**TERM PAPER**

**EFFECTS OF IRAN’S ADVANCEMENT IN CIVIL NUCLEAR PROGRAM: IMPLICATIONS FOR SECURITY POLICIES OF SAUDI ARABIA AND ISRAEL 2000-2020**

***COURSE TITLE:***

***COURSE INSTRUCTOR:***

***SUBMITTED BY:***

***DATE OF SUBMISSION:***

**TABLE OF CONTENT**

[**CHAPTER 1: INTRODUCTION 3**](#_jq0ml7j9rlwt)

[BACKGROUND 3](#_ynu6h979a1eb)

[RESEARCH QUESTION 3](#_4vudv5hb805z)

[HYPOTHESIS 4](#_xgkbulakc1jh)

[AN OVERVIEW OF METHODOLOGY & DATA SOURCES 4](#_aarj2frpsgnc)

[**CHAPTER 2: LITERATURE REVIEW 4**](#_kpfzqbd01wao)

[THEORETICAL FRAMEWORK 8](#_dv4o69afgnf3)

[REALISM 9](#_ovbgcawina7i)

[LIBERALISM 9](#_wj7vy97he89p)

[CONSTRUCTIVISM 9](#_co6p33iyonok)

[**CHAPTER 3: METHODOLOGY 10**](#_zf4v521czha1)

[DISTINCT HYPOTHESIS 10](#_gyujqick93dn)

[QUANTITATIVE ANALYSIS 10](#_xut2mdqmi8rt)

[➔ DESCRIPTIVE STATISTICS 11](#_c6orun9qxm0i)

[➔ REGRESSION ANALYSIS 12](#_zanty82wkh4q)

[QUALITATIVE ANALYSIS 13](#_2m7xinkr9lsa)

[➔ JOINT COMPREHENSIVE PLAN OF ACTION 13](#_iuqg5g4hwfbo)

[★ PERCEIVED THREAT: 14](#_yzpwp4gut91)

[★ STRATEGIC RESPONSES: 14](#_glgl4p2i4qep)

[★ REGIONAL ALLIANCES AND SECURITY PARTNERSHIPS: 14](#_pogbmrxo895m)

[FUTURE IMPLICATIONS 15](#_g3t75thhbbsl)

[**CHAPTER 4: IRAN’S NUCLEAR PROGRAM 16**](#_4kcqw0sb0tta)

[HISTORICAL DEVELOPMENT 16](#_rcl008s4aqxg)

[ROLE OF IAEA 16](#_po8ygyy483cr)

[NUCLEAR DEVELOPMENT 17](#_g2dp5oalv8yt)

[JPOA AND JCPOA 18](#_ypni7zg0yoyv)

[**CHAPTER 5: EMPIRICAL FINDINGS 19**](#_ar0xnh7if21v)

[**CHAPTER 6: CONCLUSION 19**](#_6oxdrx96kozd)

[FUTURE CONSIDERATIONS 20](#_i4y1giirgt46)

[**REFERENCES 21**](#_sdl09c5wzryq)

# **CHAPTER 1: INTRODUCTION**

## **BACKGROUND**

From the beginning of the century, Iran's development in civil nuclear activities has become known as a critical junction in the field of global politics, especially in the region of the Middle East. The development of Iran's atomic development has caused significant concern and debate amongst worldwide and regional players due to the potential consequences for regional stability and stability. Considering their strategic necessities and safety interests in the area, adjacent nations which include Saudi Arabia along with Israel have closely monitored these developments.The complex interplay between Iran's nuclear ambitions and Saudi and Israeli security theories emphasizes the importance of this study issue. As Iran works to strengthen its nuclear capabilities, it causes strategic recalibrations and political adjustments among neighboring nations, resulting in a rearrangement of the global security environment. The recognition of the mechanisms underlying Saudi Arabia and Israel's retaliation against Iran's nuclear advances is critical for a thorough comprehension of the Middle East's larger territorial disputes and security imperatives. In addition, the developing debate around the Iranian nuclear programme needs an in-depth study of the many components that extend proliferation dangers, preventative techniques, and global dynamics of power. Conducting an examination necessitates a multidisciplinary strategy, relying on concepts from diplomatic theory, security analyses, strategic planning, and nuclear arsenal dynamics. By looking into the detailed interrelated components within Iran's nuclear path and adjacent states' tactical calculation, this study hopes to contribute to a deeper comprehension of the Middle East's complex geopolitical surroundings and its larger implications for the globe's security construction.

## **RESEARCH QUESTION**

The central focus within this study is to investigate the "new systems" that may arise in reaction to Iran's civil atomic system, as well as their influence on Saudi Arabia's and Israel's military-economic policies. The key problem underlying this research is: What geopolitical recalibrations has Saudi Arabia as well as Israel explored in response to Iran's nuclear advances between 2000 and 2020?

The comparative examination of Israeli with Saudi reactions to Iran's civilian nuclear arsenal needs to take into account a variety of elements that influence the way they act. The dispute between Arabs and Israelis and the larger Sunni-Shia rivalry have a substantial impact on both nations' strategic considerations, including their stance on the nuclear ambitions of Iran.

