history that dates back to Greek city states.1 Since World War II, they have become more common, frequently being used by the United Nations, regional groupings, and individual countries, including the United States (Carter & Farha, 2013).

Also, economic sanctions are defined, according to Lowenfeld (2002), as "measures of an economic—as contrasted with diplomatic or military—character taken to express disapproval of the acts of the target or to induce that [target] to change some policy or practices or even its governmental structure" (as cited in Barry & Carter, 2011) . Moreover, according to Galtung (1967), sanctions involve a group of international actors taking action against one or more others, with the intention of either punishing them by depriving them of something valuable, or compelling them to conform to certain norms deemed important by the initiators. Nevertheless, contemporary academics tend to conceptualize sanctions in a more simple manner. In agreement with Peksen and Drury (2010) and Hufbauer et al. (2007):

sanctions initiated by one or more international actors (the senders) against one or more others (the receivers) with either or both of two purposes: to punish the receivers by depriving them of some value and/or to make the receivers comply with certain norms the senders deem important sanctions are generally known as a form of economic pressure imposed on a designated party to compel them to comply with the requests of the sender. (as cited in Blad, 2019, p. 10)

Moreover, the concept of 'economic sanctions' is closely related and coincides to terms like boycott and embargo. In some situations, economic sanctions are compared to

blockades and economic combat. Nonetheless, when compared to these methods, economic sanctions are deemed to be relatively less severe. This is due to the fact that they are typically employed during times of peace to reconcile disagreements without resorting to military conflict, unlike economic warfare which tends to accompany traditional warfare (Blad, 2019). In broad terms, economic sanctions may be categorized as follows: "unilateral sanctions" implemented by a solitary state, "multilateral sanctions" enforced by a voluntary coalition comprising nations with similar perspectives, and "international sanctions" authorized by UN Security Council resolutions with extensive acceptance from the global community (Ezzati, 2016).

Among these three options, the sanctions that stem from UN Security Council resolutions are generally regarded as the optimal course of action in terms of efficacy. It is mandatory for United Nations member states to comply with the sanctions resolutions passed by the UN Security Council. Subjected to economic pressures by the global community, the state in question would inevitably be compelled to surrender in due course .Yet, UN Security Council sanctions are frequently "diluted" as they are impacted by the priorities of the UN Security Council's 15 member states. Because the Council requires time for lengthy talks, penalties are frequently ineffective because the target country or group has already adopted countermeasures such as concealing assets or resources. Hence, the enactment of UN Security Council sanctions resolutions has recently reduced because of the conflict involving the United States, China, and Russia (Sugita, n.d.).

Realizing the limits of the UN Security Council, Sugita (n.d.) affirmed that the American government started applying unilateral sanctions more frequently around the turn of the century. These are not barriers to trade designed to halt the flow of products, instead they are financial penalties designed to prohibit transactions in US dollars and the use of the US financial system. Financial sanctions imposed unilaterally by the United States apply extraterritorially on foreign corporations. Because many countries find it impossible to ignore them, they claim

broader participation and, finally, international sanctions have emerged as a key tool in US foreign strategy.

Financial sanctions target the movement of funds and other forms of value to and from a specific country, corporation, individual, or other entity. These sanctions can have a broad impact because they cannot only freeze financial assets and restrict or limit financial activities, but they can also disrupt trade by making it impossible to pay for the export or import of products and services. Financial sanctions are frequently used in conjunction with trade and other penalties to enhance their impact (Carter & Farha, 2013).

A significant amount of a global currency, such as the US dollar, according to Sugita (n.d.), passes through financial institutions such as banks, and the channels are limited. Keeping a tight watch on banks makes tracking straightforward. Because banks are government-licensed businesses, they generally accept government rules. In the United States, financial sanctions involve hefty fines for violators, who will be prevented from using US currency and removed from the US financial system. Banks and other financial institutions which support violators will also face punishment. Without the capacity to use US dollars, the violator will be unable to conduct business around the world. As a result, breaking US financial sanctions is referred to as receiving a "death sentence".

The aims of economic sanctions, containing financial sanctions, are as follows: (1) traditional economic sanctions to decrease the financial power of a "enemy state" in the event of international disputes and confrontation, (2), sanctions from the standpoint of human rights and humanity as a whole such as those against South Africa's apartheid policy (3) the deterrence of the creation and spread of nuclear arms sanctions from the standpoint of human rights and humanity as a whole such as those against South Africa's apartheid policy, (4) the fight against terrorism and (5) penalty for violations of international law (Sugita, n.d.).

2.1.1 . Brief History of the US Economic Sanctions Against Iran's Nuclear Program

The United States deploys economic sanctions programs through the US Department of Treasury's Office of Foreign Assets Control ("OFAC") for a number of purposes, including diplomatic, economic, and humanitarian goals, in addition to concerns related to national security. In this regard, the OFAC oversees a complicated sanctions framework against Iran. Iran sanctions prevent almost all either direct or indirect transactions involving Iran, the Iranian government, persons who typically reside in Iran, and entities located in Iran or developed under Iranian law, with particular emphasis on the Iranian Revolutionary Guard Corps (IRGC) (Yildiz, 2019).

