

Economic Sanctions as a Foreign Policy Tool: A Case Study of the Iran-West Conflict

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Abstract

The study examines how economic sanctions affect Iran's economy, society, and regional influence, revealing their effectiveness and long-term implications. It uses quantitative and thematic analysis of government speeches, press releases, and news. The sample included 50 annual data observations from 1969 to 2018. This study's results indicate that economic sanctions negatively impact the Iranian economy, especially Iran's oil exports, banking, and manufacturing sectors. The ARDL model implies that sanctions enormously affect Iran's macroeconomic instability, and the more severe the sanctions imposed on Iran, the more significant the negative impact on the country's macroeconomic stability. The theme analysis demonstrates how sanctions have limited Iran's nuclear program but not stopped it completely. However, they have failed to reduce Iran's ability to support militant groups or its regional influence.

Furthermore, sanctions have affected the tone of official speeches by Iranian leaders towards the West, making them more cooperative when Iran faces economic hardship and internal unrest. The study recommends that policymakers should consider using multilateral sanctions besides applying diplomatic strategies to minimise the impact on civilians. Finally, policymakers should support moderate candidates in Iranian elections to encourage positive political changes.

Keywords: *Iran, economic sanctions, foreign policy, nuclear program, international conflicts, ARDL model.*

1. Introduction

Economic sanctions as a tool in foreign policy have been a topic of intense debate in recent years. It has become an increasingly popular instrument of foreign policy to elicit a change in the policies of a foreign government by damaging its economy. The sanctions aim to achieve various goals, including counterterrorism, non-proliferation, democracy and human rights promotion, and conflict resolution (Masters, 2019). Sanctions can also restrict a state's access to the international financial system, freeze assets under a country's jurisdiction, or ban specific exports (Hanania, 2020). Many policymakers view economic sanctions as the tool of choice to respond to significant geopolitical challenges in different countries, including Iran, Venezuela, Russia, and Ukraine (Hanania, 2020). One of the most notable conflicts in which economic sanctions have been employed is the Iran-West conflict.

The Islamic Revolution that took place in 1979 significantly changed Iran's foreign policy towards the West, particularly the United States. Prior to the revolution Iran was an

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ally of the United States. Played a crucial role in safeguarding American interests in the Middle East (Nakhavali, 2013). However, following the revolution, the new government developed opposition towards U.S. Influence. Adopted a policy of "Neither East nor West Islamic Republic" (Johns, 2007). This marked the beginning of an enduring conflict, between Iran and the United States that persists to this day. Since 1984, Iran's economy has been under various U.S. economic sanctions of increasing scope and intensity. The sanctions were initially placed on banning the sale of American arms and dual-use technology but gradually expanded to include a total embargo on all bilateral trade and investment. Additionally, the U.S. has successfully assembled several Western countries to execute multilateral sanctions on Iran, which has been a constant pillar of Western foreign policy against Iran for over three decades (Fahimirad, 2016). The sanctions aimed to discourage Iran from pursuing its nuclear ambitions or desire to be an axis of power in the Middle East (Amuzegar, 1997).

While the Iranian economy has managed to cope with these sanctions for years, the sanctions have taken a more complex, severe, and aggressive form by the E.U., U.N., and the U.S. since 2005 after Mahmoud Ahmadinejad took office. It aimed to weaken the structure of the Iranian economy, forcing it into isolation from both international trade and the financial system. As a result, the pressure on the Iranian economy increased, leading to rapid falls in the growth rate, which was as high as -6.6% in 2011 (Takeyh and Maloney, 2011).

This dire situation prompted new and more prudent policy approaches that led to negotiating the Geneva Agreement between Iran and the P5+1 group (the US, Britain, France, Russia, China, and Germany) (Lohmann, 2016). The deal opened the door to reducing the economic sanctions imposed on Iran and improving foreign relations with some European countries (Takeyh and Maloney, 2011).

Therefore, this research tries to answer whether economic sanctions have succeeded in diminishing Iran's nuclear and defensive capabilities or led to changes in its foreign policy toward its neighbours in the region by examining the effectiveness of economic sanctions diplomacy as a foreign policy tool to settle international conflicts, using Iran as a case study. The importance of the research derives from the scarcity of studies on the impact of economic sanctions on the trajectories of these international conflicts, especially with the growing interest in non-military interventions to settle international political disputes.

The paper is structured into several sections; after the introduction, the literature review examines the historical background of economic sanctions against Iran and their impact on its economy. Then, the methodology section summarises all methods used in the analysis. The quantitative analysis section employs both descriptive and econometric models to show the effect of sanctions on economic growth, exchange rate, oil exports, government spending, and the current account. The thematic analysis section examines the impact of economic instability on Iran's foreign policy. Finally, the conclusion summarises the findings and provides insights into sanctions' effectiveness and implications.

2. Literature review

Economic sanctions have emerged as a used strategy for governments to address conflicts. These measures, involving the limitation or cessation of interactions with a country, can significantly affect the targeted country's economy, politics and society. Iran serves as an example of a country that has faced sanctions imposed by the community for many years (Kobayashi, 2017).

This section explores the role of sanctions in resolving conflicts and provide an overview of the economic sanctions imposed on Iran.

2.1 Economic sanctions as a tool for resolving international conflicts:

Economic sanctions involve the imposition of trade and financial limitations on a targeted country to influence the behaviour that violates international norms, including instances of human rights violations or pursuing weapons of mass destruction (Afesorgbor, 2019). These measures, often used to achieve political or economic objectives, can significantly impact both the recipient and enforcing nations. Sanctions encompass various measures, such as trade constraints, monetary penalties, and travel bans. The sanctions aim to force the targeted country to change its actions. Yet, the outcomes depend on factors such as its political framework, economic structure, and the sanctions' specifics.

Using economic sanctions can be tracked to World War I, when the Allied and Associated Powers waged an unparalleled economic war against the German, Austro-Hungarian, and Ottoman empires (Overy, 2022). Since then, economic sanctions have tackled terrorism, nuclear proliferation, wars, and human rights breaches.

The efficacy of economic sanctions has been a subject of debate among policymakers and scholars. While some contend that sanctions can achieve desired political and economic objectives, others argue they inflict harm on the intended country and its economic stability. Recent studies suggest that the effectiveness of economic sanctions depends on factors like the scope of the sanction imposed, the resilience of the target country, and the level of international support (Özdamar and Shahin, 2021).

A review of relevant studies on the impact of economic sanctions on the target country and its economy shows that sanctions can have significant negative consequences for the target country, including a decline in economic growth, increased inflation, and a decrease in foreign investment inflows (Özdamar and Shahin, 2021). Besides, it also can have a detrimental impact on the population, particularly vulnerable groups such as children (Zoë Pelter, 2021).

For example, Cuba and North Korea have been under economic sanctions for decades. Cuba has been subject to a U.S. trade embargo since 1960. Although the embargo destroyed Cuba's economy, it pressured the government to respect human rights and political freedoms. The Cuban government estimated the embargo cost about \$130 billion in economic activity (Askari et al., 2003a).

The limitations led to food, medical, and other shortages, causing high malnutrition and sickness rates in Cuba. Some claim the embargo has helped Cuba to modify its policies, while others say it has reinforced its resolve and contributed to its economic and political isolation from its neighbours (Hufbauer and Jung, 2020, Abdelbary and Benhin, 2019).

On the other hand, North Korea has faced multiple U.N. Security Council sanctions since 2006 for its nuclear programme and human rights abuses (Hufbauer and Jung, 2020). The sanctions and arms embargo prohibit most economic and financial transactions with North Korea. To overcome this situation, North Korea has grown its trade with China and used smuggling and hacking to evade restrictions. Although the sanctions undermined North Korea's nuclear weapons programme, they have impacted the population by causing food and other shortages and making it harder for humanitarian organisations to distribute supplies (Kim et al., 2022).