* Israel's widespread rivalry with Arab governments, especially those that support Iran, including Hezbollah in Lebanon or Hamas in Gaza, has a direct impact on its perspective of Iran's atomic ambitions. Because it supports anti-Israeli organizations, Israeli leaders see Iran as a regional destabilizer and a possible fundamental danger. As a result, Israeli actions regarding the nuclear ambitions of Iran are frequently motivated by security concerns connected to the Arab-Israeli conflict.
* Saudi Arabia, a Sunni-majority country, sees the nuclear ambitions of Iran through its perspective of the larger Sunni-Shia conflict. Iran's atomic goals are viewed as a component of its regional hegemonic objectives, that threaten Saudi Arabia's power in the region. The religious dimension of the competition heightens Saudi fears over Iran's nuclear abilities, as they believe that an atomic-armed Shia Iran could exacerbate instability in the entire region and strengthen Shia minorities in countries adjacent to it.

**External Actors Involvement**

The presence of other parties, primarily the United States, complicates Israeli and Saudi actions regarding the Iranian nuclear ambitions. Israel reaps the advantages of a tight strategic relationship with the United States, that offers it with assurances of safety and military support. As a result, Israeli actions toward Tehran are shaped by US strategic interests in the area, such as nonproliferation initiatives and limitation of Iran's dominance.

## **HYPOTHESIS**

The theory enticing this research is that developments in Iran's civil nuclear activities have encouraged Saudi Arabia and Israel to make strategic changes regarding their military-economic plans. These modifications are motivated by the perceived risk presented by Iran's nuclear system, and they aim to protect their different national security interests in a context of changing conditions in the region.

## **AN OVERVIEW OF METHODOLOGY & DATA SOURCES**

To answer the question under study and evaluate the hypothesis, a complete methodical strategy that combines both quantitative and qualitative evaluation will be the method used. The study will use a contrasting case-based strategy, concentrating on military and economic developments in Saudi Arabia as well as Israel throughout the chosen period.

On the qualitative front, political conversations and international agreements will be examined to get insight into the tactical dialogues and coalitions that emerged in reaction to Iran's nuclear project. This qualitative study can help to comprehend the motives underlying policy selections and operational recalibrations.

# **CHAPTER 2: LITERATURE REVIEW**

(Waltz, 2012) has stated his thoughts in "Why Iran ought to Get the Bomb," which suggests that an atomic-armed Iran would be discouraged from employing or exporting weapons of mass destruction to terrorists. In the paper "Iran and the Bomb," Colin H. Kahl challenges Waltz's point of view, arguing that his argument undervalues the possible hazards as well as destabilizing implications of Iran's nuclearization.Kahl contends so, although the Tehran regime might be logical, having a nuclear arsenal would enable its government to move towards its regional aims with greater force, which could contribute to increasing backing for terrorist organizations including proxy conflicts. He uses historic instances, like Pakistan's behavior after gaining nuclear weapons, as examples of how nuclear weapons might cause increased conflict in the region and war intensification. Furthermore, Kahl claims the theory of the stability-instability dilemma can be applied to the case, implying that though the presence of nuclear weapons could stop big conflicts between nuclear-armed countries it might additionally promote lower-level aggression and detrimental behaviors.subsequently Kahl accentuates the significance of stopping Iran from gaining weapons of mass destruction by diplomatic methods, arguing that the hazards involved with having a nuclear-armed Iran exceed the possible benefits of regional peace.

(Narang, 2012) investigates the dominant prejudice in the field of nuclear deterrence studies by claiming that various atomic stances have varying preventive power. Although previous literature frequently sees all nuclear-armed nations as equal solely because of their ownership of weapons of mass destruction, this article advocates an alteration in methodology to examine various nuclear stances. The study especially examines the impact of asymmetrical intensification nuclear deployments in discouraging war beginning and progression.Research results indicate that modest arsenals and guaranteed vindication stances might not be as successful in averting severe military confrontation. Rather, the study stresses the unique preventive qualities of an unbalanced escalating stance, which has been shown to successfully avoid warfare at high as well as low levels of assault, involving either nuclear or non nuclear powers.Additionally, the work has consequences for theoretical comprehension and policy discussions on prevention and proliferation. It stresses the importance of nuclear postures and the fact that having nuclear weapons might not be sufficient to deter traditional strikes. Policymakers are asked to evaluate not just the state's acquisitions of nuclear arsenals, but also whether it would operationalize its nuclear arsenal when they reach the level of capability. This reinforces the significance of regional governments openly allocating their nuclear capabilities to deter conventional dispute as a way to endure fewer assaults.

The work of (Sagan, 1996) explores the key diffusion question of why governments undertake nuclear weapons programmes. Considering the abundance of available knowledge on the topic, the article observes an unexpected lack of ongoing focus paid to this essential problem. The writer disputes the widely held view that nations pursue weapons of mass destruction primarily for national security motives, rather presenting three additional intellectual mechanisms: the security framework, the politics of home framework, as well as the norms framework.According to the security model, governments acquire nuclear weapons to strengthen national security, especially in the face of nuclear dangers. However, the study contends primarily a domestic affairs standpoint, stressing instances where atomic caution derives from internal political goals instead of exterior armed considerations. It explores the model's repercussions for policy, calling for diplomatic attempts to combat proliferation of nuclear technology by strengthening domestic opponents of weaponry development and supporting civilian administration of the government.The research investigates the causes of nuclear proliferation and compares alternate scenarios. It accentuates the importance of the norms model, that proposes that atomic decisions are impacted by symbolic purposes and state individuality, as well as global standards and perceptions about acceptable conduct.The article stresses the complicated nature of nuclear proliferation and the difficulty policymakers have in dealing with it as a result of contradicting policy suggestions from various models. It advocates for theory-driven comparison studies in order to better comprehend how diverse causal processes cause identical results, as well as an in-depth strategy and a synthesis of competing policy suggestions from multiple perspectives on theory.

