

FUNDAÇÃO GETULIO VARGAS
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**What Factors Are Most Important in a State's Decision to Abide to or Refrain from
International Security Regimes?**

Exploring The Strategic Motivations behind Libya's Decision to Abandon Its Nuclear
Weapons Program and Israel's Refusal to Do So

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Knowledge Field: Internationalization of
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Adviser: Prof. Dr. Guilherme Stolle Paixão e
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ABSTRACT

What Causes Nuclear Proliferation or Nuclear Rollback? Answering this question will help us understand the factors behind state decisions to join international regimes of security. Understanding why states abide or retrain from international security regimes will help us to address current obstacles to non-proliferation in the Middle East; Why, after many years of trying, are we unable to put in place a Nuclear Weapons Free Zone in the Middle East? What is in store for the 2015 Iran Nuclear Deal now that a new democrat administration has come to office in the United States? These findings will be particularly pertinent in forecasting if the growing security tensions between Iran, and by extension Hezbollah, and its regional “enemies” push it to pursue nuclear weapons development. Or, on the contrary if the country’s rapidly degrading economy push it back to the negotiating table¹. With a new American administration in place, the democrats will have to make a decision on which outcome is most likely.

The three dominant factors explaining nuclear behavior are first, the presence of threats to security; second, the extent of a state’s economic and political integration into the global system; and lastly the existence of security guarantees to a state. In this paper I will assess the validity of the three dominant arguments for explaining nuclear behavior of states by conducting a case comparison between Israel’s decision not to join the Nuclear Non-Proliferation Treaty, and Libya’s decision to undergo and subsequently abandon Nuclear Weapons development. I will show how the continuous and significant threats to Israeli security diminishes the impact that the two other factors have, and further how the lack of significant threats to Libyan security caused its economic and political isolation from the international community to play the decisive role in its nuclear rollback. Furthermore, these case studies will highlight how security guarantees are only decisive in light of a protected state’s perception of their legitimacy.

These findings will help shed some light on which non-proliferation policies should be adopted if we ever wish to see a Nuclear Weapons Free Zone in the Middle East.

KEY WORDS: Denuclearization; Middle Eastern Politics; International Security Regimes; Cultural Management

¹ Since the United States’ 2018 withdrawal from the Joint Comprehensive Plan of Action (JCPOA), Iran’s national currency has depreciated by 450%, and the country was among the hardest hit by the 2020 Covid-19 pandemic. Mahdi Ghodsi; Ali Fathollah-Nejad, “The Geopolitical Roots of Iran’s Economic Crisis”, Sada Journal, November 30, 2020, <https://carnegieendowment.org/sada/83350>

RESUMO

O que causa proliferação nuclear ou reversão nuclear? Responder a essa pergunta nos ajuda a entender os fatores por trás das decisões dos Estados de aderir a regimes internacionais de segurança. Entender por que os Estados seguem ou se abstêm dos regimes de segurança internacional nos ajudará a enfrentar os atuais obstáculos à não proliferação no Oriente Médio; Por que, depois de tantos anos de tentativas, não conseguimos criar uma Zona Livre de Armas Nucleares no Oriente Médio? O que está reservado para o Acordo Nuclear com o Irã de 2015?

Os três fatores dominantes que explicam o comportamento nuclear são, em primeiro lugar, a presença de ameaças à segurança; segundo, a extensão da integração econômica e política de um estado no sistema global; e, por último, a existência de garantias de segurança a um Estado. Neste artigo, irei avaliar a validade dos três argumentos dominantes para explicar o comportamento nuclear dos Estados, conduzindo uma comparação de caso entre a decisão de Israel de não aderir ao Tratado de Não Proliferação Nuclear e a decisão da Líbia de se submeter e posteriormente abandonar o desenvolvimento de Armas Nucleares. Vou mostrar como as ameaças contínuas e significativas à segurança israelense diminuem o impacto que os outros dois fatores têm, e ainda como a falta de ameaças significativas à segurança da Líbia causou seu isolamento econômico e político da comunidade internacional para desempenhar um papel decisivo na sua reversão nuclear. Além disso, esses estudos de caso destacarão como as garantias de segurança só são decisivas à luz da percepção de um estado protegido de sua legitimidade.

Essas descobertas ajudarão a lançar alguma luz sobre quais políticas de não proliferação devem ser adotadas se algum dia quisermos ver uma Zona Livre de Armas Nucleares no Oriente Médio.

PALAVRAS CHAVE: Desnuclearização; Política do Oriente Médio; Regimes de Segurança Internacional; Gestão Cultural

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1. INTRODUCTION

The absence of an overarching authority over states is the most noteworthy and determinant characteristic of the international system today². Having no single sovereign to apply the rule of law over all states means that all states are entitled to make decisions on security and policy for themselves according to the fundamental principles of state sovereignty³. This being said, the emergence of globalization towards the end of the twentieth century has strengthened connection and the need for cooperation between states, notably in the field of security. Indeed, globalization is accompanied by global governance; the exercise of authority at the international level instead of at the state level, giving rise to an international regime when it is created to tackle specific problems or challenges. Stephen D. Krasner defines an international regime as a set of “principles, norms, rules and decision-making procedures, around which actor [state] expectations converge in a given issue-area”; that they are therefore the intervening variable between basic causal factors and outcomes and behavior of states⁴.

According to liberalist theory, international institutions and cooperation between states can be mutually beneficial by reducing uncertainty and increasing credibility⁵. Indeed, international institutions and regimes are beneficial in that they permit states to engage in cooperation in order to fulfill their own purposes and goals. This is particularly important in the field of security where uncertainty and misperceptions among states can often lead to conflict; international regimes in security reducing this threat⁶. Even the most powerful states recognize the importance of international regimes and rely on them to govern specific sets of activities, as can be seen since the creation of the Nuclear Nonproliferation Treaty of 1968.⁷

Soon after the end of the Second World War, came the realization that the spread of Nuclear Weapons posed a grave threat to international and regional security of states⁸, especially if they were to land in the wrong hands, given their unparalleled destructive potential. In realization of this threat, on June 12th 1968, the Nuclear Nonproliferation Treaty (NPT) was

² Jan Klabbers, *International Law*, (Cambridge University Press, 2013), 9

³ A principle that has been applied since the Treaty of Westphalia

⁴ Stephen D. Krasner, “Structural Causes And Regime Consequences: Regimes As Intervening Variables”, *International Organization*, 36(2), (1982): 185

⁵ Robert O. Keohane, “International Institutions: Can Interdependence Work?” *Foreign Policy*; (Spring 1998); 86

⁶ Geoffrey Blainey, “The Causes of War”, (Free Press, 1973), 56

⁷ Also called the Treaty on the Non Proliferation on Nuclear Weapons.