Similarly, since 2015, the U.S. and other nations have implemented economic sanctions on Venezuela for political and economic reasons (Seelke et al., 2021). The economy and population of Venezuela have suffered from these sanctions. For example, oil exports, a major revenue source, have dropped. The foreign currency shortage makes importing food and medicine hard (Fishman, 2017). However, Venezuela's political situation has been unclear after the sanctions as it has forced the Venezuelan administration to deal with the opposition, but they have also had unexpected repercussions (Hufbauer and Jung, 2021).

On the other hand, Somalia has been subject to comprehensive sanctions imposed by the United States and the UNSC since 1992 following the collapse of the Somali government (Biersteker et al., 2013). The sanctions aim to disrupt Somali terrorist groups like Al-Shabaab. These sanctions have mostly affected ordinary Somalis who have lost income and humanitarian aid. Besides, it has slowed Somalia's economic and institutional rebuilding (Møller, 2009).

Finally, Iraq was a Middle East example of a country negatively impacted by economic sanctions. The United Nations imposed extensive sanctions on Iraq after the Gulf War 1991 to pressure Saddam Hussein to abide by U.N. resolutions (Alnasrawi, 2001). Iraq found it challenging to import basics as a result of the sanctions, which targeted the nation's capacity for international trade. Many children died, and the population was afflicted by sickness and starvation (Abdelbary, 2020). The country's economic recovery was further hampered by the sanctions since they barred Iraq from obtaining the tools it needed to restore its infrastructure (Gordon, 2010).

In conclusion, economic sanctions are an effective tool that countries use to put political pressure on other nations. However, it might have different effects based on the target country and the sanctions applied (Tarallo, 2020). The impact of the sanctions has been uneven, as evidenced by the cases mentioned above. While sanctions can be a useful tool for achieving political targets, they frequently negatively impact the people living in the targeted countries. As a result, before implementing sanctions, policymakers must take caution and carefully assess their potential effects (O'Driscoll, 2017).

2.2 Historical Overview of Economic Sanctions Against Iran

Iran has experienced the imposition of the most stringent sanctions in recent historical context. These sanctions began subsequent to the Islamic Revolution of 1979, engendering the subjecting of Iran to sanctions originating from various countries, especially the United States. The sanctions have devastated Iranian society and the economy and have significantly raised tensions between Iran and the international community (Salehi-Isfahani, 2019).

The first point in the emergence of these sanctions can be traced to the 1979-81 hostage crisis when Iranian students took hostage American diplomats from the U.S. embassy in Tehran. These early sanctions were limited both in scope and impact, but they established the stage for a more widespread and prolonged economic pressure campaign against Iran (Nakhavali, 2013).

The extent and intensity of the sanctions against Iran have increased over time. With numerous restrictions limiting Iran's capacity to trade and finance its activities, the United States has been particularly aggressive in targeting the Iranian economy (Askari et al., 2003b). Some of the critical sanctions imposed on Iran include:

- The Iran Sanctions Act of 1996 (ISA) permits the U.S. to sanction people or businesses investing over \$20 million in Iran's energy industry within 12 months. The law also prohibited U.S. companies from doing business with Iran and imposed restrictions on exporting goods and technology to Iran.
- In the 2000s, due to its nuclear expansion, the E.U. and the U.N. placed sanctions on Iran. Resolution 1696 of the U.N. Security Council warned Iran to suspend uranium enrichment or face penalties in 2006. The U.N. also restricted Iran's nuclear and ballistic missile activities with Resolution 1737 the following year (Laub, 2015).
- The Comprehensive Iran Sanctions, Accountability, and Divestment Act (CISADA) increased energy restrictions against Iran in 2010 (Cohen et al., 2011). Additionally, E.U. sanctions targeted Iran's energy, finance, and transport industries (Maloney, 2015).

- The 2012 Iran Threat Reduction and Syria Human Rights Act (ITRSHRA) extended U.S. sanctions on Iran's central bank. The E.U. also placed new restrictions on Iran, including an oil embargo (Lohmann, 2016, Abdelbary, 2023).

Despite these sanctions, Iran continued its nuclear programme, leading to more U.N. Security Council resolutions and sanctions. In 2015, Iran signed the Joint Comprehensive Plan of Action (JCPOA) with the U.S., UK, France, Germany, China, and Russia to lift certain sanctions in exchange for restricting its nuclear programme (Coates, 2018). Later, in 2018, After withdrawing from the JCPOA, the U.S. reimposed sanctions on Iran's oil exports and financial sector. On the other hand, The E.U. tried to maintain the deal and formed the Instrument in Support of Trade Exchanges (INSTEX) to allow trade with Iran outside the US-dominated global financial system (Batmanghelidj and Rouhi, 2021).

In the midst of economic and political constraints arising from sanctions, Iran has not abandoned its nuclear programme or other programmes. According to some analysts, Iranian officials consider the sanctions as Western animosity and imperialism, which has increased their resolve. Others claim that the sanctions have had minimal impact on Iran's behaviour and have mostly been a symbolic expression of disapproval rather than a practical means of changing Iranian policies (Esfandiary and Tabatabai, 2015).

Iranian economic sanctions have a complicated history, reflecting decades of tensions and disagreements with the international community. These sanctions' consequences on Iran's economy and society are debated. However, Iran attempts to offset the sanctions' economic and political effects and adjust to the new economy. The sanctions' long-term implications are unclear; thus, their foreign policy goals and unexpected consequences must be examined.

In conclusion, the literature review has covered the history of economic sanctions, highlighting Cuba, North Korea, and Venezuela, particularly in the context of Iran and the West. Despite the available literature on the subject, there remains a research gap in understanding the long-term implications of sanctions on Iran's economy and society; this research gap emphasises the need to study how sanctions affect Iran's regional influence, society, and economy. The present study addresses this gap by giving comprehensive insights into sanctions' effects on Iran's economy and society, which can help policymakers and scholars comprehend economic sanctions' foreign policy efficacy.

3. Methodology

In order to achieve the study's objectives, the research followed a two-stage analysis using a mixed-methods approach.

Stage 1: Analysis of the impact of economic sanctions on Iran's economic performance using deductive methods to show the effect of sanctions on economic growth, exchange rate, oil exports, government spending, and the current account. Then, the study generates macroeconomic instability aggregate indicators using principal component analysis (PCA) to reflect the whole macroeconomic environment and show the effectiveness of the severity of the sanction. The analysis also employed a descriptive approach, focusing on the trends and patterns of the economic indicators over time. Additionally, the Autoregressive Distributed Lag (ARDL) model, developed by Pesaran et al. (2001), used to test how sanctions have impacted the macroeconomic instability of the Iranian economy. This model will test the relationship between sanctions and economic indicators such as inflation, unemployment, and government debt.

The sources of data study are from the World Bank, International Monetary Fund (IMF), Penn World Table (PWT), and Polity IV database. The sample period covered 50 observations for annual data from 1969 until 2018.

Stage 2: The analysis used inductive methods by investigating the grey literature and the content of official speeches, press releases, and news to recognise whether sanctions have succeeded in diminishing Iran's nuclear and defensive capabilities or led to changes in its foreign policy toward its neighbours in the region. The thematic analysis identified the themes and patterns in Iran's foreign policy regarding sanctions.

4. Results and discussion

4.1 Descriptive quantitative analysis

The imposition of economic sanctions on Iran has targeted various sectors of Iran's economy, including oil exports, banking, and manufacturing, and has had a considerable impact on the Iranian economy.