(Sechser & Fuhrmann, 2013) have investigated that The topic of whether nuclear arsenals give an edge during global crisis negotiations constitutes a fundamental subject in modern security studies. Throughout over seventy decades of the nuclear age, experts remain at odds with this subject, attempting to comprehend the mechanisms of intimidation and restraint in nuclear weapons. While substantial study has already been conducted on the notion of nuclear discouragement, there is still a significant empty space in knowing whether or not arsenals of weapons enable sustained compliance - the power to force antagonists to adjust their behavior by warnings or actions.The authors contend that, given their immense devastating power, nuclear devices are useless instruments for forcing nations to agree with demands. They argue that effective coercion necessitates the capacity to legitimately threat possession of the subject of dispute while inflicting minimal expenses on the challenger, both of criteria nuclear weapons fail to achieve primarily because of their inappropriate suitability for invasion and substantial usage expenses.To back up this claim, the authors present an updated data set containing over 200 cases of militarized compellent attacks from 1918 to 2001. Their empirical research finds compelling proof in support of their argument, proving that compellent claims from countries with nuclear weapons are not more probable to be successful, even after controlling for any kind of selection biases in the dataset. Therefore, while nuclear arms may have persuasive influence in the arena of deterrence, their value in aiding complete compliance appears to be constrained.The article questions the accepted consensus on the usefulness of nuclear weapons in pressure, drawing on previous compellent claims. It emphasizes the need for deeper evaluations regarding nuclear capabilities outside standard deterring paradigms.

(Tannenwald, 1999) investigated the growth of the moral ban on the application of nuclear arms since 1945, questioning the conventional justification of deterring as the primary reason behind their non-use. The study stresses the role of ethical restrictions in nuclear making choices, especially in light of the United States' atomic history. The research examines several cultural impacts of the nuclear taboo, particularly regulatory, fundamental, and liberal elements, to offer understanding into the way these standards affect the military's capabilities along with the worldwide system's application of self-help materials.The article demonstrates the impact of the nuclear taboo on how decisions are made concerning nuclear weapon use by conducting extensive evaluations of historical situations including World War II, the Korean War, the Vietnam War, & the Persian Gulf War. Particularly, the study discusses occasions in which the United States avoided using nuclear weapons while having considerable nuclear dominance. The research goes into particular situations, such as the Vietnam War along with the Gulf War, to examine the evolution of the military taboo and its influence on atomic decision-making processes. It shows how variables such as apprehension about larger conflicts, societal opposition to nuclear power, and the validity of nonnuclear military substitutes affected decisions regarding strategy.

(Tannenwald, 2013) has investigated the issues facing the nuclear nonproliferation system, especially from the perspective of poor countries. The study addresses the regime's perceived crises as a result of problems with justice and fairness in its norms, regulations, and processes, stressing the significance of resolving these issues for the regime's long-term viability. The study investigates the elements impacting the regime's credibility, focusing on equity, fairness, and justice in the execution of non-proliferation standards and norms. Rathbun emphasizes the need of addressing the problems of developing nations, who frequently feel marginalized or treated unfairly under the existing structure. This acknowledgement is thought critical for upholding the commitment to nonproliferation duties.Furthermore, the study examines the idea of procedural fairness and how it applies to the system. It promotes transparent and equitable decision-making procedures to increase credibility, arguing that embedding justice and fairness concepts into the regime's structure of governance may encourage confidence and collaboration among nations, hence enhancing overall non-proliferation efforts. Finally, Rathbun's work stresses the need for fairness and justice in tackling the issues of the nuclear nonproliferation system, particularly from the standpoint of poor countries. Incorporating these ideas into the regime's conventions, regulations, and processes can help it gain respectability and assure its viability over time.

## **THEORETICAL FRAMEWORK**

Assessing governments' reactions to external challenges, including Iran's civil nuclear initiative, need a theoretical structure that clarifies the fundamental tenets that govern the actions of governments. In the field of international relations concept, realism, liberalism, & constructivism are significant frameworks, each presenting various viewpoints on state behavior and relations in the global arena.

### **REALISM**

Realism, which depends on the philosophical works of authors like Thucydides & Machiavelli, holds that governments are mainly driven by the pursuit of authority and safety in a system of international anarchy. Under a realist perspective, Saudi Arabia & Israel's reactions to Iran's nuclear advances may be viewed via the prism of their own interests and preservation. Realists maintain that nations prioritize their own defense above anything else and use strategic considerations to enhance their relative influence in the face of potential enemies. In this environment, Saudi Arabia along with Israel may see Iran's atomic project as a danger to their sovereignty and hence take protective steps to retain their geopolitical supremacy. (Tagma, 2023)

### **LIBERALISM**

In contrast to realism, liberalism emphasizes the importance of institutions, regulations, and collaboration in influencing governmental behavior. Liberals contend that nations are affected not just by power concerns, but also by principles like freedom, equality, and financial interdependence. Saudi Arabia's & Israel's responses to Iran's nuclear programme may be analyzed via a liberal perspective in regard to their commitment to global norms and institutions. Liberals argue that governments may solve safety issues through legislative solutions, participation in global discussions, and partnership in the economy. As a result, Saudi Arabia along with Israel's reactions to Iran's atomic effort might correspond to their involvement in international entities such as the U.N. and attempts to form alliances with like-minded countries. (Rooth, 2015)