⁸ Saira Khan, “Nuclear Proliferation Dynamics in Protracted Conflict Regions. A Comparative Study of Southeast Asia and The Middle East.” (Ashgate, 2002) 7

adopted⁹. The NPT is the main international regime to prevent the spread of nuclear weapons, which has attempted to freeze the number of nuclear-weapon states. Since its adoption, 190 States have become parties to the Treaty¹⁰, giving it near-universal membership as well as building a stronger case for the “Nuclear Taboo”¹¹. The NPT and the subsequent Additional Protocol (AP), which was added to strengthen the existing safeguards system, are considered to be the backbone of the nonproliferation regime¹². Avner Cohen defines this nonproliferation regime as “the entire edifice of treaties, norms safeguard mechanisms and international organizations that embody the ideal of nuclear nonproliferation.”¹³ The Treaty itself is divided into three main pillars, by which member states firstly commit to pursue general and complete disarmament should they already possess Nuclear Weapons; secondly to forgo the development or acquisition of nuclear weapons; and lastly the treaty encourages non-nuclear states to develop nuclear technology for peaceful applications, in cooperation with the International Atomic Energy Agency (IAEA).¹⁴ Despite the tempting security and the political leverage that nuclear weapons can provide to many less powerful states in international anarchy, the NPT has proven itself successful in curbing nuclear proliferation, as most states that have signed on abide by its rules¹⁵. However, the NPT’s success is curbed by the five states not party to the Treaty, as well as those party states that do not abide by it. Indeed, States are more likely to proliferate and develop nuclear technologies when they are worried about their security¹⁶. It is particularly interesting to note that Israel is among these five states not party to the Treaty, as it is a key and influential actor in the Middle East. It is of further significance to highlight that other Middle Eastern states – parties to the NPT – have themselves been in breach of it¹⁷. It is encouraging to highlight that of these violators of the NPT regime, Libya had decided to undergo a nuclear “rollback” and abandon its nuclear weapons program in order to re-integrate the NPT regime

⁹ And later entered into force in March of 1970

¹⁰ North Korea withdrawing from the Treaty in 2003. “Nuclear Nonproliferation Treaty at a Glance”, Arms Control Association, <https://www.armscontrol.org/factsheets/nptfact>

¹¹ To this more treaties and judicial decisions have recognized the illegality of nuclear proliferation. It is indisputably accepted by States that nuclear weapons should not be used at all; Louis René Beres, “Security Armageddon”, (DC Health and Company, 1986), 178.

¹² Gawdat Bahgat, “Proliferation of Nuclear Weapons in the Middle East” (University Press Florida, 2007), 10

¹³ Avner Cohen, “The Nuclear Issue in the Middle East in a New World Order”, (Contemporary Security Policy 16, No. 1, April 1995) 49.

¹⁴ “Timeline of Nuclear Nonproliferation Treaty (NTP)”, Arms Control Association, <https://www.armscontrol.org/factsheets/Timeline-of-the-Treaty-on-the-Non-Proliferation-of-Nuclear-Weapons-NPT>

¹⁵ Indeed, shortly after India and Pakistan had joined the “nuclear club” both countries had gained political leverage and power in South Asia and on the global scene; Gawdat Bahgat, “Proliferation of Nuclear Weapons in the Middle East,” (University Press Florida, 2007), 10

¹⁶ Saira Khan, “Nuclear Proliferation Dynamics in Protracted Conflict Regions. A Comparative Study of Southeast Asia and The Middle East.” (Ashgate, 2002), 283

¹⁷ Iran in 2002, Iraq in 1991 and Syria; “Nuclear Proliferation Case Studies”, World Nuclear Association, <http://www.world-nuclear.org/information-library/safety-and-security/non-proliferation/appendices/nuclear-proliferation-case-studies.aspx>

and abide to its standards (See Appendix A for complete list of States in the Middle East, their nuclear status, and NPT adherence).

In parallel to the creation of an international regime on nuclear nonproliferation, the idea of regional agreements on nonproliferation arose since the mid-1950s. Indeed, with the realization that “because the causes of insecurity vary from region to region, security solutions do not come in a ‘one-size-fits-all’ package,”¹⁸ five Nuclear Weapon-Free Zones (NWFZ) have been created¹⁹ in the Latin America and the Caribbean, the South Pacific, Southeast Asia, Africa and Central Asia. NWFZ are defined by the United Nations as “a regional approach to strengthen global nuclear non-proliferation and disarmament norms and consolidate international efforts towards peace and security.”²⁰ These regional agreements accomplish two goals: the abolishment of nuclear weapons in the entire region as well as the provision of a security assurance to states that they will not be attacked²¹. Indeed, in accordance with the Liberalist perspective, the participation in such a regime would be beneficial to all the member States’ individual securities. However, though support for a NWFZ in the Middle East has been presented many times²², such a regime has failed to materialize. Indeed, since the late 1970’s, almost every session of the General Assembly has called for negotiations on a NWFZ in the Middle East, as this region in particular has experienced several deadly military conflicts; a situation that could be even more disastrous with the presence of Nuclear Weapons²³.

Therefore, when looking at the clear success the NPT regime, as well as the security successes of the NWFZs, asking ourselves “What Factors Are Most Important In A State’s Decision To Abide To, Or To Refrain from, International Security Regimes?” is crucial to addressing the impediments to the creation of a Middle Eastern Nuclear Weapon-Free Zone. In order to find an answer to the first question, I will attempt to answer the following question: “Why Did Libya Develop and Abandon Its Nuclear Weapons Program to Abide to The NPT Regime, While Israel Remains Opposed To Joining?”

¹⁸ Mohamed ElBaradei, “Nuclear Weapon-Free Zones: Pursuing Security, Region by Region,” <http://www.iaea.org/NewsCenter/Statements/2005/ebsp2005n005.html>.