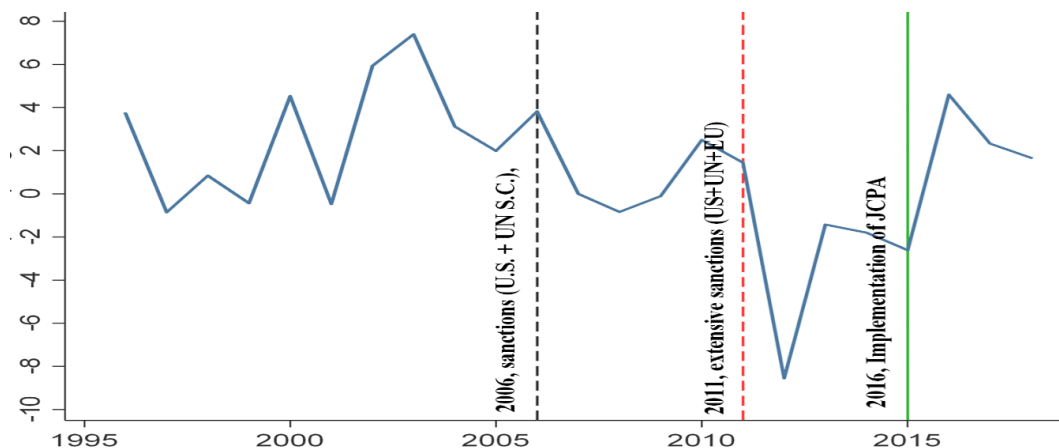
The economic performance and growth

Iran possesses abundant natural resources, encompassing oil, gas, and minerals, that have conventionally acted as promoters for elevating its GDP. Nevertheless, the Iranian economy has grappled with multifaceted challenges due to internal and foreign pressures affecting its GDP. Iran's economy has historically faced challenges from extensive government intervention, which constrained economic expansion.

Over the years, Iran's Real GDP per capita growth has been volatile due to sanctions, war, and government policy changes. In 2005, Iranian conservative Mahmoud Ahmadinejad was elected president. His policies, including increased state control, led to a significant reduction in foreign investment and had a negative impact on the real GDP per capita growth.

In 2011, after placing substantial sanctions on Iran's energy, financial, and maritime sectors due to concerns over the country's nuclear program. These restrictions reduced foreign investment, oil exports, and access to international financial markets, which hurt real GDP per capita growth. After international sanctions were imposed in 2012, real GDP per capita growth dropped to -8% from 2.5%.

Figure (1): The real GDP per capita growth in Iran (1995-2018)



Source: World Bank, World Development Indicators (WDI) (2021).

The sanctions have also led to an increase in the shadow economy, where unregulated economic activities occur outside the formal economy (Momodu et al., 2020). The sanctions have made it difficult for businesses to access legal channels of finance, investment, and trade, which lead to an increase in informal economic activities. The growth of the underground economy has been a coping mechanism for businesses affected by the sanctions. Still, it has led to a decline in government revenues and a loss of control over the economy (Farzanegan and Hayo, 2019, Raynor, 2022).

In addition to the direct impact on the Iranian economy, Iran has lost investment opportunities due to sanctions, which have hurt the economy. Foreign investors are cautious of investing due to the risk of violating sanctions, which led to a decline in foreign investment and enhanced non-sanctioned segments of the economy (Esfahani and Pesaran, 2009). The fall in FDI has hurt Iran's economy and caused a technology gap, hindering its ability to develop and compete globally (Biglaiser and Lektzian, 2011).

Furthermore, the sanctions have caused significant challenges for the Iranian banking sector. According to Mohaddes and Raissi (2018), Iranian banks' access to the international banking system has severely curtailed their capacity to deal with foreign banks, disrupting trade finance and foreign exchange transactions. The authors note that the inability to handle international transactions has reduced trade, hurting the country's economy.

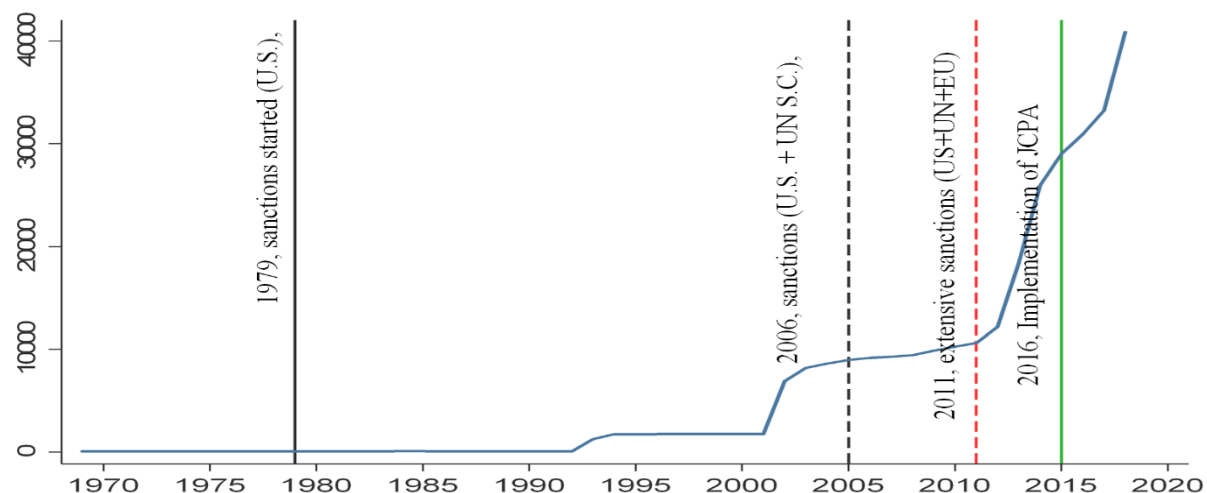
However, Iran reached a breakthrough nuclear deal with the West after 2015. The JCPA lifted restrictions, which raised international investment, oil exports, and real GDP per capita growth. After JCPA was implemented in 2016, real GDP per capita growth rose to 4.6% from -2.61% the previous year.

The Exchange Rate

Since the Islamic Revolution, sanctions have significantly affected the Iranian rial exchange rate. Between 1969 and 1979, the exchange rate remained relatively stable at around 70 Iranian rials per USD; even after the U.S. began imposing sanctions, the rate dropped slightly. However, economic pressures and political instability caused the Iranian rial to fluctuate sharply during the Iran-Iraq war, reaching 91 rials in 1985.

After the war, the exchange rate was stable until 2005, when Ahmadinejad took office. Ahmadinejad's policies devalued the rial to a record low of 17,900 rials per USD in 2012. The U.S., E.U., and U.N. imposed extensive international sanctions on Iran, negatively affecting the Iranian economy, especially the exchange rate. The rate devalued until the JCPOA lifted some sanctions on Iran, causing the Iranian rial to appreciate slightly.