### **CONSTRUCTIVISM**

Constructivism examines how ideational elements like sense of self, standards, and social structures influence state behavior. Constructivists argue that social relationships and collective concepts, instead of solely material concerns, determine states' goals and identification. Under a constructivist perspective, Saudi Arabia and Israel's reactions to Iran's nuclear project may be evaluated as an example of the manner in which they perceive and create Iran's danger. Constructivists claim that governments' perceptions of security risks are formed by society and can alter gradually. As a result, Saudi Arabia and Israel's answers might be affected by their own internal governance, historical accounts, and ideas of belonging, as well as external elements such as diplomatic exchanges and communications. (Merom, 2017)

Using these theoretical perspectives, this study aims to give a deeper view of Saudi Arabia's & Israel's reactions to Iran's nuclear programme. Realist viewpoints may shed insight on the security considerations and balance of power that drive their tactical actions, whilst liberal viewpoints may emphasize their adherence to global organizations and standards. In contrast, constructivist viewpoints may give insight on the significance of belonging, rhetoric, or social constructs in determining people's impressions of Iran's danger to security. The paper uses this theoretical structure for showing the diverse character of state behavior when responding to complex issues of security in the region of the Middle East.

# **CHAPTER 3: METHODOLOGY**

## **DISTINCT HYPOTHESIS**

The first phase in this study's technique is to generate a hypothesis in particular that will act as the research's driving foundation. The hypothesis is developed to investigate a certain link or consequence based on the research's topic about Saudi Arabia and Israel's actions regarding Iran's nuclear development. In this situation, the hypothesis may propose that there is a causal association connecting Iran's atomic advances and Saudi Arabia's and Israel's geopolitical realignments. For example:

***“Advances in Iran's civil nuclear arsenal have prompted Saudi Arabia and Israel to make tactical modifications regarding their military-economic plans in response to perceived hazards of their national security objectives.***”

## **QUANTITATIVE ANALYSIS**

In order to better comprehend the current trends and performance of these states, I have conducted analysis based on data taken from world development indicators. The variables for the study under review include gdp growth, military expenditure % of gdp and foreign direct investments. I have conducted the research by emphasizing on descriptive statistics and regression analysis.

### **DESCRIPTIVE STATISTICS**

The descriptive statistics give information on Iran's fiscal health and military spending for the selected time period of 2000-2020. Iran's GDP growth rate has a modest amount of variation, with a mean of 3.03% with an average deviation of 3.88%. The overall pattern of GDP growth levels is somewhat negatively distorted, showing a minor trend into a decrease in growth. Notwithstanding this variety, the median growth rate of 3.19% indicates rather consistent economic success. GDP growth rates can vary from -3.75% to 8.82%, indicating changes in revenue generation across the time.Iran spends a median of 2.54% of its gross domestic product on defense. The normative deviation of 0.37 suggests that military expenditures vary very little over time. The overall distribution of military spending is somewhat positively skewed, indicating a trend towards greater levels of expenditures. Nevertheless, the median expenditures of 2.56% of GDP shows an even balance round the mean. The variation in the amount of military spending is lighter, spanning from 1.97% to 3.32% of gross domestic product, or showing a more constant level of funding for defense capabilities.The descriptive data for Foreign Direct Investment (FDI) in Iran show an average amount of FDI of roughly $2.64 billion, with a significant degree of fluctuation reflected by a standard deviation of about $1.26 billion. The median FDI worth around $2.88 billion indicates a core trend less impacted by high levels. With a range of $39 million to $5.02 billion, the data demonstrates the wide variety of investment amounts recorded. In addition, skewness and kurtosis data show a somewhat left-skewed distribution, showing a trend towards greater FDI values. Overall, these figures give useful information about the pattern and quantity of FDI in Iran throughout the provided time. The descriptive data for Foreign Direct Investment (FDI) in Israel show a median FDI of $9.78 billion, with a standard deviation of $6.14 billion, showing a significant degree of variation in expenditure levels. The median FDI value of around $8.80 billion indicates a core trend less impacted by high levels. With a range of $1.58 billion to $21.53 billion, the analysis shows substantial variety in investment quantities recorded throughout the selected time period i.e. 2000-2020. Furthermore, skewness and kurtosis data indicate a somewhat right-skewed distribution, implying a trend towards greater FDI values. Overall, these figures give beneficial insights into the trend and quantity of FDI in Israel, indicating the country's appeal to international investors as well as its economic success throughout the time period studied.The statistical information for Foreign Direct Investment (FDI) in Saudi Arabia show an average FDI of roughly $110.97 billion, plus a standard deviation of approximately $12.20 billion, showing an extensive variety of investment rates. The median FDI figure of $80.12 billion indicates a core trend less impacted by high levels. With a range of -$1.88 billion to $39.46 billion, the analysis shows substantial fluctuation in investment quantities observed throughout 2020-2000. Furthermore, skewness and kurtosis data indicate a right-skewed dispersion, implying a trend towards greater FDI values. In general, these figures shed insight into the structure and amount of FDI within Saudi Arabia, showing the country's appeal to international capitalists as well as its economic success throughout the analyzed period.