2.1.1.1. The U.S Economic Sanctions (1979- 2006)

American sanctions against Iran were initially imposed in response to the detainment of American diplomats in Tehran in 1979. An executive order was issued by President Jimmy Carter that authorized the confiscation of Iranian assets in the United States. As a result, in April 1980, the US stopped diplomatic ties with Iran (*Photos: The Troubled History of Iran-US Relations*, 2022). Later on, President Ronald Reagan categorized Iran as a State Sponsor of Terrorism due to the assertion that the conditions in Iran pose a significant and out-of-the-ordinary risk to the United States' economy, foreign policy, and national security. This decision came after an assault perpetrated by Hizballah, which was supported by Iran, in 1983 resulting in the loss of 241 Marine Corps personnel stationed in Beirut. The act of being labeled as a state sponsor of terrorism leads to instant prohibitions on entry to the United States. Other provisions include the limitation on the sale of dual-use items and financial aid (Samore, 2015).

Due to rising apprehension regarding Iran's endeavors to acquire weapons of mass destruction and endorse terrorism in the early 1990's (Photos: The Troubled History of Iran-US Relations, 2022), In conformity with Samore (2015) president Bill Clinton enforced two executive orders in 1995, prohibiting any form of American commerce or investment with Iran. The subsequent year, he approved the Iran and Libya Sanctions Act that mandated penalties on companies making investments beyond a specific monetary limit in Iran's energy industry (by

2006, the Libyan sanctions were lifted). The Iran Sanctions Act was categorized as a "secondary" sanction, which implies that it affected businesses not operating in the United States. Companies faced sanctions if they opted to engage in transactions with Iran's energy sector, as they would consequently be prohibited from engaging in business activities with the United States. European nations perceived these sanctions as having jurisdiction beyond their borders, prompting the European Union to warn of their intention to dispute the sanctions' validity at the World Trade Organization. After conceding, the United States made the decision to withdraw the energy sanctions with the condition that Europe agrees to work more effectively to prevent Iran from producing weapons of mass destruction.

Following the tragic event of the 9/11 terrorist attacks, President George Bush includes Iran in the "axis of evil" alongside Iraq and North Korea in his State of the Union speech. The words of the speech elicit anger and discontent among the people of Iran (*US-Iran relations: A brief history*, 2020). Hence, according to Samore (2015) President George W. signed executive orders and legislation, where he granted further powers to pursue individuals or organizations involved in sponsoring terrorism or engaging in money laundering activities.

After the revelation in August 2002 by the Iranian dissident organization "the National Council of Resistance of Iran (NCRI)" about Iran's acquisition of secret nuclear facilities without required notification to the IAEA, the international community became increasingly concerned about Iran's continued development of nuclear weapons (Sugita, n.d.). Based on Samore (2015), a coordinated worldwide attempt to impose sanctions would be postponed until the nuclear development talks between Europe and Iran concluded badly. On the other hand, the United States imposed financial penalties on Iran, believing that it would be most effective to halt the country's crude oil exports, which accounted for half of its national income. Sugita (n.d.) claimed that crude oil is traded in US dollars on the international market. As a result, as long as US dollar payment for Iran-related transactions is absent, Iran will be unable to

export crude oil. In essence, this phase is defined by the United States' unilateral sanctions against Iran .

2.1.1.2. The U.S. Economic Sanctions (2006- Present)

The US Department of Treasury made a decision in September 2006 to prohibit non-Iranian banks from utilizing US dollars in order to settle transactions with Iran. Due to the financial sanctions imposed by the US, not only were Iranian banks prevented from utilizing the US financial system, but non-Iranian entities were also forbidden from engaging in US dollar transactions with Iran. Consequently, Iranian crude oil cannot be bought by the world using US currency any longer. Not all currencies, such as Euros, British Pounds, Japanese Yens, or RMB, are as reliable as US dollars when it comes to settlement, and their availability may also vary worldwide. Also, US urged the Financial Action Task Force on Money Laundering (FATF) with developed countries to monitor Iran's remittances linked to money laundering, weapons of mass destruction, and terrorism. US also conducted cyber-attacks on Iran's uranium enrichment facilities, delaying its nuclear program by a half to two years (Sugita, n.d.).

In January 2009 Barack Obama became the U.S. president, he dedicated himself to establish adoption of the UN Security Council Resolution 1929 which transformed the sanctions from independent to financial measures approved by the international community. Moreover, in accordance with Article 311 of the Patriot Act, the United States labeled the Central Bank of Iran as a significant concern for money laundering in January of 2012. The application of the Article was first seen when Banco Delta Asia, which had been involved in business dealings with North Korea, was designated in September 2005. This action struggled to keep Iran in the global financial network. In addition, The Obama government issued a directive asking nations to select either the United States or Iran. In 2011, the EU put a halt to its oil imports from Iran, and the following year, Japan exited a significant oil field initiative and decreased its oil imports by 80%.

The Society for Worldwide Interbank Financial Telecommunication (SWIFT) has ceased to allow any financial transfers linked to Iran (Sugita, n.d.).