¹⁹ The first one having been concluded by Latin and Caribbean states in 1967 with the Treaty of Tlateloco ; Gawdat Bahgat, “Proliferation of Nuclear Weapons in the Middle East” (University Press Florida, 2007), 151

²⁰ “Nuclear-Weapon-Free Zones”, (United Nations Office for Disarmament Affairs), <https://www.un.org/disarmament/wmd/nuclear/nwzf/>

²¹ Gawdat Bahgat, “Proliferation of Nuclear Weapons in the Middle East” (University Press Florida, 2007), 150

²² The first multilateral initiative dating back to a 1974 UNGA Resolution; Heinz Gärtner, “A Nuclear-Weapon-Free Zone in the Middle East”, *Austrian Institute for International Affairs*, 2011/12.

²³ Ibid.,

This question is of particular importance today, with the rising tensions between Iran – a state that has been in breach of the NPT in the past²⁴ - and Saudi Arabia. Both these regional powerhouses, involved in opposing camps of several proxy-Wars in the region, seek to achieve regional hegemony and have the resources to pursue a nuclear weapons program²⁵. Therefore, from a purely security-based point of view both states have strong incentives to seek nuclear proliferation. However, understanding if, and to what extent, the socioeconomic and political costs of proliferation might play on their decision is crucial to understanding what policies should be pursued by the international community, and particularly by the United States in the coming future.

Several theories and hypothesis have been identified by scholars as causes for the development of nuclear weapons, and as factors encouraging the integration of nuclear nonproliferation regimes. For this paper, we consider as a starting point, that the decision to abide to or refrain from a nuclear nonproliferation regime is the product of a cost-benefit analysis on the behalf of a state – a rational actor. Where theories on nuclear proliferation diverge, is in their assessment of the influence that various factors have on this cost-benefit analysis. Indeed, while some authors argue that threats to security are the most important factor driving nuclear acquisition²⁶, others insist rather on the socioeconomic and political incentives of either nuclear acquisition or rollback^{27, 28}. Lastly, some authors emphasize particularly, the influence that the existence or not of a power ally's commitment to guarantee the security of a *protégé* on that *protégé's* decision to proliferate or not.

For the purpose of this paper we will narrow our analysis strictly to nuclear weapons, as opposed to other Weapons of Mass Destruction (WMD), as these ones in particular possess three important characteristics: first, nuclear weapons are the deadliest type of WMD; second, they are the hardest the manufacture and require extensive investment and sophisticated technical infrastructure; and third, they are regulated by a more sophisticated international regime than other WMD²⁹.

²⁴ Indeed, in 2002 Iran was placed under UN Security Council sanctions for refusing to stop its uranium enrichment program; Scott D. Sagan, "The Causes of Nuclear Weapons Proliferation", *The Annual Review of Political Science* (2011), 226

²⁵ Max Ficher, "How the Iranian-Saudi Proxy Struggle Tore Apart the Middle East", *The New York Times*, Nov 2016, <https://www.nytimes.com/2016/11/20/world/middleeast/iran-saudi-proxy-war.html>

²⁶ Nuno P. Monteiro; Alexandre Debs, "The Strategic Logic of Nuclear Proliferation", *International Security*, Volume 39, No. 2, (2014), 7

²⁷ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East" (University Press Florida, 2007),

²⁸ Nicholas L. Miller, "The Secret Success of Nonproliferation Sanctions", *International Organizations*, (2014), Volume 68, Issue 4, 913-144.

²⁹ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East" (University Press Florida, 2007), 2

This research study seeks to measure the impact of proposed factors that propel or impede nuclear militarization in the Middle East, and more broadly which factors push states to adhere to or refrain from international security regimes. In order to do this, I will first explore the three most compelling factors behind a state's decision to "go nuclear" or not: Security Concerns; Economic and Political Integration; and the Existence of a Security Guarantee. I will then proceed to an extensive examination of the nuclear behaviors of Israel and Libya, as these case studies provide different state behaviors in regards to an international regime: Rejection and post-hoc adherence. This second section will help us determine which factors were most important in each state's behavior, and therefore which theory best predicts state behavior in regards to international security regimes. Finally, based on these findings, I will conclude on the relevant policy implications that would promote the creation on a Nuclear Weapons Free Zone in the Middle East.

2. EXPLORING THE STRATEGIC THEORIES BEHIND NUCLEAR WEAPONS DEVELOPMENT AND ROLLBACK

In order to understand the impediments to the creation of a NWFZ in the Middle East, we must ask ourselves: Why do States develop, or refrain from developing, nuclear weapons? Answering this question gives us critical insight on the strategic logic for states to abide to international regimes of security, as nuclear weapons, due to their unprecedented destructive and deterrent capability, represent the most significant tool for national security³⁰³¹. Indeed, they serve as international normative symbols of modernity and military power. Many theories diverge on which factors affect the development of nuclear weapons. Of these, three competing theoretical frameworks on why states decide to build or refrain from developing nuclear weapons merit particular attention. In the following section, I will first develop the "Security Theory" according to which states build nuclear weapons to increase national security against foreign threats, and refrain from it when these security threats are perceived as minimal. I will then go onto analyzing the "Economic and Political Integration Theory" according to which states refrain from nuclear weapons development if they are economically and politically dependent on their relationships to other states, and forgo nuclearization if they are relatively

³⁰ Sagan defines them as political objects of considerable importance in domestic debates and international bureaucratic struggles; Scott D. Sagan, "The Causes of Nuclear Weapons Proliferation", *The Annual Review of Political Science* (2011), 226

³¹ Noel Stott goes so far as to categorizing Nuclear Weapons as "the ultimate guarantor of state security"; James J Wirtz and Peter R. Lavoy, *Over the Horizon Proliferation Threats*, (Stanford University Press, 2012), 51

independent of the international community. I will follow with the development of the “Security Assurances Theory”, by which states commit to acting or refraining from acting in the field of security depending on the perceived existence of a security guarantee by another state. Finally, I will conclude this section by briefly addressing other theories presented by scholars, and explaining why these theories do not merit being further developed for the purpose of this paper.