Figure (2): Official exchange rate of Iranian rial per US\$ (1969-2018)



Source: World Bank, World Development Indicators (WDI) (2021)

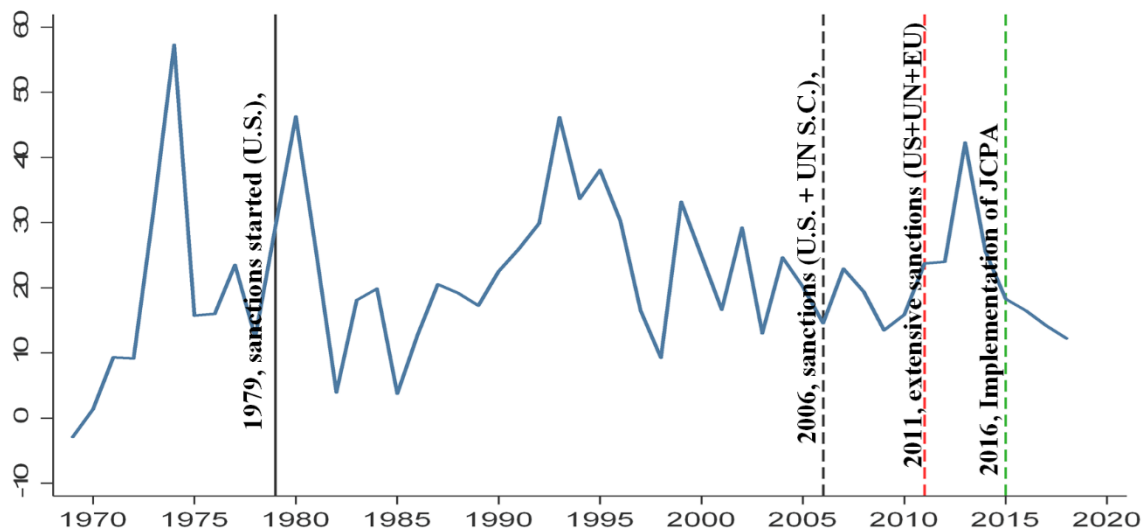
The Inflation Rate

The Iranian economy's inflation rate has remained a point of concern for policymakers and citizens for several decades. A surge in government expenditures and rapid economic expansion led to an inflation rate exceeding 57% in 1974 and 46% in 1980. In the mid-1980s, a period of austerity measures and curtailed government spending contributed to a reduction in inflation.

However, the late 1980s and early 1990s witnessed an increase in inflation, surging above 46%, as the Iran-Iraq war during this period drained the nation's resources and spurred heightened government outlays. International economic sanctions compounded the challenge, limiting the government's access to borrowing and financial markets.

Nonetheless, inflation resurged in the late 1990s and early 2000s due to government efforts to stimulate economic growth. The imposition of sanctions, particularly affecting Iran's vital oil market revenue stream, exacerbated the difficulty in accessing foreign markets. This scarcity of products and services propelled significant price hikes, precipitating substantial inflation. Notably 2013, when sanctions tightened, Iran's inflation reached 40%.

Figure (3): Inflation, GDP deflator (1969-2018)



Source: World Bank, World Development Indicators (WDI) (2021)

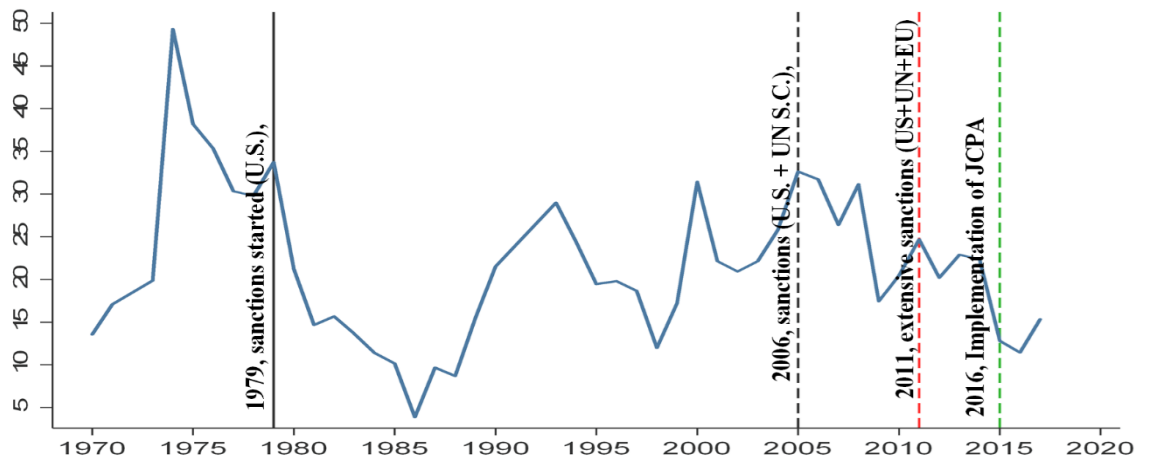
Furthermore, the Iranian economy has been subject to the influence of oscillating global oil prices. Given Iran's substantial dependence on oil exports for its GDP, the dynamics of worldwide oil prices hold influence over the economy's fortunes. Over the past two decades, the global oil market has experienced pronounced volatility. This factor has engendered an environment of unpredictability and has played a role in fostering inflation within Iran.

The Oil Sector

Iran's oil and gas industry has driven its economic growth for decades. Iran has the fourth-largest proven crude oil and second-largest natural gas reserves (Ebrahimi et al., 2017). The oil sector contributes to 20% of the GDP (Nakhle, 2022), and historically, 80% of Iran's total export revenues and 50% to 60% of the government revenue (Salahieh, 2017, EIA, 2013).

Political events in Iran have disturbed crude oil production during the past four decades. The 1979 revolution and the Iran-Iraq War substantially reduced crude oil production. Furthermore, Iran's oil industry and economy have been significantly impacted by multilateral sanctions from various sides. For instance, crude oil production dropped from 6 million barrels per day in 1976 to less than 2 million in 1979, as shown in Figure (4). Similarly, Iran's oil industry suffered considerably during the 1980–1988 Iran-Iraq War, lowering oil rent (% GDP) from 21.22% to 8.69% (Figure 5).

Figure (4): Oil rent (% GDP) in Iran (1969-2018)



Source: World Bank, World Development Indicators (WDI) (2021)

However, after the end of the war, Iran's crude oil production rate stabilised at approximately three mb/d, and it did not experience a significant reduction even with the implementation of unilateral sanctions. Despite the sanctions, Iran's oil rent remained relatively stable until the intensification of sanctions from various sides. With the increase in sanctions, Iran's crude oil production rate sharply declined by about 60% in recent years.

Figure (5): Crude oil production in Iran (1975-2018)

Millio
n
barrel
s per
day

Source: U.S. Energy Information Administration, International Energy Statistics Database

The decrease in oil exports has profoundly impacted Iran's comprehensive economic trajectory. In 2012, the nation witnessed a plummet in its oil exports, marking the lowest point since 1986. Notably, Iranian oil export proceeds amounted to \$69 billion in 2012, representing a sharp reduction from the \$95 billion recorded in the preceding year, 2011 (EIA, 2013).

The sanctions affecting investment in Iran's oil sector have also been tightened, resulting in several foreign companies' cancellation of new projects, negatively affecting existing projects. The United States and E.U. measures prohibited large-scale investment in Iran's oil and gas sector and cut off its access to sources of financial transactions. Furthermore, the E.U. imposed an embargo on Iranian oil and banned European protection and indemnity clubs (P&I Clubs) from providing Iranian oil carriers with insurance and

reinsurance (Van de Graaf, 2013). These insurance-related sanctions were particularly effective in stemming Iranian exports, which affected European importers and Iran's Asian customers, who were forced to halt imports temporarily.

The lifting of sanctions in 2016 following the implementation of the Iran nuclear deal led to a significant rise in oil rent (% GDP) to 15.44% in the same year. Iranian oil production reached 800,000 barrels daily, surpassing pre-sanction levels. Iran reclaimed market share and became the fourth-largest oil producer in 2017, after the U.S., Saudi Arabia, and Russia.