### **REGRESSION ANALYSIS**

The regression study for Iran's economic expansion from 2000 to 2020 yielded a multiple R value of 0.64, showing a fairly good relationship between the variables that predicted and the growth in GDP. The R-squared value of 0.41 indicates that predictor variables account for about 41% of the variance in growth in GDP. An F-test having a probability value of 0.007 confirms the regression algorithm's statistical importance. Yet, the correlation coefficients for military spending (% of GDP) or (FDI) are not considered statistically noteworthy at customary levels, with the p-value of 0.094 and 0.715, correspondingly. Thus, while the framework as a whole is important, individual variables could not be having a substantial influence on Iran's GDP increase within the 2000-2020 time frame.For the State of Israel, a regression study for GDP growth from 2000 to 2020 found a significant positive link amongst the variables that were predicted and growth in GDP, having an overall R value of 0.83. The R-squared value of 0.69 indicates that the predictor factors account for about 69% of the variance in growth in GDP. An F-test having a p-value of 0.00002 confirms the regression algorithm's significance. The military spending (% of GDP) coefficient is highly significant at the standard deviation, having a probability value of 0.004. Nevertheless, the correlation coefficient for (FDI) cannot be considered of statistical significance (p-value=0.590).It also means that, although military spending could have a substantial influence on Israel's growth in GDP, foreign direct investment does not seem to make an important role within the selected time period.Considering Saudi Arabia, the regression evaluation of GDP growth from 2000 to 2020 indicates a reasonable correlation between the variables being predicted and the increase in GDP, having a multiple R of approximately 0.60. An R-square statistic of 0.36 implies that the predictor variables account for about 36% of the volatility in growth in GDP. The corrected R-square statistic equals 0.27. The results of an F-test with a p-value of 0.02 confirms the correlation strategy statistical validity. The percentage of defense spending (% of GDP) coefficient is of statistical importance at the 0.05 level (p-value = 0.05). Nevertheless, the coefficient of variation representing foreign investments is not of statistical significance (p-value=0.55). The observations under study imply that FDI has no direct impact on gdp growth but military arsenal has impacted economic expansion to some extent.

## **QUALITATIVE ANALYSIS**

The qualitative study of international agreements, including the Joint Comprehensive Plans of Actions (JCPOA) and in relation to the impact of Iran's civil nuclear programme progress on Saudi and Israeli security strategies from 2000 to 2020 entails investigating the commitments' diplomatic efforts, tactical and future implications.

### **JOINT COMPREHENSIVE PLAN OF ACTION**

The JCPOA significantly influenced the region's circumstances by resolving fears about Iran's nuclear agenda. Its provisions and implementation were critical for determining its effectiveness. Saudi Arabia and Israel had different reactions: Saudi Arabia was first skeptical, while Israel strongly objected to the pact. These replies demonstrate varying safety perspectives and political viewpoints. Saudi Arabia, concerned about Iran's regional goals, regarded the JCPOA with reservations, whereas Israel, seeing Iran as an inherent danger, resisted making any adjustments. The JCPOA's impact on security and stability in the regional dynamics was ultimately decided by the way it handled the complaints and preferences of major Middle Eastern players. (European Council, 2024).

#### **PERCEIVED THREAT:**

Saudi Arabia and Israel assessments of the JCPOA's effectiveness in limiting Iran's military ambitions have a significant impact on the regional environment. Saudi Arabia, aware of Iran's hegemonic goals and historic rivalries, expressed cautious confidence about the accord. Although Saudi Arabia acknowledged that it might to reduce conflicts, it continued apprehensive regarding Iran's over time adherence and regional goals. Israel, on the other hand, saw Iran as an existential danger and strongly rejected the JCPOA, claiming fears about inadequate constraints on Iran's nuclear development and its support for regional allies. Both nations closely watched the Islamic Republic's compliance with the accord, viewing any alleged transgressions as a danger to their national interests along with the security of the region.

#### **STRATEGIC RESPONSES:**

Saudi Arabia along with Israel retaliated to the JCPOA with a diverse strategic strategy that included legislative actions, tactical measures, and geographical partnerships. Saudi Arabia stepped up its dialogue with other nations, demanding assurance and assurances of safety to offset the Islamic Republic's possible resurgence. In addition, it strengthened its arsenal of weapons and bilateral ties to counter Iranian dominance. In a comparable manner Israel took a proactive approach, increasing defense collaboration with partners and improving intelligence exchange agreements to keep track of Iran's nuclear activities. Both nations followed strong foreign policies with the goal of restraining Iran's geopolitical aspirations while protecting their national security priorities in the context of changing geopolitical circumstances.

#### **REGIONAL ALLIANCES AND SECURITY PARTNERSHIPS:**

The JCPOA has had a wide-ranging influence on regional relationships and military ties, mirroring the Middle East's complicated geopolitical context. In the Gulf area, Arab governments, notably ones affiliated with Saudi Arabia, had conflicting views to the pact. Although some Gulf Cooperation Council (GCC) participants carefully approved of the prospect of minimized conflicts with Iran, some conveyed concern about Iran's growing diplomatic prominence and prospective nuclear capacities, provoking those to try to establish more connected security relationships alongside the US as well as additional Western allies. Who were the participants in these alliances? The JCPOA, which entered into force in January 2016, restricts Iran's civilian military production activity. Each of the five permanent members in the UN Security Council at the time (China, Russia, France, Britain, and the United States of America) plus Germany, known together as the P5+1, were essential to discussions involving Iran. The European Union (or EU) also participated. (Robinson & Takeyh, 2023) Saudi Arabia, as the de facto ruler of the Sunni Arab bloc, increased its attempts to develop alliances in the region and security relationships in reaction to what it saw as Iranian expansion. The coalition led by Saudi Arabia in Yemen, intended at combating Iranian-backed Houthis rebels, regained importance as Riyadh attempted to strengthen its control and demonstrate military force in the vicinity. (Al Jazeera, 2023)

Furthermore, Saudi Arabia strengthened its security collaboration alongside the US and other countries in the West, boosting its arsenal of arms and tactical adaptability in the face of possible Iranian dangers.In a comparable manner Israel, an important US partner in the region, has strongly opposed the JCPOA, claiming fears about Iran's atomic goals and regional instability. In reaction, Israel strengthened its defense alliances with compatible nations, particularly the United States, plus increased information cooperation to ensure Iran's adherence with its nuclear pact. The JCPOA therefore triggered an alteration of regional allies and defense collaborations, motivated by comparable fears about Iran's military agenda and its consequences for regional peace and safety.