Due to the imposition of sanctions and its severe effects on the Iranian economy, based on a survey, 60% of Iranians would be willing to forego their nuclear program if the sanctions were lifted. In 2013 Rouhani was elected by a significant majority in 2013 and opted for Zarif as the foreign minister. He held clandestine discussions with the United States regarding nuclear concerns, in light of Iran's deteriorating economy (Sugita, n.d.). As a result, in a strategic move, US leader Barack Obama consented to engaging in discussions involving multiple nations including Iran, which ultimately led to the signing of the 2015 nuclear pact aimed at curtailing Iran's nuclear pursuits in exchange for relaxed economic sanctions. However, this pact is considered the first diplomatic engagement between the U.S. and Iran in concern of its nuclear program (*Photos: The Troubled History of Iran-US Relations*, 2022).

In May of 2018, President Donald Trump chose to withdraw from the nuclear agreement and subsequently repose economic sanctions on Iran. Furthermore, he made it clear that he would also consider imposing the same consequences on any nations or companies that continue to acquire Iran's oil. The Iranian economy is currently experiencing a significant decline into recession. Moreover, The Trump administration imposed new financial penalties on Rouhani, Zarif, and Iran's Central Bank. As a result, Iran is facing unrelenting sanctions, ranging from the head of state through armed forces and government officials to the top diplomat. The present broad restrictions are analogous to those imposed on Japan and Germany during World War II (Sugita, n.d.). In May 2019, the relationship between the US and Iran deteriorated due to the U.S. imposing stricter sanctions aimed at limiting Iran's oil exports (*US-Iran relations: A brief history*, 2020).

2.1.2 . Impact of Economic Sanctions on Iran

The most severe sanctions imposed on Iran have targeted its energy and finance sectors. However, there is also impact on the political and humanitarian side in Iran .

2.1.2.1. The Economic Impact

Reduced oil revenues: Heeley and Sahay (2013) reported that Iranian oil income fell substantially in 2012 with revenues for the first 11 months of 2012 falling by 30% (measured in real dollars) from the previous year's total, and Iran's oil minister predicting a 40% reduction in petroleum exports in January 2013. Because American and European sanctions have reduced Iranian oil shipments from an average of 2.5 million barrels per day in 2011 to 1.1 million barrels per day. Since 1995, American corporations have been prohibited from importing or assisting transactions involving Iranian oil, and the EU enacted an oil embargo in 2012. Currently, the United States allows only China, India, Japan, South Korea, Taiwan, and Turkey to acquire Iranian oil at a fixed price (Samore, 2015).

Currency depreciation and price growth: concerns over declining oil earnings have resulted in a depreciation of the Iranian rial, partly because rial holders believe that the regime will shortly run out of reserves. The BBC News (2012) reported that in just one week, the Iranian rial has dropped by 25% ;hence, according to agencies citing currency exchange sites in the country, it has plunged to as low as 35,000 to the dollar. In conformity with reports, the currency has lost 80% of its value since the end of 2011. Prices increased by 4.5% per month for the next two months, however the third month witnessed a more modest 2.5% increase (Salehi, 2013).

Limiting access to critical supplies: Sanctions have rendered importing critical ingredients for Iran's ballistic missile program, such as aluminum powder, problematic. In a comparable way sanctions may have led to a slowing of uranium enrichment operations, albeit they are unlikely to be the only culprit. Yet, Alireza Nader, International Policy Analyst declared "Iran’s closed economic system…has allowed Khamenei and the conservatives to pursue the nuclear program largely unfettered. If anything, sanctions may have the benefit of strengthening

Khamenei's claim to legitimacy– resistance against a "bullying" United States." (Heeley&Sahay, 2013).

2.1.2.2. The Humanitarian Impact

Humanitarians blame US financial restrictions for damaging Iran's medical system, which is under attack from COVID-19. The US has declared that it has exempted a wide range of humanitarian commodities from its sanctions list, including medications and medical devices, and that it is ready to give humanitarian help to Iran. Iran has rejected the gestures. During the pandemic, Iranian Ambassador to Japan Morteza Rahmani stated at a news conference in Tokyo that Iran had not received medical supplies and that US sanctions are medical terrorism. The Iranian envoy appears to have used the occasion to tell the world that US sanctions are inhumane (Sugita, n.d.). Moreover, Heeley and Sahay (2013) asserted that "Humanitarian effects on Iranian civilians " even though US legislation nominally allows medicine and food against restrictions in order to reduce the effect on innocent Iranians, the increased application of financial sanctions has discouraged exporters from shipping to Iran since they are having problems being paid and because the licensing requirements of the US Treasury Department are too onerous ;also, several news sites have highlighted incidents of Iranian civilians struggling as a result of sanctions; for example, patients with cancer have reportedly had difficulty obtaining medicine normally delivered from Western nations.

2.1.2.3. The Political Impact

Some suggest that sanctions are likely to strengthen the current system in theocratic regimes such as Iran, which employs increased emphasis on religion to compensate for economic woes (Naghavi & Pignataro, 2015 as cited in Shahin, 2021). Also, Heeley and Sahay (2013) suggested that economic sanction inadvertently helping the government and its allies ,and lowering possible Iranian allies as sanctions could damage US interests in the longer term by weakening the economic and political influence of more moderate, pro-American Iranians,

reducing their ability and desire to fight the government from inside, and possibly even leading them to blame the US for their economic woes. Although Naghavi and Pignataro (2015) acknowledge that some regimes may shift towards moderation instead of emphasizing religious ideology when faced with dire situations and significant revenue losses, they argue that sanctions actually stabilize these targeted regimes and keep them in a favorable position (as cited in Shahin, 2021).