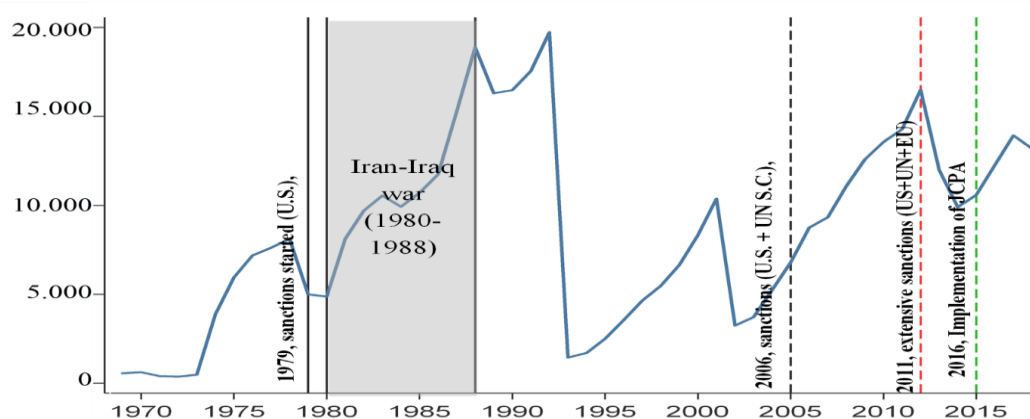
The Military spending

Throughout the 1970s and 1980s, Iran maintained stability in military expenditures, with few exceptions. The period spanning the Iran-Iraq War (1980-1988) witnessed a remarkable surge in military spending. During this conflict, Iran's outlay for defence escalated significantly, culminating in an expenditure exceeding \$18 billion in 1988 alone—an amount roughly equivalent to nearly 20% of the country's GDP.

After the cessation of the Iran-Iraq War, Iran sustained a notable level of military expenditure, which persisted until the late 1990s. During this phase, the government pivoted its attention towards the comprehensive task of national reconstruction. Nevertheless, the subsequent decade, the 2000s, witnessed a resurgence in military spending, culminating in its peak exceeding \$16 billion in 2011. Due to its nuclear pursuits, this surge can be attributed to increasing tensions between Iran and the international community, particularly the United States. Consequently, Iran aimed to bolster its military capacities to serve as a deterrent and to affirm its regional influence.

In 2011, wide-ranging international sanctions were enforced against Iran, including limitations on both military equipment and technology acquisitions. This resulted in a reduction in military expenditure. These sanctions include constraints on Iran's procurement of advanced military technology and apparatus. Additionally, they encompassed a prohibition on weapon sales to Iran and the provision of technical guidance or training to Iran's armed forces. Consequently, the country's reliance on its domestic military industry intensified. This transition was mirrored by a military budget contraction, which decreased by approximately 20% between 2011 and 2015. Specifically, the budget declined from \$16.2 billion in 2011 to \$12.9 billion in 2015, driven by the constraints of these sanctions.

Figure (6): The military expenditure (% of GDP) in Iran (1969-2018)



Source: World Bank, World Development Indicators (WDI) (2021)

The year 2015 marked the signing of the JCPOA between Iran and the P5+1 nations, leading to the alleviation of certain international sanctions. Despite this development, military expenditure exhibited a degree of constancy, fluctuating within the range of approximately \$13 billion to \$14 billion from 2015 to 2019. Lifting certain sanctions

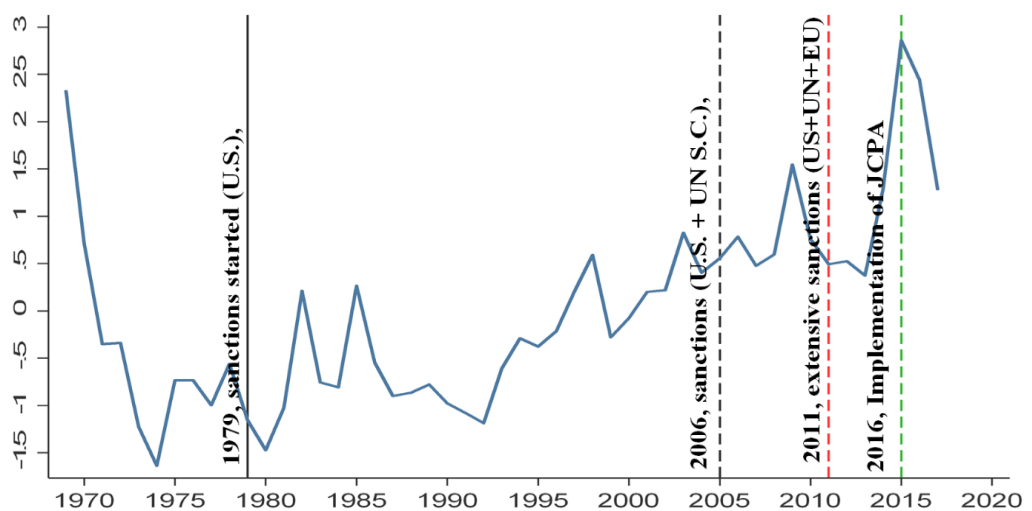
gave Iran more global market access, but the country's military industry remained a top priority for the government.

The Economic Instability

The Macroeconomic instability Aggregate indicator (PCA) provides a comprehensive view of the Iranian economy's overall stability. It considers four critical macroeconomic indicators: exchange rate, unemployment, current account, and inflation. As per the data from 1969 to 2018, the indicator fluctuates between negative and positive values, with the lowest value of -1.64 in 1974 and the highest value of 2.86 in 2015.

Several events have contributed to fluctuations in the indicator. For instance, the sanctions imposed and the Iran-Iraq War from 1980 to 1988 profoundly impacted Iran's economy, causing the indicator to increase during these periods. The war led to decreased oil exports and increased military spending, which severely affected Iran's economy.

Figure (7): The macroeconomic instability Aggregate indicator in Iran (1969-2018)



Source: Authors' estimates based on WDI (2021)

2005 witnessed the election of conservative Ahmadinejad, an event that gave rise to amplified macroeconomic instability, emblematic of the potential perturbations arising from shifts in political leadership. Similarly, the extensive international sanctions imposed in 2011 contributed to escalating this indicator, underscoring the deleterious economic repercussions of these sanctions. The impact of economic sanctions was evidenced by a contraction in oil exports—a pivotal revenue stream for Iran—. Additionally, the marked depreciation of the rial amplified the cost of imports, thereby diminishing the purchasing potency of the populace. The sanctions also engendered challenges regarding Iran's ability to execute international trade and financial transactions. This development led to disarray in the banking domain and a reduction in foreign investment. Consequently, Iran encountered barriers in accessing foreign capital, necessitating dependence on domestic resources that proved insufficient to meet the growing needs of the nation's populace. These economic challenges yielded substantial social and political ramifications, encompassing widescale protests, social turbulence, and political polarisation.

Conversely, the enactment of the JCPOA in 2016, an initiative that eased a portion of the international sanctions, instigated a decline in the composite indicator of macroeconomic instability, signifying the prospect of potential economic improvement. Nonetheless, the enduring ramifications of sanctions on Iran's economy await revelation, and should the sanctions persist, the nation will persist in grappling with noteworthy economic hurdles.

4.2 Econometric model

Model specification

According to Pesaran et al. (2001), the Autoregressive Distributed Lag (ARDL) model estimates the long-run relationship between Macroeconomic instability Aggregate indicator and economic sanctions.

The first step in the ARDL methodology is to ensure that all the variables are integrated of order I through the Augmented Dickey-Fuller (ADF) or Phillips-Perron (P.P.) tests. Followed by specifying how deterministic variables enter the ARDL model as in equation (1). Then, the model estimates coefficients provide information about the short-run and long-run relationships between the variables. Followed by perform the Bounds Test, which is used to determine whether a long-run relationship exists between the variables. Finally, if appropriate, the speed of adjustment can be estimated to determine how quickly the variables converge to their long-run equilibrium through using the Error Correction Model (ECM) approach, which involves including the lagged difference of the dependent variable in the ARDL model.