2.1. *The Security Theory*

According to many scholars who advocate a realist approach to matters of international security, state behavior is primarily influenced by its main goal of survival in an anarchical, self-help system³². Therefore the main factor that states consider when making security decisions is their goal of overcoming what they perceive to be a security gap between their military capabilities and that of their adversary³³. According to neorealist theory, this entails that by seeking nuclear weapons capability to ensure security, other states will follow suit to balance against their rival³⁴³⁵. This theory seems to explain many major proliferation decisions such as the United Kingdom and France’s decisions to build nuclear weapons in response to a growing Soviet military threat, or Pakistan’s decision to develop nuclear weapons capability shortly after hostile and neighboring India’s nuclear tests in 1998.

Therefore in accordance to this realist argument, international anarchy and power-driven states hinders their ability to cooperate in affairs of security. This model would imply that a state’s perception of its individual security at a given moment will impact its decision to join an international regime or not. It is important to note that what matters in terms of security and state behavior is not the actual existence of a threat, but rather the perceptions of states as to whether there is a threat or not³⁶. Therefore misperceptions and lack of dialogue between states are impediments to the formation of international security regimes.

A variation of this argument, in assuming that states are rational actors, notes that calculations about the relative balance of power between states and the influence on a given state’s security at one given time, contributes to the control of nuclear weapons development. Indeed, Kurt Campbell uses

³² John J. Mearsheimer, “*The Tragedy of Great Power Politics*”, (University of Chicago, 2001), 31

³³ Sami G. Hajjar, “Security Implications of the Proliferation of Weapons of Mass Destruction in the Middle East”, *The Strategic Studies Institute*, (1998), 7

³⁴ This phenomenon is described as the “*Security Dilemma*”; Kenneth Waltz, “*Theory of International Politics*”, (New York: Random House, 1979)

³⁵ George Shultz once summarized this argument as “*Proliferation begets proliferation*”; George Shultz, “Preventing the Proliferation of Nuclear Weapons,” U.S. Dept. of State, Bureau of Public Affairs, Office of Public Communication, Editorial Division, (1984), 18

³⁶ Mieczyslaw Malec, “Security Perception: Within and Beyond a Traditional Approach”, *Naval Postgraduate School*, Monterrey California, (2003), 9

neorealist logic to explain that states will exercise nuclear restraint as long as they believe that the distribution of power in the international system remains heavily weighted in their favor³⁷. This argument would suggest that decisions on security, and more importantly decisions to abide to an international security regime or not, are based on a cost-benefit analysis of joining such an institution, which would result in doing whatever would provide the best security outcome for a state³⁸. This further development would explain nuclear restraint behaviors in the past, notably that of South Africa: Indeed, facing new security threats in the 1970's, caused by Soviet expansion in southern Africa and the simultaneous buildup of Cuban forces in Angola, South Africa constructed six atomic weapons. However in 1991, its small nuclear weapons arsenal was destroyed, coinciding with the end of the Cold war and the elimination of the risk of a Soviet-led or sponsored attack on South Africa³⁹.

T.V. Paul, argues that “the level and type of security threats that [a state] faces and the nature of the interactions or conflict with its key adversaries and allies in its immediate geo-strategic environment” is what pushes a state to acquire or go without nuclear weapons⁴⁰. This would mean that the more serious a perceived security threat is to a state, the less likely it is to concede to an international regime that would limit its potential use of force and security. Accordingly, we see that this theory is rather problematic in the context of the Middle East, where the Arab-Israeli conflict and regional instability in the Persian Gulf region has kept many states prudent and self-reliant regarding their security decisions.

The strength of this security model to proliferation is widely recognized in nonproliferation literature. However there are fundamental weaknesses to this argument that are worth exploring. Firstly, this model treats the state as a unitary actor in its pursuance of national security; it does not consider internal factors to the state such as domestic politics, bureaucratic dynamics and leadership perceptions in a state's response to security threats. Indeed, many scholars highlight the importance of the perception and belief system of policy makers and individual leaders in state security decision-making⁴¹. Secondly, it does not take into account factors other than security risks that may drive state policy orientations, such as economic power.

³⁷ James J Wirtz and Peter R. Lavoy, “Over the Horizon Proliferation Threats,” (Stanford University Press, 2012), 51

³⁸ This idea of a cost-benefit analysis is further highlighted developed by Monteneiro and Debs: “The likelihood of proliferation, we contend, is largely determined by the strategic interaction between a state deciding whether to acquire nuclear weapons and its adversaries.”; Nuno P. Monteneiro; Alexandre Debs, “The Strategic Logic of Nuclear proliferation”, *International Security*, Vol. 39, No. 2, (Fall 2015), 9

³⁹ Scott D. Sagan, “Why Do States Build Nuclear Weapons?: Three Models in Search of a Bomb”, *International Security*, Vol. 21, No. 3, (1996-1997), 60.

⁴⁰ T.V. Paul, “Power versus Prudence”, (McGill-Queens University Press, 2000), 4.

⁴¹ Gawdat Bahgat, “Proliferation of Nuclear Weapons in the Middle East” (University Press Florida, 2007), 5

For the purpose of this paper, I adopt Monteiro and Debs's definition of security as "any aims that may require the use of force against another state"⁴². I will measure the "level of security" of a state in a given time by highlighting significant threats to its security. This will be done by looking at its participation, or its risk of participation, in an international war, as based on historical accounts and scholarly analyses. I will also look at the number of hostile states and its relative strength in regards to these hostile states.

2.2. *Economic and Political Integration Theory*

A competing approach to nuclear weapons development draws upon a neoliberal and constructivist approach to explain why states decide to, or refrain from, international security regimes. Indeed, this school of thought argues that international anarchy can be mitigated by international regimes and interdependence between states, in order to increase national security and power through mutual cooperation⁴³. This logic to take into consideration the growing importance of the global economy and global institutions for individual states, in their search for security and wellbeing. Robert Gilpin argues that states join international regimes if they perceive such integration to be in their best interest⁴⁴. It is further important to note that this paradigm's definition of power comes in various forms; it is not just military-based, but also economic and political. In this approach, economic and political integration can be seen as complementary.