2.2. Diplomacy Engagement Approach

The definition of diplomacy is the art and practice of negotiating and conducting dialogues through various means between states, groups, or individuals to have an impact on the decisions, events, and behaviors of the international system. It is done to prevent war or bloodshed between nations and to advance world peace (Ziegler, 2023).

Abdurahmanli (2021) claims that globalization has led to the differentiation of diplomacy in several domains based on specific traits, such as Mediation Diplomacy, Multilateral Diplomacy, Dual Diplomacy, Public Diplomacy, Civil Diplomacy, Summit Diplomacy, Conference Diplomacy, Parliamentary Diplomacy, Shuttle Diplomacy, Social Diplomacy, Nuclear Diplomacy, Preventive Diplomacy, Silent Diplomacy, Cultural Diplomacy, Environmental Diplomacy, Humanitarian Diplomacy, Open Diplomacy, Coercive Diplomacy, Toothless Diplomacy, Hard Diplomacy, Soft Power Diplomacy, and Cross Diplomacy.

The word "engagement" has been increasingly popular in diplomatic circles in recent years to refer to a range of outreach and public diplomacy initiatives with foreign audiences. The term is nearly always used to refer to a variety of methods used to persuade or sway foreign audiences in the government, military, academia, business, and think tanks (wallin, 2013).

In 2009, Dr. Nick Cull commented about the sudden preference for the term "engagement" within these circles: "The term engagement has much to command it. It not public

diplomacy, though. Since it is already employed in slightly different contexts by both the military and the marketing industry, it can be assumed that it will be well received by both of those audiences. It is already popular with NGOs and other experts in international communication" (as cited in, Wallin, 2013).

Maller (2010) describes diplomatic engagement as an enabler rather than a strategy. Sanctions at the diplomatic level are an expensive foreign policy tool. Despite being politically acceptable and normatively fulfilling, the United States may suffer short- and long-term losses in intelligence, communications, and the capacity to more successfully employ coercive measures if it continues to maintain a diplomatic distance from problem states today. As the body of data mounts, it is essential that the American public understand that such engagement is key to U.S. interests in addition to policymakers understanding all the advantages of diplomacy and the effects of maintaining diplomatic sanctions.

2.2.1. Brief History of U.S. Diplomatic Efforts Towards the Iranian Nuclear Program

The Joint Comprehensive Plan of Action (JCPOA Agreement) is the most significant diplomatic achievement of US efforts; nevertheless, there are other relationships that demonstrate diplomatic acts and events that occurred prior to the JCOPA and the Breakaway.

2.2.1.1. Prior to the JCPOA Agreement

Iran informs the IAEA on November 14th, 2004 that it will cease enrichment-related activities as a result of talks with France, Germany, and the UK. The so-called Paris Agreement stated that Iran will continue the suspension throughout the four-country talks. The IAEA Board of Governors decided against referring Tehran to the UN Security Council as a result (*Timeline of Nuclear Diplomacy With Iran*, n.d.).

The United States said in April 2009 that it would fully participate in the P5+1 discussions with Iran following a review of its Iran policy by the new Obama administration, reversing the previous administration's position that Iran must first comply with UN demands

(*Timeline of Iran's Nuclear Activities*, 2021)**.** Iran holds presidential elections in June 2009. Mahmoud Ahmadinejad, the incumbent, is proclaimed the victor despite numerous evidence of election fraud. This slows diplomatic efforts to handle Iran's nuclear program and ignites weeks of protests inside Iran (*Timeline of Nuclear Diplomacy With Iran*, n.d.).

Time line of Iran's nuclear activities (2021) declares that in a speech to the UN General Assembly in September 2012, Israeli Prime Minister Benjamin Netanyahu drew a line in the sand for an Israeli attack on Iran. According to Netanyahu, Iran will have accumulated enough uranium enriched to 20 percent (or roughly 250 kg) if it continues to do so, which will be sufficient for one bomb. The P5+1 and Iran gathered once more in Geneva on December 30 and 31, 2013, for technical discussions about the execution of the November Joint Plan of Action (*Timeline of Iran's Nuclear Activities*, 2021)**.**

Iran and the P5+1 declare on November 2014 that talks will continue since progress has been achieved on the challenging topics, and both parties now see a way forward. The parties state that their new deadlines are for a political agreement to be reached by March and for the technical annexes to be finished by June 30. From November 2013, all parties will keep up with the interim Joint Plan of Action's requirements. In addition, pledges are made by Iran and the P5+1 (*Timeline of Nuclear Diplomacy With Iran*, n.d.).

According to Pop (2020) The American and Iranian parties each brought years' worth of accumulated dissatisfaction and mistrust to the negotiating table. The P5 + 1 group of participants in the talks consisted of the United States, Russia, China, the United Kingdom, France, and Germany. Nationals of a single nation make up the P5 + 1 and EU delegations during negotiations. The process of negotiating the agreement reflects the interplay of states, each with its own agenda of stakes that affects tactics and the final result. The decision-making process for Iran's foreign policy is complicated and involves multiple centers of power. The Islamic Revolutionary Guard, which is obedient to its supreme commander, Ayatollah Ali

Khamenei, also has a significant voice in security issues in addition to the government. The complex nature of the negotiation process resulted from the participation of representatives from at least six different nations and cultures, including the US, Europe, the Middle East, and Asia.