To illustrate the ARDL modeling approach, the following simple model can be considered:

$$M_t = \alpha_0 + \alpha_1 \text{sanct} + \alpha_2, 8L \text{ control variables } t + \varepsilon_i \quad \dots\dots\dots (1)$$

$$M_t = \alpha_0 + \alpha_1 L \text{ SANCT} + \alpha_2 L \text{ GDP} + \alpha_3 L \text{ MX} + \alpha_4 L \text{ OIL} + \alpha_5 L \text{ FDI} + \alpha_6 L \text{ CRE} + \alpha_7 L \text{ POLI} + \alpha_8 L \text{ WAR} + \varepsilon_i \quad \dots\dots\dots (1.1)$$

Where t points to the year, and "M" - Macroeconomic instability aggregate indicator (PCA) includes exchange rate, unemployment, current account, and inflation. This variable measures the overall macroeconomic stability of the Iranian economy. "GDP" - GDP (constant 2010 US\$). This variable measures the size of Iran's economy and is a key indicator of economic performance. "MX" - Iran's military expenditure (constant 2010 US\$). This variable measures the level of military spending in Iran, military spending can have significant impacts on the overall economy, such as reducing resources available for investment in other sectors and increasing government debt. "OIL" - Oil rents (% of GDP). This variable measures the percentage of Iran's GDP derived from oil exports and is included in the model because Iran is a major oil-exporting country, as changes in oil prices and export volumes can have significant effects on the economy performance and the first sector affected by sanctions. "FDI" - Foreign direct investment, net inflows (BoP, current US\$). This variable measures the level of foreign investment in Iran. "CRE" - Domestic credit to private sector (% of GDP). This variable measures the level of credit available to the private sector in Iran and reflects the access to credit is an important factor for economic growth, particularly in the private sector. "POLI" - Political institutions, Polity IV database, -10 (full autocracy) to 10 (full democracy). This variable measures the quality of Iran's political institutions and showed the level of governance and institutions capacity in Iran. "SANC" - Dummy variable capturing the intensity of sanctions. This variable is coded as an ordinal variable (0-3), with 0 indicating no sanctions, 1 indicating limited sanctions, 2 indicating moderate sanctions, and 3 indicating extensive sanctions. This variable is included in the model because sanctions can have significant negative impacts on a country's economy, particularly in the case of Iran where the country has been subject to extensive sanctions in recent years. "WAR" - War dummy variable, Iran-Iraq war (1980-1988). This variable is included in the model to control for the potential impact of the Iran-Iraq war on the dependent variables. This war had significant impacts on the Iranian economy, such as reducing economic growth, increasing government debt, and damaging infrastructure, and it is important to account for these effects in the analysis.

Table (1): Unit root tests for variables in level (intercept is included)

Tests variables	ADF		PP		Final result
	Level	1st diff	Level	1st diff	
M	-3.512 0.0004	-	-3.508 0.0000	-	I(0)
lOil	-3.532 0.4462	-3.54 0.0007	-3.524 0.2166	-3.532 0.0000	I(1)
lGDP	-3.512 0.7768	-3.516 0.0025	-3.508 0.9128	-3.512 0.0009	I(1)
lMX	-3.508 0.1589	-3.512 0.0001	-3.504 0.2529	-3.508 0.0000	I(1)
lcons	-3.512 0.0606	-3.516 0.0001	-3.508 0.1358	-3.512 0.0089	I(1)
LFDI	-3.512 0.0345	-	-3.508 0.0011	--	I(0)
LCRE	-3.528 0.652	-3.536 0.001	-3.528 0.8415	-3.504 0.0000	I(1)
POLI	-3.508 0.5168	-3.512 0.0001	-3.504 0.4846	-3.508 0.0000	I(1)

Regarding the stationarity of the variables, with the developed Augmented Dickey-Fuller (ADF) and Phillips-Perron (P.P.) tests, the results of table (1) indicate that all variables except M and FDI where are integrated on level, are stationary at the first difference up to a significance level of 5%, which satisfies the condition for applying the ARDL model.

According to serial correlation test between the residuals through the Breusch-Godfrey Serial Correlation L.M. Test. The value of both the F-statistic was insignificant, indicating the absence of a serial correlation problem in the proposed model. Secondly the Breusch-Pagan-Godfrey test used to test heteroscedasticity, ensure the homoscedastic of the random error variance. The results of the test led to reject the alternative hypothesis (H1) of the absence of heteroscedasticity problem in the model, as shown in table (2).

Table (2): Serial correlation and Heteroscedasticity tests

Test	F-statistic.	Prob.
Breusch-Godfrey LM Test	0.3413	0.7261
Breusch-Pagan-Godfrey	0.8108	0.6791

According to Akaike information criteria, the preferred ARDL model which was selected ARDL (4,3,4,4,3). Based on the Bounds Testing Approach for the Cointegration test, the value of the F-statistics, compared to the lower and upper bounds at different significance levels, and testing the null hypothesis (H0).

Table 3: F-Bounds Test

F-statistic	Bound of critical values	
	Lower bound I(0)	Upper bound I(1)

5.33	2.56	3.49
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Table 3 contains the test results, including the F-statistic value and critical values at 5%. The F-statistic value was greater than all critical values, so the null hypothesis (H₀) was rejected, indicating a common integration relationship between the study variables in the long run.

Results of Estimated Long-Run and Error Correction Equations

Due to the presence of a cointegrating relationship between the variables, long-term relationships can be estimated between the Macroeconomic instability aggregate indicator and the independent variables.

Table 4: Long-Run Effects

Variable	Coefficient	Prob.
SANC	0.9729	0.000

Table (4) represents the estimated long-run coefficient for the regressors, confirming the hypothesis regarding the negative impacts of sanctions on the level of Iran's Macroeconomic stability. The results show that an increase in the intensity of sanctions is associated with a larger increase in the Macroeconomic instability in the long run. Each level of increase in the intensity of sanctions with respect to the coding approach increases in the Macroeconomic instability in the long run by approximately 33%, *ceteris paribus*.

Table 5: Short-Run Effects (Impact Multipliers)

Variable	Coefficient	Prob.
SANC 2016	0.419	0.7995
SANC(-1) 2015	0.18367	0.389173
SANC(-2) 2014	1.58819	0.001051
SANC(-3) 2013	0.9884	0.007025
SANC(-4) 2012	0.44396	0.001554

In the next stage an error correction model for the selected ARDL Model is estimated. Table (5) presents the results of the estimated ECM corresponding to the long run estimates. The estimated ECM has two parts. First part contains the estimated coefficients of short run dynamics. As shown in the table, the coefficients and probability values for the impact of economic sanctions on Iran's macroeconomic instability over time.

Although, the coefficient for the variable "SANC" (the current level of sanctions) and SANC(-1) are positive and statistically insignificant, the lagged variables have a stronger relationship between past levels of sanctions and macroeconomic instability. For instance, SANC(-2), SANC(-3), SANC(-4)(years from 2012 until 2015) has a coefficient of 1.58819 significant at 1%, indicating a strong positive relationship between sanctions imposed in periods ago and macroeconomic instability. This means that a 1-unit increase in economic sanctions two, three and four periods ago is associated with a 1.58819-unit, 0.9884-unit and 0.4439-unit increase in macroeconomic instability, respectively.

The coefficients of the lagged variables show that the effects of economic sanctions on macroeconomic instability in Iran are not immediate but rather lagged. Specifically, extensive sanctions imposed two, three and four periods ago, have a significant positive impact on macroeconomic instability. This is consistent with the research argument that the effects of economic sanctions may take some time to fully materialise and that their impact may accumulate over time.