Economic preoccupations and priorities can force states to concede to international pressures to adhere to international regimes of security and give up security independence. Indeed, isolation from the international community and economic sanctions can have disastrous effects on a state's economy and internal stability, as can be seen with the Iraqi example from 1990 until the end of the 2003 Iraq War. Gawdat Bahgat highlights that growing integration in the global system is conditioned on adherence to international norms and regimes⁴⁵. Due to the fact that economic hardships influence states' decisions in security, this theory suggests that

⁴² Nuno P. Monteneiro; Alexandre Debs, "The Strategic Logic of Nuclear proliferation", *International Security*, Vol. 39, No. 2, (Fall 2015), 7-51

⁴³ Alexander Wendt, "Anarchy Is What States Make of It : The Social Construction of Power Politics," *International Organization* 46, No. 2, (Spring 1992), 391-425

⁴⁴ Robert Gilpin, "Global Political Economy", (Princeton University Press, 2001), 356

⁴⁵ States today, in order to enjoy the economic benefits of joining international organizations such as the world Trade Organization or the World Bank and the International Monetary Fund, must accept the implementation of international norms and rules. Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East" (University Press Florida, 2007), 11

economic dependence, and the socioeconomic advantages of political and economic integration therefore increases a state's likelihood to abide to an international security regime.

The Impact Of Economic Incentives And Pressures By A Powerful State: Increase economic interdependence between states means that they are increasingly reliant on one another to maintain economic power, and this can be used as a tool for some states to influence the foreign policy decisions of others. Indeed, close bilateral relations between potential proliferators and the United States have restrained them from pursuing nuclear weapons options; this list of potential proliferators includes Argentina, Brazil and Ukraine, among others⁴⁶.

The Success of Nonproliferation Sanctions: According to this theory, economic and political sanctions placed upon a state by other states or the international community, are successful tools to pressure states into abiding to international regimes of security. Nicolas L. Miller highlights that sanctions have succeeded in deterring states from nuclear weapons programs, as rational leaders assess the risk and impacts of sanctions before initiating nuclear weapons programs, and the benefits of halting such programs in order to put an end to such sanctions⁴⁷. This theory would help to explain the Iranian acceptance of the 2015 Iran Nuclear Deal. Indeed, in agreeing to limit its controversial nuclear energy program which many international powers feared would be used to create weapons, Iran received the lifting of the arms embargo against it, and more importantly of many important economic sanctions which were crippling its economy⁴⁸⁴⁹.

I define "international integration" as any type of arrangement in which a state agrees to coordinate with one or more states or with international organizations on economic and political affairs, therefore creating a relationship of interdependence and cooperation. By "economic integration" I do not mean the unification of economic policies between states or the full abolition of tariff restrictions, but rather any type of economic arrangement between one or more states. This integration can take place in various forms such as the provision of financial aid, foreign direct investment, bilateral trade agreements or membership to regional

⁴⁶ Ibid., 15

⁴⁷ Nicholas L. Miller, "The Secret Success of Nonproliferation Sanctions", *International Organization*, Vol 68, Issue 04, (2014), 913-944

⁴⁸ Kyle Crichton, David E. Sager, "Who Got What They Wanted in the Iran Nuclear Deal?", July 2015.

⁴⁹ "Iran Nuclear Deal : Key Details", *BBC News Services*, Oct 13, 2017, <http://www.bbc.com/news/world-middle-east-33521655>

or international economic institutions. For the purpose of this paper, and in accordance with the neoliberalist paradigm, I consider economic and political integration to be beneficial for a state, particularly in terms of economic wellbeing, as they are created to be mutually beneficial and theoretically result in an increase of GDP.

I will measure the “level of economic and political integration” of a state in a given time by looking at the existence of economic and political sanctions, the existence of trade relations among states, the delivery of foreign aid and other forms of financial assistance in international financial institutions, and finally I will look at state per capita GDPs to assess their economic dependence on the international community. This information once again will be provided through historical works and articles, as well as data from the World Bank.

Despite this convincing reasoning, this theory does not take into account the importance of leadership and the values of members of the political elite. When Iran’s petroleum production fell after the United Kingdom froze Iranian government financial assets around the world and instituted an embargo on the purchase of Iranian Oil in the early 1950’s, and the country suffered from economic turmoil, Iran still refused a more than favorable economic deal with the British. This was because Mohammad Mossadegh, the leader at the time, was primarily driven by political motives rather than economic ones, and therefore pursued an anti-western and anti-British policy that provided him strong favor at home⁵⁰. Therefore, we can see that though economic and security incentives can come into play, they are not the only driving force behind state decisions; leaders and political elites’ interests often play a decisive role as well. Moreover, this theory does not take into consideration other state incentives to remain politically and economically isolated, such as is the case of North Korea, which is well known for its sub-par economic strength.

2.3. *Security Assurances Theory*

A third theory that tries to predict the strategic logic of state security decisions takes into consideration the important role of security assurances. Security assurances can be defined as commitments to act or refrain from acting in the field of security⁵¹. In Jeffrey W. Knopf’s book “*Security Assurances and Nuclear Proliferation*,” he highlights that such assurances complete three strategic

⁵⁰ David Painter, “The United States, Great Britain and Mossadegh”, *Institute for the Study of Diplomacy*, (1993), 4

⁵¹ Bruno Tertrais, “Security Assurances and the Future of Proliferation” In: *Over the Horizon Proliferation Threats*, ed. James J. Wirtz ; Peter R. Lavoy, (Stanford Security Studies, 2012) , 240.

objectives for an “assured” state (*protégé*). Security assurances by the protecting state firstly provide the *protégé* with a deterrence mechanism, secondly with an alliance commitment and lastly it provides reassurance between states, which reduces the chances of conflict. Security assurances, as a deterrent mechanism, entails that the “guarantee” will affect the calculations of adversaries in their analysis of the costs and benefits of attacking a protected state. This will provide states without nuclear weapons to deter adversaries from attacking, particularly so if the protecting state acts as a nuclear umbrella to the *protégé*. Security assurances as a sign of alliance commitment provide states with the reassurance that they will be defended by the protecting state in case of aggression. This can convince state-leaders to pursue state interests instead of pursuing the costly path of nuclear-weapons development. Finally, security assurances provide reassurance to the protégé in persuading it that no aggressive intentions will arise⁵². I argue however, that the reassurance aspect of security assurances (negative assurances) do not have as much of an impact on state security decisions as do deterrence and commitment (positive assurances). Indeed, two types of security assurances exist: Positive and Negative assurances, which vary themselves in type and scope. Positive security assurances (PSA), or “Security Guarantees,” consist of commitments to assist a state in case of aggression, and involves the pledge of the protecting state to defend the protégé with military action⁵³. This can imply the possible use of nuclear weapons, in which case the guarantee is referred to as a “nuclear umbrella”⁵⁴. Some scholars qualify this type of security agreement between states as “Extended Deterrence”, as it consists in extending the logic of deterrence to a third party and persuading a potential adversary that the costs of attacking the *protégé* would be that of attacking the protecting state⁵⁵. The second type of security assurance is a negative security assurance (NSA), which is a commitment not to attack a country or to refrain from using certain means against it⁵⁶.