These are the main two diplomatic strategies of negotiating that were adopted by the US toward the nuclearization of Iran :

Dual-track Diplomacy: After President Barack Obama moved into the White House, dual-track diplomacy was used from 2008 to 2012. He has expressed a willingness to engage in a conversation that "will not be advanced by threats," but rather by honor and "mutual respect" (Stein 2009, as cited in Pop, 2020).However, the plan included two crucial components. First, the diplomatic process would present the suspension of enrichment as an option rather than a requirement before engaging in confidence-building measures. Second, human rights and regional stabilization issues would not be discussed during the negotiations; they would only be concerned with the nuclear program (Pop, 2020).

The chosen leadership strategy: Between 2012 and 2015, the last negotiations took place. Coercive diplomacy was the chosen leadership strategy. Iran has promised to halt all building and uranium enrichment activities and to fully cooperate with the IAEA. E3 + 3 should instead lift the restrictions on gold, precious metals, petrochemicals, and the car sector. Concerns over Iran's heavy water reactor must be addressed in the second stage, along with engagement on a civilian nuclear program, the implementation of transparency measures, such as the supplementary program, and a thorough relaxation of all ongoing nuclear sanctions (Pop, 2020).

2.2.1.2. The JCPOA Agreement

Iran signed the Joint Comprehensive Plan of Action (JCPOA) with the United States, the United Kingdom, France, China, Russia, and Germany in July 2015, less than two years after the Rouhani administration took office (Mallus, 2018). The signatories concurred that Iran's operating uranium enrichment centrifuge count should be reduced from 19,000 to 5,060; Iran's

uranium enrichment level should be lowered to 3.67%; the storage of enriched uranium should be limited to 300 kilograms; and Iran's heavy water reactors should be modified so they cannot produce weapon-grade enriched uranium. The lifting of the global and unilateral economic and financial sanctions against Iran related to its nuclear program was jointly announced by the United Nations, the European Union, and the United States. In accordance with a decision it passed in July 2015, the UN Security Council also resolved to relax sanctions regarding Iran's nuclear program (Sugita, n.d.).

Even though the JCPOA was a historic agreement between the US and Iran, serious issues persisted. One of them is how to handle Iran's nuclear program after 2030. The JCPOA mandates that Iran's nuclear program abide by the prior constraints for a period of 10 to 15 years. As a result, Iran will be free to continue developing its nuclear capability after 2030. The JCPOA agreement does not provide a permanent ban on Iran's nuclear development. Secondly, Iran's difficulties go beyond just its nuclear program. They also include its support for terrorism, the development of ballistic missiles and other WMDs, and its backing of other Middle Eastern militia groups. Under the JCPOA deal, sanctions imposed on Iran for its nuclear program were eased, but the so-called non-nuclear penalties were not removed .The JCPOA failed to gain expected support in the US and abroad due to Iran hardliner's objection (Sugita, n.d.).

2.2.1.3. The U.S. Withdrawal from the JCPOA Agreement

Pop (2020) stated that the US has withdrawn from the JCPOA, arguing that it failed to achieve a non-nuclear Iran and delayed their goal of becoming a nuclear state. The Washington administration is delegitimizing Iran to discourage its reintegration into the international community. Early on in his presidential campaign, Donald Trump hinted that the Iranian nuclear deal would be a political flashpoint. He specifically criticized the agreement for a number of reasons, including: the short timeline; the fact that it provided a significant exemption from sanctions, which could result in sponsorship of regional groups outside of its borders; and

the agreement's failure to address Iran's ballistic missile program (Vakil and Quilliam, 2019). Iran lacks intercontinental ballistic missiles (ICBMs), which can travel over 2,900 miles, but it does possess 13 different types of short- and medium-range ballistic missiles, as well as cruise missiles. Iran rejected proposals to place restrictions on ballistic missiles during the JCPOA negotiations. Iran's ballistic missile program was subject to restrictions by UNSCR 2231, which would be lifted in 2023.

The Trump administration has urged all nations to agree to a global ban on the import of Iranian crude oil, particularly starting in May 2019. They have also reinstated sanctions against Iran. European and Japanese businesses are reluctantly complying with the US request after struggling to decide whether to support the US or Iran. On that occasion, the Trump administration made Iran comply with twelve strict demands, including the permanent termination of its nuclear program, the cessation of ballistic missile development, the release of all Americans who had been detained, the cessation of support for Shiite militias, and the cessation of its threats against its neighbors.The Iranian Supreme Leader Khamenei was the focus of financial penalties and his assets were frozen after the Trump administration designated the Iranian Revolutionary Guard Corps (IRGC), an independent elite force, as a terrorist organization. Financial sanctions were imposed on Rouhani, Zarif, and the Iranian Central Bank by the Trump administration (Sugita, n.d).

The future of this accord is difficult to predict, but one thing is for sure: when the US withdrew, nothing will be the same. While Iran is deviating from the terms of the accord, European powers are making every effort to show their political and diplomatic relevance in the global arena. Trump's increasing American unilateralism has an influence on Europe in that it raises awareness of the need for a separate foreign policy there. Trump's decision to nix the JCPOA will have a lasting impact in Tehran, pushing Iran's leaders into the US's geopolitical rivals (Pop, 2020).