#### **FUTURE IMPLICATIONS**

Future ramifications of the JCPOA are dependent on continual surveillance of Iran's adherence and regional events. Saudi Arabia and Israel’s opposing responses indicate persistent difficulties and future adjustments in relationships. Increasing examination and possible modifications to the pact may have an impact on the stability of the region, while major actors' tactical choices might reconfigure geopolitical interactions. Future events will probably be determined by Iran's conduct, the efficiency of diplomacy attempts, and the Middle Eastern security circumstance as it evolves. Monitoring and a proactive approach will be critical in handling any problems and possibilities associated with the JCPOA's adoption.

# **CHAPTER 4: IRAN’S NUCLEAR PROGRAM**

## **HISTORICAL DEVELOPMENT**

Iran has been developing its civil atomic activity throughout the beginning of the 2000s, invoking its entitlement to peaceful use of nuclear technology within the Non-Proliferation Treaty (NPT). However, allegations grew about the dual-purpose potential of Iran's military efforts, heightening global worries about the project's possible military elements. Notwithstanding worldwide surveillance and penalties, Iran has continued to develop the country's nuclear infrastructures comprising the enrichment of uranium facilities as well as research facilities.

The examination will largely concentrate on Saudi Arabia and Israel's policies toward Iran's nuclear program, as well as its regional activities and relationships. Nevertheless, while the primary emphasis is on their actions regarding Iran, the larger regional environment and the consequences of Iran's activities and relationships in the area will also be discussed. The section below covers Iran’s actions regarding nuclear arsenal and how restrictions were imposed on them to narrow down the atomic activity in the state.

## **ROLE OF IAEA**

Iran's nuclear project has long been the subject of worldwide surveillance and geopolitical friction, with the International Atomic Energy Agency, or IAEA, conducting surveillance and inspection to guarantee conformity with global nonproliferation regimes. Despite Iran's assurance that its nuclear operations are serene, there are worries about the initiative's possible military elements. The IAEA has already found occurrences of infringement and undisclosed substances, provoking calls for increased openness and collaboration via Iran. Although Iran has been cooperative with some parts that undergo the IAEA's assessments, there are currently delays, limitations, and a lack of accessibility to specific locations, hindering efforts to confirm the nonviolent character of Iran's nuclear project. The disclosures of concealed nuclear-related materials and infrastructure have heightened global reservations about Iran's goals and capacities. These results highlight the need of thorough surveillance and verification techniques in preventing nuclear proliferation and ensuring international and regional safety.

## **NUCLEAR DEVELOPMENT**

In the course of the summer of the year 2002, the National Council of Opposition of Iran, a federation of multiple Iranian dissident groups, exposed the presence of a pair of Iranian atomic locations: a nuclear enrichment plant at Natanz as well as a heavy-water production plant at Arak. Considering its dual-purpose nature, the sites might be beneficial for a civilian atomic system, but they might additionally be used to manufacture bombs: Natanz could supply Iran alongside weapons-grade radium, whereas Arak might help it in obtaining weapons-grade material. It was discovered that Tehran attempted to conceal its nuclear power plants from the IAEA instantly heightened international concerns about their ultimate objective.

***EARLY DIPLOMACY AND INTERNATIONAL PRESSURE***

The discovery of Iran's Arak & Natanz installations in 2003 spurred significant international attempts to put an end to Iran's enrichment of uranium projects. In October 2003, Iran consented to cease enrichment efforts and approve a supplementary agreement to its safeguarding arrangement with 3 European nations. Nevertheless, Iran refused to keep its promises, submitting the IAEA with partial and contradictory disclosures in the years 2004 and 2005. The absence of collaboration resulted in the IAEA Council of Directors declaring non-compliance in September 2005, triggering an inquiry to the United Nations Security Council. Iran replied by suspending application of the supplemental protocol and restarted enhancement efforts, eventually enriching the uranium to 3.6% in April 2006. (Iran Watch, 2023)

Notwithstanding diplomatic attempts by the P5+1 and resolutions of the UN Security Council implementing restrictions, Iran has kept up its nuclear refinement project. Foreign debates became more urgent in the month of September 2009, after the location of a second clandestine enrichment of uranium plant outside Qom was disclosed. Although heightened penalties and the Stuxnet computer malware attacking Iran's enriching equipment, Iran's enhancement project continued. By the end of the summer of 2013, Iran had set up hundreds of centrifugal pumps at its nuclear power plants, accumulating considerable volumes of enriched uranium over time. This buildup increased worries surrounding Iran's ability to generate weapons-grade combustible products, stressing the disappointment of multilateral attempts to limit Iran's uranium goals.