In accordance with scholars such as Knopf and Tertrais, I argue that Negative Security assurances have less of an impact on proliferation decisions than positive ones do. These NSAs do not provide the deterrence effect that extended deterrence does, and therefore would not have the same impact on state’s decision to wish to further their own military capacity for protective purposes. As nuclear weapons are primarily tools of deterrence, the interest in their development is for deterrence

⁵² Jeffrey W. Knopf, “Security Assurances and Nuclear Proliferation”,

⁵³ I use the term “Security Guarantee” only when describing PSAs and not NSAs

⁵⁴ Bruno Tertrais, “Security Assurances and the Future of Proliferation” In: *Over the Horizon Proliferation Threats*, ed. James J. Wirtz ; Peter R. Lavoy, (Stanford Security Studies, 2012) ,

⁵⁵ Bruno Tertrais, “Security Guarantees and Extended Deterrence in the Gulf Region: A European Perspective”, (Strategic Insights, Volume VIII, Issue 5, Dec 2009), 1

⁵⁶ This type of assurance has been widely sought after by many non-nuclear weapons states (NNWS) and has been incorporated already in many international treaties such as the Tlatelolco Treaty of 1968, creating the NWFZ in Latin America and the Caribbean. Moreover, many Nuclear Weapons States (NWS) have readily agreed to negative security assurances in response to demands by NNWS. NWS, particularly the United States, through various protocols and treaties, have committed to refrain from using nuclear weapons against parties, unless allied with a nuclear weapons state ; Bruno Tertrais, “Security Assurances and the Future of Proliferation” In: *Over the Horizon Proliferation Threats*, ed. James J. Wirtz ; Peter R. Lavoy, (Stanford Security Studies, 2012),240.

purposes⁵⁷. Moreover, Tertrais argues that negative security assurances are of less value because they are not necessarily believed by recipient states, as is the case for Iran who repeatedly made clear that it is not interested in Western promises of nonaggression⁵⁸. Due to the theory behind why NSAs have little impact on a state's decision to undergo nuclear development, in this paper I will focus solely on the existence of PSAs. Furthermore, I will accord particular attention to security guarantees by nuclear-armed states, as they would involve the use of nuclear weapons to protect a *protégé*, and provide nuclear-weapons level deterrence.

In accordance with this theory, and for the reasons mentioned above, PSAs – especially those in the form of bilateral defense pacts – would stem proliferation and would push states to abide to international regimes on security. This theory can be supported by past examples: The North Atlantic Treaty Organization (NATO), is considered to provide a nuclear umbrella to its allies⁵⁹. Moreover, one of the reasons for which Sweden abandoned its nuclear weapons program was because it believed that there was a *de facto* nuclear umbrella covering its territory⁶⁰. Most notably, the U.S. security guarantees provided to Japan by the Security Treaty between the United Nations and Japan (1951), as well as to South Korea by the Mutual Defense Treaty between the United States and the Republic of Korea (1953), are considered to have helped prevent them from going nuclear despite their financial and technological capacity to do so⁶¹.

To provide an example of how a refusal to provide a security guarantee can further justify a state's decision not to join an international security regime, we can cite the Indian example, having justified its decision not to sign the NPT by the lack of a credible security guarantee by the United States⁶².

The importance of this factor in stemming a state's decision to go nuclear, or to abide to an international security regime, also is faced with many counter examples. Indeed, Charles de Gaulle did not believe in nuclear guarantees at all, and decided to pursue nuclear weapons development despite U.S. security guarantees to France. Nor did the Soviet-North Korean and Sino-North Korean Treaties

⁵⁷ The security model of nuclear proliferation argues that by providing extended deterrence to an insecure client, a patron obviates the client's need for indigenous nuclear weapons capabilities; Gene Gerzhoy, "Alliance Cohesion and Nuclear Restraint: How the United States Thwarted West Germany's Nuclear Ambitions", *International Security*, Volume 39, Number 4, (Spring 2015), 91

⁵⁸ Bruno Tertrais, "Security Assurances and the Future of Proliferation" In: *Over the Horizon Proliferation Threats*, ed. James J. Wirtz ; Peter R. Lavoy, (Stanford Security Studies, 2012), 257.

⁵⁹ Article 5 of the Washington Treaty (1949) creates an obligation to assist any member states that find themselves victim of an armed attack, and is widely interpreted as implying the use of nuclear weapons by the United States, the United Kingdom and France; *Ibid.*, 242.

⁶⁰ Paul Cole, "Sweden without the Bomb. The Conduct of a Nuclear-Capable Nation without Nuclear Weapons", *The RAND Corporation*, (1994).

⁶¹ Bruno Tertrais, "Security Assurances and the Future of Proliferation" In: *Over the Horizon Proliferation Threats*, ed. James J. Wirtz ; Peter R. Lavoy, (Stanford Security Studies, 2012) ,242.

⁶² *Ibid.*, 243

of Friendship, Cooperation and Mutual Assistance Positive Security Assurance, both signed in 1961, prevent North Korea from withdrawing from the NPT in 2003, and developing nuclear weapons.

Security guarantees take various forms, ranging from informal to formal security assurances. Formal security guarantees consist of formal treaties and pacts between states, such as the Security Treaty Between the United States and the Republic of Korea (1953) or the Washington Treaty (1949). Informal guarantees may take a wide variety of forms, such as unilateral statements, informal promises or even the permanent presence of weapons on the protected country's territory⁶³. It is argued however, that strong defense commitments (especially those including a "nuclear umbrella") rather than informal ones, are effective in bolstering the nonproliferation regime. Indeed, Bruno Tertrais argues that "vague promises of assistance are not enough to prevent proliferation." What matters most in this theory, therefore, is not so much the existence of the security assurance, but rather that the *protégé* is convinced of the assurances it is provided with. With this in mind, in my evaluation of the impact that security guarantees have on nuclear weapons development, I will use as a dependent variable the existence of formal and informal security guarantees, but I will also take into account the perception of the protected governments of the existence of a guarantee. To determine the *protégé's* perception of the guarantee, I will rely on historical data and statements by government leaders.