Furthermore, these results suggest that the more severe the sanctions imposed on Iran, the greater the negative impact on the country's macroeconomic stability. This is in line with the expectation that sanctions can have significant negative impacts on a country's economy, particularly in the case of Iran, which has been subject to extensive sanctions from 2011-2015.

Table 6: The error correction rate and equilibrium

CointEq(-1)*	-0.89217	0.0009
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Estimated error coefficient (E.C.) is statistically significant at 1% and negative value which confirms the result of the cointegration. Its value is estimated to be -0.89 which implies that the speed of adjustment to equilibrium after a shock is high. Approximately 89% of disequilibrium from the previous year's shock converge back to the long-run equilibrium in the current year.

4.3 Thematic analysis

This section explores the impact of internal pressures and economic instability on Iran's foreign policy. The section examines the grey literature, official speeches, press releases, and news to determine whether sanctions have diminished Iran's nuclear and defensive capabilities or influenced its foreign policy towards neighbouring countries.

Impact of Economic Sanctions on Iran's Nuclear Program

Economic sanctions have significantly impacted Iran's nuclear program. Multiple studies argue that sanctions have impeded Iran's nuclear program. For example, the Federation of American Scientists (2017) stated that Iran's sanctions make acquiring nuclear project materials and technology difficult and delay Iran's nuclear energy development (Mohamadi et al., 2021). Similarly, the Centre for Strategic and International Studies study found that sanctions have harmed Iran's nuclear program by limiting its access to capital and technology. According to Nephew (2017) study, sanctions prevented Iran from importing advanced centrifuges and other nuclear apparatus. In addition, Libicki (2012) demonstrated that sanctions had a significant impact on Iran's nuclear programs and constrained Iran's ability to produce highly enriched uranium, a main component of nuclear weapons.

According to the International Atomic Energy Agency, IAEA (2015) report, sanctions have made it hard for the agency to monitor Iran's nuclear program and access its facilities to obtain the needed information. Additionally, several studies show that the sanctions have had a major impact on Iran's nuclear development, particularly its fuel production. Iran has also been unable to acquire nuclear fuel production equipment and technologies due to sanctions (Aghazadeh, 2013, Levite, 2021). Guo et al. (2021) argued that sanctions have reduced Iran's nuclear program by reducing its access to nuclear materials and technology.

Overall, economic sanctions have had a major influence on Iran's nuclear program. The sanctions have slowed Iran's nuclear progress, as well as restricted access to financing and foreign technology, and weakened the country's ability to generate high-enriched uranium and nuclear fuel.

Impact of Economic Sanctions on Iran's Defence Capabilities

The imposition of sanctions has greatly impacted diverse parts of the Iranian economy, encompassing its defence power. As delineated by the United States Department of Defense, the bedrock of Iran's military potency rests upon three fundamental pillars: ballistic missile capabilities, naval prowess, and adeptness in asymmetric warfare. Iran's capacity to bankroll its military machinery is overwhelmingly contingent on the income derived from its oil resources. This stream experienced a noticeable ebb after the sanctions came into effect. In a parallel vein, the Center for Strategic and International

Studies (CSIS) has astutely underscored that the Iranian regime's capacity to underwrite its military endeavours is inexorably entwined with its petroleum exports. Consequently, the sanctions were designed to constrict the overall scope of trade, thereby impeding Iran's quest to acquire modern armament systems (Katzman, 2014). As articulated in the Council on Foreign Relations report, the sanctions have a state of pressure encircling Iran's prospects of procuring sophisticated weaponry systems (Laub, 2010).

Iran, on the other hand, has managed to avoid sanctions by developing its local military sector. According to a Brookings Institute analysis, sanctions have not greatly hampered Iran's capacity to develop missiles. Instead, it has compelled Iran to build its own military industry (Einhorn and Van Diepen, 2019). According to the International Institute for Strategic Studies (IISS), Iran has up to 50 medium-range and 100 short-range ballistic missile launchers. It has also built a missile programme capable of attacking U.S. assets in the area (United States Department of State, 2017).

Importantly, sanctions have had various consequences on Iran's defensive capability depending on the penalty imposed. Sanctions implemented by the United States on third-party businesses doing business with Iran's missile programme have effectively limited Iran's missile capability. This is due to Iran's reliance on foreign technologies to manufacture its weapons. As a result of restricting access to these technologies, Iran's capacity to build modern missiles has been undermined (Einhorn and Van Diepen, 2019).

Sanctions have also impacted Iran's naval capabilities, an essential aspect of its military strategy. It has hindered Iran's ability to get innovative nautical equipment. As a result, Iran has been compelled to strengthen its domestic naval capabilities (Johnson, 2012).

In conclusion, sanctions have had a substantial influence on Iran's defensive capability. Evidence shows they have limited Iran's capacity to grow and upgrade its military capabilities, forcing the Iranian military to shift its priority to locally made weapons and equipment, which may have long-term consequences for the country's defensive capabilities.

Impact of Sanctions on Iran's regional influence

Over years, continued sanctions have hurt Iran's economic relationships with different countries. For example, Iran's oil exports to Turkey, a major economic partner, decreased by over 70% from 2018 to 2019 (Segal, 2018). The sanctions have also changed Iran's foreign policy, making it more aggressive and combative towards its neighbours. Economic restrictions have made Iran more assertive in the region, escalating tensions with its neighbours. For example, Iran has been accused of aiding the Houthis in Yemen and the Assad administration in Syria. These actions have increased tensions between Iran and its neighbours, making relations more hostile (Johnson, 2012).

However, other experts believe that Iran's foreign policy goals of regional strength and influence have not been changed by the sanctions' impact, but the Iranian assertive foreign policy is rooted in its strategic interests and economic sanctions have not changed them (Perthes, 2010).

As discussed, scholars dispute how economic restrictions affect Iran's foreign policy towards its neighbours. Some claim the sanctions have impacted Iran's foreign policy goals, but others say the country's strategic objectives have not. Therefore, the effectiveness of economic sanctions in attaining foreign policy goals and their unexpected repercussions must be examined.

Impact of Sanctions on Iranian leaders' speeches

In recent years, there has been a growing interest in analysing the content of official speeches, press releases, and news to understand how conflictual and cooperative they are regarding international sanctions against Iran. The relationship between economic

pressure through sanctions and Iranian leaders' conflictual or collaborative tone of official speeches is complex and multifaceted.

Since the Islamic Revolution in 1979, Iranian officials have maintained a conflictual speech against the West, especially the United States. This was exemplified by the Iran Hostage Crisis, which lasted 444 days and strained relations between the two countries for decades. Subsequently, as a response to the increased economic sanctions from the U.S. against Iran, the Iranian official speeches became more conflictual, including a talk by the then Supreme Leader of Iran, Ruhollah Khomeini, in 1988, in which he referred to the U.S. as the "*Great Satan*" and called for the destruction of Israel (Beeman, 2008).

Similarly, during this period, Iranian President Mahmoud Ahmadinejad showed a largely conflictual and combative tone towards the West. It emphasised Iran's independence and defiance of Western pressure (Akbarzadeh, 2009). Ahmadinejad's 2005 U.N. General Assembly speech blamed the U.S. and Israel for many of the world's problems (Shakoury, 2018). His 2012 Tehran Non-Aligned Movement summit speech was anti-Western and urged for stronger cooperation among non-aligned countries against Western forces (Warner and Gallo, 2013). Iranian official press announcements were likewise conflictual. Iran's Foreign Ministry accused the U.S. of fostering "*terrorism and extremism*" in the Middle East in 2011. In 2012, Iran's Supreme Leader, Ayatollah Ali Khamenei, said that economic sanctions were part of a bigger plan to destabilise the country and that Iran would not yield to foreign pressure. Iran's Revolutionary Guard issued a warning statement to the U.S. against the Syrian invasion in 2013.'