## **JPOA AND JCPOA**

Secret "back channel" negotiations between Iranian and US officials began in Oman in the year 2012, establishing the framework for bilateral interaction. The inauguration of Iranian President Hassan Rouhani in the month of June 2013, who called for a positive relationship with the P5+1, helped to improve discussions. Serious negotiations began in the last month of 2013, resulting in the Joint Programme of Action (JPOA) in the month of November of that year. The JCPOA recommended concrete initiatives for Iran to adopt, such as limiting its enrichment of uranium to 20%, dissolving pre-existing stocks, and improving IAEA surveillance. In exchange, the P5+1 lifted limited restrictions and released frozen Iranian cash. Importantly, the JPOA set up a framework for larger discussions leading to a comprehensive treaty. Commitment from iran’s side:

* Servicing not more than 5,060 IR-1 centrifugal pumps over a period of ten years.
* Enhancement to no more than 3.67 % over an amount of 15 years.
* A stockpiling of not more than 300 kilogrammes of uranium that has been enriched for 15 years.
* No uranium enrichment process at Fordow for 15 years.
* The Arak Heavy Waters Nuclear was redesigned to be more proliferation-resistant.
* Supplementary transparent initiatives, particularly the ultimate approval of an alternative protocol to the safeguarding consensus.

Commitments from P5+1 side:

* The lifting of practically all United Nations Council of the United Nations sanctions targeting Iran.
* Most of the European Union's sanctions on Iran will be lifted and eventually removed, as well as a vow not to reintroduce penalties banned pursuant to the JCPOA.
* The repeal of some US economic sanctions, particularly those targeting Iran's oil and securities industries.

In this paper, the primary focus has been on evaluating the changing policies of israel and saudi arabia in response to iran’s nuclear arsenal. For this purpose The method will entail selecting and comparing two relevant timeframes or occurrences within a larger chronology. These chosen times or events will act as critical reference points, allowing for a more in-depth knowledge of how policies and responses evolve throughout time.

1. **IAEA Vs JCPOA**

A comparison of Saudi Arabia's and Israel's policy reactions to Iran's conflict with International Atomic Energy Agency (IAEA) assessments in 2003 with the enactment of the Joint Comprehensive Plan of Action (JCPOA) in 2015 indicates major differences in approach. In 2003, increased worldwide concern about Iran's nuclear program pushed both countries to take forceful stands and advocacy for tough inspections and economic sanctions. Conversely, the signing of the JCPOA in 2015 identified a watershed moment when Saudi Arabia and Israel separated: whereas Saudi Arabia carefully approved of the agreement, Israel strongly disputed it, highlighting shifting dynamics in regional safety thoughts and diplomatic strategies in the face of Iran's nuclear program.

1. **IRAQ WAR Vs ARAB SPRING UPRISING**

A comparative review of Saudi Arabia's and Israel's strategies during times of increased tensions or regional instability, including the months following the end of the Iraq War in 2003 or the Arab Spring upheavals in 2011, reveals subtle adjustments to evolving regional security environments. The Iraq War in 2003 caused geopolitical turmoil, forcing both countries to rethink their strategy in the face of increased regional instability. Saudi Arabia & Israel negotiated this turbulent period by employing bilateral tactics and military readiness to protect their own national interests. In contrast, the Arab Spring protests of 2011 created additional problems, with both countries confronting increasing geopolitical uncertainty and domestic challenges. Saudi Arabia retaliated by assisting regional friends and participating in regional crises to maintain peace, while Israel strengthened its borders and observed any spillover effects. The contrast emphasizes the fluctuating character of regional security interactions, as well as Saudi Arabia and Israel's strategic versatility in responding to changing geopolitical conditions.

# **CHAPTER 5: EMPIRICAL FINDINGS**

***SECURITY POLICY FRAMEWORKS***

Security policy frameworks include extensive policies, concepts, and actions undertaken by Saudi Arabia and Israel to preserve their national security preferences, particularly in reaction to Iran's nuclear program, regional operations, and partnerships. These frameworks direct the development and implementation of policies concerning protection, diplomatic efforts, intelligence, and other facets of national security. Modifications in security policy frameworks need revisions in strategic goals, threat assessments, military principles, and resource allocation to accommodate changing security issues. In this regard, both Saudi Arabia and Israel may modify their military movements, adjusting force deploys and availability levels in reaction to what they perceive as threats by Iran and its allies. In addition, military expenditures may be adjusted to concentrate expenditures in capability required for deterring or combating future Iranian aggression. Alliance forms could shift with new partnerships formed or current ones strengthened to develop collective security arrangements counter common dangers posed by Iran. Furthermore, revisions to national security policies may reflect developments in geopolitical conditions and threat evaluations, laying out new measures to control Iran's nuclear goals and regional impact. In general, modifications to security policy framework represent the constantly shifting dynamics of regional security issues, as well as the need for Saudi Arabia along with Israel to adjust their policies to protect their national interests in the face of Iran's nuclear program and regional actions.

This study's empirical findings offer insight into the link among Iran's nuclear development and Saudi Arabia's and Israel's reactions. The descriptive statistics show that Iran's finances remained steady across the study period, with only minor variations in GDP growth and comparatively stable defense spending as a proportion of GDP. Nevertheless, Foreign Direct Investment (FDI) in Tehran fluctuates considerably, showing fluctuating degrees of confidence among investors. In the regression analysis, Iran's expansion in GDP is positively connected with variables that predicted it, indicating that some factors influence growth in the economy. Similarly, in Israel, defense spending as a proportion of GDP is significantly positively correlated with GDP growth, but FDI is not of statistical significance. Saudi Arabia's rise in GDP shows a plausible link with predicting factors, notably the spending on defense as a proportion of GDP.