2.2.2 . Impact of Diplomatic Engagement

The diplomatic engagement Impact refers to the achievement of the Iran Nuclear Deal's (JCPOA) conditions and the degree to which it was successful in fulfilling the American objective of putting an end to Iran's nuclear program.

2.2.2.1. The Achieved Claims under the Agreement

The International Atomic Energy Agency confirmed on January 16, 2016, that Iran had carried out the requirements of the Iran Deal to guarantee that its nuclear program is and will always be exclusively peaceful. Iran's breakout time, or how long it would have taken it to collect enough fissile material to create a weapon, was only two to three months prior to this accord. Iran would need to wait at least a year now due to the Iran deal. Additionally, this agreement establishes unmatched monitoring and access, so if Iran attempts, US will be informed and sanctions would be reinstated (*Iran deal*, n.d.).

According to The Obama White House (2016), Iran has :

- 25,000 pounds of enriched uranium were exported from the country.
- two-thirds of its centrifuges were dismantled and removed.
- took the Calandria out of its heavy water reactor and put concrete inside of it.
- Unprecedented access was granted to its nuclear installations and supply chain.

Iran has achieved these measures, allowing the United States and the rest of the world to move on to the JCPOA's next stage, which is the easing of sanctions connected to Iran's nuclear program. Nevertheless, a number of American sanctions programs and designations will continue to exist.

2.2.2.2. The Four Blocked Pathways to a Nuclear Weapon under the Agreement

The two fissile ingredients needed to make a nuclear bomb are uranium or plutonium, but because to this agreement, Iran's four potential routes to obtaining those materials are shut down. First there was the highly enriched uranium produced at the Natanz plant, then at the Fordow site, then weapons-grade plutonium, and finally covert attempts to make fissile material *(Iran deal*, n.d.).

Simply put, the Iran Nuclear Deal places restrictions on Iran's nuclear program in exchange for the lifting of sanctions. More specifically, the agreement prevented Iran from obtaining the enriched uranium and plutonium needed to create nuclear weapons by imposing numerous time-bound restrictions, such as those on the quantity and type of centrifuges it is allowed to use to enrich uranium, its stockpile of enriched uranium and heavy water, and a restriction on the country's ability to build heavy-water reactors. Certain terms of the agreement, such as the deal's unrestricted access for outside nuclear inspectors, were permanent (*What You Need to Know About the Iran Nuclear Deal*, n.d.).

2.2.2.3. Iran's Nuclear Program in Absence of the JCPOA

As of right now, Iran possesses a sizable supply of enriched uranium and close to 20,000 centrifuges, which would be sufficient to make 8 to 10 bombs. It would take Iran 2 to 3 months to have enough weapon-ready uranium (or highly enriched uranium) to construct their first nuclear weapon if they rushed to develop a bomb without the agreement in place. That stockpile and those centrifuges would continue to expand exponentially if left unchecked, essentially ensuring that Iran could produce a bomb — and do so rapidly — if it so desired (*Iran deal*, n.d.).

The major components required to make a bomb are eliminated by this agreement, and if Iran disregarded its promises, the breakout time would increase from 2-3 months to at least a year. Importantly, Iran won't receive any further sanctions relief until the IAEA certifies that Iran has complied with its obligations under the agreement. Additionally, the U.N., U.S., and

E.U. have the power to reinstate the sanctions that have severely harmed Iran's economy should Iran break any of the terms of this agreement (ibid).

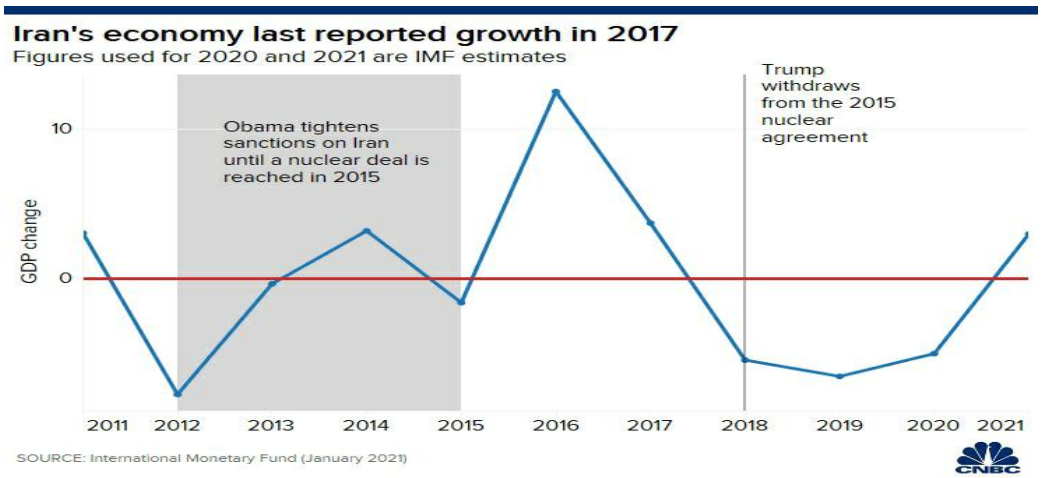
2.2.2.4. The Economic Impact of JCPOA

Lester (2017) found that Iran generated export revenues by over $7 billion and got access to $4.2 billion in assets in the six months that followed the agreement to put the JCPOA into effect. The country's previously frozen foreign financial assets are expected to increase by more than $100 billion. Gross total relief to Iran as a result of the deal, including unfrozen assets, is estimated to be around $11 billion, which is much more than the US government's initial projections.