2.4. *Remaining Theories on Strategic Motivations of Nuclear Proliferation and Rollback*

A noteworthy argument worth mentioning in this paper is one that suggests that changes in economic and political orientations of states affects a state's willingness to participate to security regimes. Indeed, Gawdat Bahgat, argues that market economies and democratic institutions, being more transparent than closed societies, make states more willing to consider economic and political rewards of joining international regimes if they do not compromise basic national security issues⁶⁴. This argument however does not explain why Israel, a democracy, did not join the NPT, while Egypt had as a non-democracy. Nor does it explain nuclear weapons development by many democracies during the Cold War, therefore the regime-type argument has its limits and will not be further discussed in this paper.

Another theory worth mentioning is the National Pride and Prestige Theory, according to which non-nuclear states may seek nuclear weapons in search for respect and status in the

⁶³ Such as is the case of the United States' military presence in Bahrain.

⁶⁴ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East" (University Press Florida, 2007), 10

international community. According to this logic, acquiring nuclear weapons bring influence and political prestige, providing political independence and national pride to nuclear states⁶⁵. This argument however does not explain Egypt under Nasser did not show strong determination to develop nuclear weapons.

Finally, one model to nuclear weapons development, which does not consider nuclear weapons development as a strategic decision by state actors at all, is the Globalization and Technological Imperative Theory. This model suggests that it is rather the transfer of nuclear technology and materials, which has expanded with globalization, which drives nuclear weapons development. Indeed, with expanding globalization and the dissemination of knowledge, this theory suggests that nuclear technology cannot be contained, and that if states gain the knowledge to make nuclear weapons, they will⁶⁶. Though this hypothesis seems promising when looking at the Pakistani case, it does not explain why some countries that are believed to have acquired nuclear technology have not pursued military capability, such as Japan or Germany⁶⁷.

3. COMPARING ISRAELI AND LIBYAN NUCLEARIZING BEHAVIOR AND OUTCOMES

In order to test these competing theories on the strategic logic behind state decisions to join or refrain from international security regimes, I will trace the strategic motivations behind the decisions of two Middle Eastern States, Israel and Libya, to “go nuclear,” and in Libya’s case, to “abandon nuclear weapons” in order to re-integrate the international security regime of the NPT. I will first assess the validity of each theory in regards to the state’s decision. The dependent variable will be “nuclear development,” which is characterized by a state’s decision to pursue nuclear weapons, regardless of if that state actually succeeded in nuclear weapons development. I will look at the time period starting from each state’s initial decision to pursue nuclear development; the creation of the Israeli State in 1948 for the case of Israel, and Gaddafi’s rise to power in 1969, in the case of Libya.

⁶⁵ Ibid., 7

⁶⁶ Ibid., 5

⁶⁷ Pakistani nuclear scientist Abdul Qadir Khan demonstrated how Pakistani nuclear weapons development was aided by a large international nuclear smuggling network. Ibid., 4

In order to test the “Security Theory” I will use “Threats to Security” as an independent variable. Using the *Correlates of War* database to look at the number of interstate disputes each state is involved in at critical points in their decision making process, I will also further highlight threats to state security by looking at the number of hostile states, as indicated in historical accounts and the works of scholars. From this assessment I will assess the potential existence a correlation between the relative security of each state, and its decision to pursue nuclear weapons capability, and to abandon nuclear weapons, in Libya’s case. To assess the validity of Economic and Political Integration Theory, I will address each state’s international integration at various points in their decisions to go nuclear or rollback, by looking at independent variables such as Gross Domestic Product (GDP) per capita, quantities of foreign aid received and foreign investment, as well as the existence of economic sanctions. This will display the “Level of International Integration” which will then be compared to the state’s decision to pursue or abandon nuclear weapons development. Finally, to assess the impact of the “Security Assurances” on a state decisions to go nuclear or not, I will have as a dependent variable the existence of security guarantees, formal and informal, by other powers.

I will first study the Israeli case, as they have pursued nuclear proliferation and continually refrained from joining the NPT. Indeed, I wish to find which factors were present or absent in Israel’s strategic decision not to abide to an international security regime and which factors did not play in pushing it to integrate the regime. It is particularly important to understand the motivations for Israeli possession of nuclear weapons, as several Islamic states have used Israel’s nuclear threat to justify their own nuclear ambitions in the region.⁶⁸ Then, I will analyze the particular case of Libya’s decision to first develop nuclear weapons program in violation of the NPT, and subsequently abandon it and abide to the security regime. This nuclear rollback will provide key insight on which factors push states to switch directions and abandon security-related independence from international regimes.

3.4 *The Strategic Considerations Behind Israel’s Nuclear Behavior*

Since the late 1960’s, Israel is considered as the sixth nuclear power, and the first one in the Middle East. Israel’s formal policy on nuclear disarmament can be captured by former Israeli President and Prime Minister, Shimon Peres’s statement that there would be “no

⁶⁸ Shlomo Aronson ; Oded Brosh, “The Politics and Strategy of Nuclear Weapons in the Middle East: Opacity, Theory and reality, 1960-1991. An Israeli Perspective.” (State University of New York Press, 1992), 5.

possibility of discussing the issue of dismantling the weapons before peace is reached between all states in the region”⁶⁹. In this section I will first describe Israel’s current nuclear status and capabilities. Then, I will follow by the analysis and categorization of Israel’s Security, International Integration and Security Guarantees, respectively. Finally I will conclude this section by determining which factor seems to have been the most important in Israel’s strategic decision to pursue nuclear weapons.