In qualitative terms, the Joint Comprehensive Plan of Action (JCPOA) had different effects on Saudi Arabia and Israel. While Saudi Arabia tentatively supported the accord, Israel aggressively opposed it, indicating differing concerns about safety. Both nations responded to the JCPOA with a variety of strategic policies, including legislative acts and increased defense cooperation, aimed at combating alleged Iranian threats and ensuring regional stability. Furthermore, the JCPOA altered the region's alliances and military collaborations, with Saudi Arabia forging alliances to prevent Iranian advancement and Israelis strengthening defense cooperation with the US.

# **CHAPTER 6: CONCLUSION**

Finally, this research study examines Iran's civil nuclear activity and its implications for Saudi Arabia and Israel's security policy from 2000 to 2020. The article examines the historical evolution of Iran's nuclear endeavours, highlighting worldwide pressure and diplomatic measures to tackle Iran's atomic goals. The study clarifies the multidimensional influence of Iran's nuclear project on the world's security dynamics by combining quantitative assessment employing World Development Indicators with qualitative assessments of multilateral agreements such as the JCPOA.

The findings highlight Saudi Arabia and Israel's varied responses to Iran's nuclear ambitions, indicating divergent strategic moves and policy modifications in spite of changing global conditions. This thorough examination adds greatly to our knowledge of the complicated interaction among nuclear proliferation, security in the region, and international negotiations in the area of the Middle East.

Furthermore, the study stresses the significance of embracing a variety of theoretical structures, such as realism, liberalism, and constructivism, to better understand state behavior in relation to Iran's nuclear project. By combining findings from both the literature review and concrete evidence, the study improves our understanding of the larger geopolitical scene and its ramifications for global security strategy.

Finally, this research enriches research on Middle Eastern geopolitical processes and provides essential information for politicians and analysts dealing with the multifaceted nature associated with nuclear proliferation and regional stability in the 21st century.

## **FUTURE CONSIDERATIONS**

Looking into the future, further studies must concentrate on the changing circumstances around Iran's nuclear project and its consequences for the safety of the region. This might entail examining the potential effects of developments in global relations, such as shifts in US foreign policy and the reconsideration of multinational accords like the JCPOA. Furthermore, more investigation on the societal and economic elements motivating Iran's atomic goals, alongside the impact played by new technology in determining nuclear proliferation dynamics, will help us better comprehend the situation. Furthermore, it is critical to investigate the larger ramifications of Iran's nuclear programme outside of the local area, such as its influence on global nuclear nonproliferation activities and the resilience of global safety systems. Considering these prospective factors will help scholars get a deeper understanding of the complicated relationship between nuclear weapons, local governance, and international safety in the coming years.

# **REFERENCES**

1. Al Jazeera. (2023, March 10). *Timeline: Iran and Saudi Arabia, from rivalry to rapprochement*. Al Jazeera. Retrieved March 20, 2024, from https://www.aljazeera.com/news/2023/3/10/iran-and-saudi-arabia-from-rivalry-to-mending-ties-a-timeline
2. European Council. (2024, February 19). *Joint Comprehensive Plan of Action and restrictive measures*. Consilium.europa.eu. Retrieved March 20, 2024, from https://www.consilium.europa.eu/en/policies/sanctions/iran/jcpoa-restrictive-measures/
3. Iran Watch. (2023, December 19). *A History of Iran's Nuclear Program*. Iran Watch. Retrieved March 21, 2024, from https://www.iranwatch.org/our-publications/weapon-program-background-report/history-irans-nuclear-program
4. Merom, G. (2017). *Israeli Perceptions of the Iranian Nuclear Threat*. Wikipedia. Retrieved March 20, 2024, from https://www.jstor.org/stable/45175795
5. Robinson, K., & Takeyh, R. (2023, October 27). *What Is the Iran Nuclear Deal?* Council on Foreign Relations. Retrieved March 21, 2024, from https://www.cfr.org/backgrounder/what-iran-nuclear-deal
6. Rooth, M. (2015). *Iran and Nuclear Weapons*. Wikipedia. Retrieved March 20, 2024, from https://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=5426149&fileOId=5426157
7. Tagma, H. (2023, October 14). *Realism and Iran's Nuclear Program | Request PDF*. ResearchGate. Retrieved March 20, 2024, from https://www.researchgate.net/publication/344385461\_Realism\_and\_Iran's\_Nuclear\_Program
8. Narang, V. (2012). What Does It Take to Deter? Regional Power Nuclear Postures and International Conflict. *Journal of Conflict Resolution*, *57*(3), 478-508. 10.1177/0022002712448909
9. Sagan, S. D. (1996). Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb. *International Security*.
10. Sechser, T. S., & Fuhrmann, M. (2013). Crisis Bargaining and Nuclear Blackmail.
11. Tannenwald, N. (1999, summer). The Nuclear Taboo: The United States and the Normative Basis of Nuclear Non-Use. *International Organization*, *53*(3), 433-468. https://www.jstor.org/stable/2601286
12. Tannenwald, N. (2013). Justice and Fairness in the Nuclear Nonproliferation Regime.
    1. Waltz, K. N. (2012, September). *Iran and the Bomb: The Abdication of International Responsibility."* https://www.foreignaffairs.com/articles/iran-and-bomb