The gains that Iran obtained from the agreement were dispersed among the several industries that were impacted by the JCPOA, but the energy industry was the main recipient of Iran's relief. Following the decision to put the JCPOA into effect, oil exports increased by "about 400,000 barrels per day," bringing in an extra $5 billion in revenue for Iran over a six-month period. For the fiscal year that ends in March 2017, oil and natural gas revenues were anticipated to total $41 billion, despite a worldwide supply glut impacting crude pricing, production, and prices (Lester, 2017). Hence, Iran's economy had seen a revival under the nuclear deal as shown in figure 3.3.1. below.

Figure 2.1

The development of Iran economy.



Note: Adopted

from Ng, A. (2021, March 23). These 6 charts show how sanctions are crushing Iran's economy. *CNBC*. https://www.cnbc.com/2021/03/23/these-6-charts-show-how-sanctions-are-crushing-irans-economy.html

2.3. An Analysis Comparing the Effectiveness of the Two Approaches in Curbing Iran's Nuclear Aspirations.

The Middle East specialist Kenneth Katzman (2012) concluded that "assessing the effectiveness of U.S. and international sanctions depends upon which goals are being examined" (p. 41) (as cited in Ateav, 2013, p. 49). Hence, the discussion over the effectiveness of two approaches will depart from three goals, which are stopping the nuclear program, delaying the nuclear program, and hurting the Iranian economy**.**

2.3.1. Ceasing the Nuclear Program

Through the analyzed information in 2.1. and 2.2., the two approaches did not stop the Iranian nuclear program . In agreement with Ateav (2013) he revealed that the overarching goal of economic sanctions over Iran has been to force the Iranian government to comply with the IAEA and the UN Security Council and "verifiably limit its nuclear development to purely peaceful purposes" (Katzman, 2013, p. 46, as cited in Ateav, 2013, p.50). In light of this requirement, it is apparent that international economic sanctions against Iran have been ineffective thus far, as Iran has not abandoned its nuclear program and has not cooperated with UN Security Council resolutions.

Alternatively the diplomatic approach which drawn in the JCPOA Agreement did not worked in the matter of ending the nuclear program because this agreement in conformity with Sugita (n.d.), requires that Iran's nuclear program be restricted to the aforementioned constraints

for a period of 10 to 15 years. Iran will thus be free to pursue its nuclear program without interruption in 2030; hence, the JCPOA accord cannot permanently limit Iran's nuclear development. However, the economic sanctions took a crucial role in advancing Iran to negotiate and take the diplomatic approach in the nuclear program. In particular Obama sanctions were successful in pushing Iran to the negotiating table, whereas the Trump administration has failed to launch deals with Iran. Iran's supreme ruler, Imam Khamenei, states again, "We will not negotiate with Trump." .

2.3.2 . Postponing the Nuclear Program

Both the approaches succeeded in delaying the nuclear program. Based on Ateav (2013) he stated that When it comes to delaying Iran's nuclear development, international sanctions have been fairly effective. The sanctions are thought to have raised the expense of Iran's nuclear program. The Iranian program has also been hindered by restrictions that limit Iran's access to vital technologies and equipment required for uranium enrichment. However, some of this delay can be ascribed to underhanded measures such as malicious software being used to attack the computer systems of Iranian nuclear plants (Hufbauer et al., 2012, as cited in Ateav, 2013). In the other hand The 2015 nuclear deal (JCPOA) with Iran limited the quantity of enriched uranium that Iran could lawfully possess, limited its ability to generate more, and imposed a stringent system of inspections. As a result, the time Iran would need to construct nuclear weapons and acquire nuclear or near-nuclear capacity grew to around a year, long enough for Western intelligence services to figure out what would be going on and authorities to take appropriate action (Haass, 2020).

2.3.3. Damaging the Iranian Economy

When measured in terms of damaging the Iranian economy, global sanctions have had some successes, but according to Amadeo (2021), when the US reduced sanctions in 2015 as part of diplomatic efforts, Iran's economy experienced growth, as also illustrated by the data.

Despite the possibility of Iran still acquiring nuclear weapons under the both approaches , sanctions have still served their purpose in punishing Iran for not aligning with its global obligations regarding nuclear power. The economic problems in Iran have been worsened by the imposition of sanctions, which have also created additional difficulties. Despite the imposition of sanctions, it is important to recognize that they have only played a minor role in Iran's economic struggles and their impact were not exaggerated and failed in the collapse of Iran's economic.