Economic challenges and domestic instability due to sanctions have compelled Iran's government to pursue increased international dialogue and cooperation (Iranian Foreign Minister 2022). The Iranian government has been facing increasing protests and dissatisfaction from its citizens due to high unemployment rates and economic problems (Fathollah-Nejad, 2019). In response to these complaints, the Iranian government has attempted to present a more cooperative image to the international community to gain support and legitimacy (Bozorgmehr Sharafedin 2013).

The U.S. also supported Iran's 2012 Shanghai Cooperation Organisation membership. In 2012, Iranian President Hassan Rouhani spoke about peace and cooperation before the U.N. General Assembly (Shakoury, 2018). He claims Iran has suffered aggression and terrorism and seeks peace through discussion and diplomacy. In his cooperative speech, Rouhani called for a "coalition for hope" and international cooperation to solve global problems.

The JCPOA, also known as the Iran deal, signed in 2015, is an example of close cooperation in foreign policy between Iran and the Western countries. The agreement was reached through negotiations involving Iran and the P5+1 nations (the United States, the United Kingdom, France, Germany, Russia and China). Its purpose was to restrict Iran's program while lifting sanctions. The European Union's Representative for Foreign Affairs and Security Policy and Mohammad Javad Zarif, Iran's Foreign Minister, expressed that the JCPOA illustrates how diplomacy, coordination and dialogue can overcome standing tensions and conflicts while paving the way for peace and cooperation (Posch, 2010).

Official speeches, press releases, and reports from Iranian and Western authorities and media sources accompanied the negotiations, and the deal's signing highlighted Iran-West collaboration and diplomatic relations. Iranian and Western media outlets covered the negotiations and deal signing with upbeat or hopeful tones. The Guardian (2015) said that "*the prospect of a new relationship with the West, and the possibility of a reopening of trade and commerce, has electrified Iranians*" (Dehghan, 2015).

In conclusion, economic sanctions have significantly shaped the tone of official Iranian speeches towards the West, from conflictual during intensive sanctions to cooperative during internal economic difficulty. The Iranian government's need for economic relief

and legitimacy has forced it to be more receptive to negotiations and cooperation with other countries, as mentioned in the various examples of cooperation between Iran and the West, such as the JCPOA, which was accompanied by speeches and statements with cooperative and hopeful tones.

5. Conclusion

This research tried to examine the effectiveness of economic sanctions diplomacy as a foreign policy tool to settle international conflicts, using Iran as a case study by answering whether economic sanctions have succeeded in diminishing Iran's nuclear and defensive capabilities or led to changes in its foreign policy toward its neighbours in the region.

The results of this study reveal that the economic sanctions imposed on Iran have targeted Iran's oil exports, financial system, and access to technology and other goods, which has had a severe impact on the country's economy. The Iranian economy was smaller than it would have been without the sanctions in terms of GDP. Besides, the budget deficit has also grown due to oil revenue deficits, adding to inflationary pressures through the government's deficit financing operations. This increased economic instability has led to internal hard pressures on the Iranian government and made it recognise that a change in foreign policy was necessary to alleviate the suffering of its people, which led to the signing of the 5+1 agreement.

The deal was signed in July 2015 and lifted many of the economic sanctions on Iran in exchange for limitations on the country's nuclear program, leading to increased economic growth and development. Furthermore, sanctions produced some internal political changes in Iran, including empowering the most moderate candidate, Rouhani, for two election rounds. The Rouhani administration has pursued a more conciliatory approach to foreign policy and sought to improve international community relations.

The results of this study show that sanctions have affected Iran's nuclear program by limiting its access to nuclear technology and materials needed to develop its nuclear program and have, therefore, slowed its progress. It made it more difficult for Iran to access the funds required to invest in its program and purchase the equipment and expertise necessary for its development. However, sanctions have not entirely stopped Iran's nuclear program. Nevertheless, the domestic pressure of sanctions may have rallied support for the nuclear program among Iranians, further incentivising its process.

On the regional influence level, sanctions have not significantly reduced Iran's ability to arm militant movements in the region, especially with the Middle East's fragile political and military situations after the Arab Spring strengthened Iran's role in the region regardless of sanctions. Iran's domestic arms industry has grown over the years, partially mitigating the limited foreign supplies of weaponry. Additionally, Iran continues to provide military equipment and advisers to the embattled governments of Syria and Iraq, and it has maintained weapons exportation to the Shiite Houthi faction in Yemen and radical Shiite factions in Bahrain.

Multilateral sanctions appear essential to substantially constrain Iran's military ambitions. Iran's military budget has dropped 77% due to sanctions. However, without multilateral sanctions, this decrease is limited. While sanctions have undermined Iran's conventional forces, growth in the domestic arms industry over time has mitigated constraints on foreign arms. This implies that sanctions have little influence on Iran's military capability and require international cooperation.

This study concludes that sanctions have had mixed effects on Iran. Sanctions have limited Iran's nuclear programme and military capabilities, but they have not limited its ability to arm regional militants. The harshness of sanctions and low oil prices

substantially influenced their impacts. Thus, economic sanctions' risks of killing innocent populations and inciting animosity that could lead to future wars must be considered alongside their advantages.

6. Policy implications

The findings of this study have major policy implications for international relations, regional security, and nuclear non-proliferation. Based on the examination of sanctions' effects on Iran's nuclear programme, defence capabilities, and regional influence, the following policy recommendations can be made:

First, the study suggests that unilateral sanctions may fail to achieve the desired outcomes. Conversely, multilateral sanctions may be more effective at keeping Iran from developing a nuclear programme and curbing its military ambitions. Second, the study highlights the limitations of economic sanctions in reducing regional influence; it has not impacted Iran's ability to arm Middle Eastern militants. Thus, officials should consider extra diplomatic, economic, and military measures to counter Iran's ambitions.

Third, the analysis indicates that sanctions have hurt the Iranian economy; however, the effects on Iranian civilians must also be considered. Economic instability, black markets, food and medication shortages, and increased unemployment resulted from sanctions, causing widespread suffering among the population. Therefore, policymakers should consider customised sanctions that minimise the impact on ordinary people. Fourth, the study demonstrates that sanctions can produce political changes in Iran, such as empowering moderate candidates. Therefore, policymakers should consider supporting moderate candidates in Iranian elections as part of a broader strategy to encourage positive political changes.

In conclusion, the study highlights that sanctions have a complex impact on Iran and that Iran's nuclear programme, military goals, regional influence, and political system require a multidimensional strategy. To achieve policy goals, policymakers should consider sanctions' effects and consider diplomatic, economic, and military options.

7. Study limitations and further research

Limitations: The textual sources used for thematic analysis were restricted to speeches, reports and news articles due to accessibility constraints. This prevented a broader investigation incorporating memoirs, internal government communications, and transcripts of diplomatic negotiations that could provide invaluable primary insights. Besides, the complex nature of Iran's politics, economy and foreign relations means that definitively isolating the effects of sanctions is challenging. As such, the findings should be considered indicative rather than determinative.

Further research: This study opens up several fruitful avenues for future research. Applying a similar framework to examine the efficacy of sanctions against other countries could yield valuable comparative insights. Detailed case studies assessing particular industries or sectors affected by sanctions would reveal nuanced micro-level impacts. Examining Iranian public opinion data over time could show how sanctions have influenced popular attitudes and perceptions.

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