Conclusion

The U.S. has used economic sanctions and diplomatic engagement to address Iran's nuclear program. The first phase, from 1979 to 2006, involved energy and financial sanctions. The second phase, from 2006 to present, led to a diplomatic closure between Iran and the US. This led to the JCPOA Agreement, which was preceded by negotiations between the P+1 and the Islamic Republic from 2009 to 2015. However, President Donald Trump withdrew from the JCPOA in 2018, arguing that economic sanctions should be reinstated. Both approaches have their own impact on Iran, with economic sanctions affecting the economic, humanitarian, and political aspects of Iran, while diplomatic engagement has impacted the economic, humanitarian, and political aspects. Despite their differences, both approaches have delayed Iran's nuclear ambitions, but economic sanctions played a crucial role in pushing Iran towards diplomatic engagement with the U.S..

General Conclusion

This work attempted to reveal the nuclearization process of Iran from its earlier stages and provided an investigated study on the American responses and reactions toward Iran's nuclear ambitions. Departing with the first chapter and through the usage of the historical, descriptive and analytical techniques in narration, it becomes clear that the nuclearization journey of Iran was divided into two phases the first one was under the Shah rule which revealed that first existence of the nuclear power within Iran was supplied with the assistance of the west especially the United States with its "Atom for Peace program" which considered the cornerstone of Iran's nuclear program; also, the attendance of the eastern assistance also appeared in the entrance of the second phase after the revolution 1979, when the united states start taking the rejection stand against Iran nuclear program and tightened the ways of its growth; although, the security concerns, economic development ; in addition to, national security priorities, and Iranian interests were the essential motives that are pushing Iran to ignore the rejection and continues in its program in any way.

Continuing with the second chapter and through the usage of the previous techniques and the comparative analysis; all together, they assisted in determining that the United States responded with rejection to Iran's nuclear growth and reacted through the application of economic sanctions along with diplomatic engagement, which after the presentation of their definitions, seem to be two distinctive approaches. Moreover, the economic sanctions against Iran were divided into two phases: the first from 1979 until 2006, and the second from 2006 until the present. Both of them, in general, applied energy and financial sanctions, varying in severity from one U.S. controller administration to another to seek this power despite of the worldly rejection.

However, the second phase, along with the continued application of the economic sanctions, sparked a diplomatic closure between Iran and the U.S., which had been absent since

the Islamic Revolution of 1979, under Barack Obama administration, which succeeded in approaching Iran's nuclear concern to the JCPOA Agreement, which was preceded by the most important negotiations between P 5+1 and the Islamic Republic from 2009 until 2015, that used two strategies: dual-track diplomacy and the chosen leadership. Hence, this deal has drawn U.S. diplomatic engagement in Iran's nuclear concern with an optimistic outlook towards it, except for President Donald Trump, who did not agree with the effectiveness of the deal.

In 2018, Donald Trump withdrew from the JCPOA for numerous reasons, and he argued that economic sanctions must be reinstated as they are more effective in eliminating nuclear activities. Besides the different perspectives on the deal, it is noteworthy that both approaches have their own impact on Iran in general and its nuclear program in particular. The economic sanctions impact can be seen on the economic, humanitarian, and political sides of Iran, whereas the impact of the diplomatic approach can be seen in the achieved claims of the JCPOA Agreement, which obviously impacted the economic side, hence the humanitarian and political sides.

As a result of the analysis and comparison of the two approaches, it can be concluded that both approaches did not succeed in stopping Iran's nuclear ambitions; rather, they succeeded in delaying its progress. However, the economic sanctions played a crucial role in pushing Iran to the diplomatic approach with the U.S., and they have nonetheless served their goal of penalizing Iran for failing to meet its worldwide nuclear power obligations.

Finally, this work confirms the outlined hypotheses as the Iranian nuclear power without the existence of the Western assistance would never exist and beside essential motives such as security concern and the security concerns, national security priorities, and Iranian interests, Iran keeps insisting on its nuclear program despite the several tries to cease it, through the application of economic sanction and diplomatic engagement alongside in order to succeed in delaying Iran nuclear program growth. It is worth noting that with coming of the new U.S.

administration headed by Joe Biden who according to Bateman (2022) that reported in BBC News "US prepared to use force to stop Iran getting nuclear arms" opened the door for further investigation in the concern of Iran and the united states relationships towards Iran's nuclear ambitions.

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ملخص

بدأ الصراع بين إيران والولايات المتحدة حول برنامج إيران النووي مع معاهدة حظر انتشار الأسلحة النووية الإيرانية. وقد جادلت طهران بأن الأسلحة النووية تتعارض مع دين الإسلام. ومع ذلك ، فقد تغيرت وجهة النظر هذه للتركيز على الأغراض السلمية وحاجة طهران للأسلحة النووية. استخدمت الولايات المتحدة نهجين رئيسيين لوقف البرنامج النووي الإيراني: العقوبات الاقتصادية التي تركز على الطاقة والتمويل. والمشاركة الدبلوماسية من خلال المفاوضات واتفاقية العمل الشاملة المشتركة في عام 2015. على الرغم من الاختلافات بينهما ، فقد أدى كلا النهجين إلى تأخير طموحات إيران النووية ، حيث تلعب العقوبات الاقتصادية دورًا حاسمًا في دفع إيران نحو التواصل الدبلوماسي مع الولايات المتحدة .

الكلمات المفتاحية : البرنامج النووي الايراني، العقوبات الاقتصادية، المشاركة الديبلوماسية، اتفاقية العمل الشاملة المشتركة .