Israel began its nuclear program almost immediately after its creation in 1948⁷⁰. During this period, Israel received important nuclear assistance from the United States. It is estimated by some that Ben Gurion decided that to develop a nuclear weapon capability around 1955, though this was made clear following the Suez Crisis⁷¹. It is more commonly accepted that the Suez Crisis was the starting point of the Israeli Nuclear weapons program. It was then that the Israeli Government decided to build a clandestine reactor at Dimona to produce plutonium, possible through French nuclear assistance and kept secret until 1960. There is lack of consensus on the exact date at which Israel achieved the nuclear weapons threshold, however according to the Federation of American Scientists, Israel “had two bombs in 1967, and that Prime Minister Eshkol ordered them armed in the nation’s first nuclear alert during the Six Day War.”⁷²

It must be noted that Israel adopts a strategy of “nuclear opacity”, meaning that it has not declared its nuclear status. Indeed, the Israeli government has never formally acknowledged making nuclear weapons or indicated the extent of its nuclear activities. This has several important implications: First, it is impossible to provide an accurate assessment of its nuclear capability, though it is estimated that Israel might have as many as two hundred nuclear devices, based on data supplied by Mordechai Vanunu in the London Sunday Times in 1986⁷³. Secondly, Israel’s nuclear opacity has protected it from the negative sanctions of nuclear weapons from the international community. Indeed, open nuclear weapons development would have most likely led to the suspension of foreign aid and weapons flows from the United States. In terms of strategic logic, nuclear Opacity must be considered as the same as the possession of nuclear

⁶⁹ Summary of a meeting between Foreign Minister Peres and Foreign Minister Evans of Australia, 10 July 1995, <http://mfa.gov.il/MFA/ForeignPolicy/MFADocuments/Yearbook10/Pages/Summary%20of%20a%20meeting%20between%20FM%20Peres%20and%20FM%20Evans%2010-Jul-1995.aspx>

⁷⁰ Frank Barnaby, “The Invisible Bomb: The Nuclear Arms Race in the Middle East”, (I.B. Tauris & Co Ltd, 1993), 4

⁷¹ Ibid., 6

⁷² Federation of American Scientists “Nuclear Weapons”, <http://fas.org/nuke/guide/israel/nuke>

⁷³ Efraim Karsh ; Martin S. Navias ; Philip Sabin, « *Non Conventional Weapons Proliferation in the Middle East* », (Claredon Press, 1993), 152

weapons, as there is still the existence of a threat and a strong belief by the international community in the existence of this threat. Therefore, since perceptions are what matter in state decision making, Israel is considered a nuclear power so long as its opacity provides it with a deterrence mechanism.

3.1.1 Significant Threats to Israeli National Security

Since its creation, Israel has been faced constant and extreme threats to its security. Indeed, it is surrounded by hostile states which refuse to recognize its very existence as a state. The continued and open opposition to the very existence of the Jewish state has led to continuous conflicts and tensions between actors in the region.

Geographical Insecurity: A first factor contributing to Israeli perception of insecurity lies in its geography; as a small country which lacks territorial depth, its small and concentrated population remains vulnerable to attacks from its borders. This is further aggravated by the fact that it borders hostile territories; indeed, it has no existing Peace Treaty with neighboring Syria, and it still considers Lebanon as an “enemy state⁷⁴”. Moreover, it has been at war with Egypt until the 1979 Egypt-Israeli Peace Treaty, and not until 1994 did it conclude a peace Treaty with Jordan. In the broader region of the Middle East, many states still do not recognize its existence as a state.

Conventional Threats: Interstate Conflicts and Wars: In regards to conventional threats, Israel has been involved in fourteen conflicts since its independence, seven among them being interstate wars⁷⁵. Among these wars, many of them involved a coalition of Arab actors and states having the intention to destroy Israel. It must be noted, however, that Israel’s military successes in these wars are a result of its superior conventional military capacities⁷⁶. Among other conventional threats that Israel faces include multiple terrorist and guerilla actions occurring on and off since the 1950’s, and border shelling by Syria in the 1950’s as well as during and following the Six Day War, Jordan in 1969-70, Egypt in 1969-70 and repeated

⁷⁴ Maher Abukhater, Los Angeles Times, April 2014, <http://www.latimes.com/world/worldnow/la-fg-wn-israel-arab-lebanon-rights-20140417-story.html>

⁷⁵ Meredith Reid Sarkees and Frank Whelon Wayman, *Resort to War: A Data Guide to Inter-State, Extra-State, Intra-state, and Non-State Wars, 1816-2007* (Washington, DC: CQ Press 2010).

⁷⁶ Despite Arab superiority in numbers and potential security threat, the IDF has become significantly stronger in military capacity, which explains its history of military successes in all three Arab-Israeli Wars; Louis René Beres, “Security or Armageddon: Israel’s Nuclear Strategy”, (D.C. Health and Company, 1986), 74

shelling by the Palestine Liberation Organization (PLO) in 1982⁷⁷. Maritime Blockades against Israel have been undertaken by Egypt in collaboration with Saudi Arabia in 1950's and then again in 1967, which pushed Israel to launch the Six Day War. In 1989 a study produced by the Jaffe Center for Strategic Studies at the Tel Aviv University estimated that an Arab coalition compromising Syria, Jordan, some Lebanese militias and contingents from Kuwait, Libya and Saudi Arabia would deploy 595, 000 troops on land, 138 000 in the air and 14,200 by sea. This consists of 3.6 times more troops than the IDF was at its largest configuration⁷⁸. It is therefore clear that as long as the Arab-Israeli conflict persists, Israel will continually face conventional threats to its security.

Nonconventional Threats: The most dangerous threat to Israeli security is an eventual nuclear attack by a hostile Islamic state. Though no other Islamic State possesses nuclear weapons capabilities to this day, it remained a possibility, as can be seen with the Iraqi experience. Indeed, in 1981 Israeli's decision to bomb the Osiraq research reactor in Iraq before its completion was motivated by the belief that Iraq was intending to manufacture nuclear weapons targeted at Israel⁷⁹. Other insecurities caused by the threat of nonconventional weapons include Syria, Egypt, Libya and Iran's production of significant amounts of chemical and/or biological weapons⁸⁰.

Further Perceptions of Insecurity: Other factors worth noting that have contributed to the Israeli perception of insecurity, as some events and actions by other states, without having any direct impacts on Israel's territorial integrity, were perceived as hostile or potentially dangerous to the Jewish state. It must first be noted that Israel's perception of its security is shaped by the tragic events of the Holocaust, resulting in extreme caution regarding matters of security. This was further reinforced after the passing of the UN Partition Plan for Palestine, after which many of its allies voted in favor yet never provided any security guarantees subsequently. It no longer accords trust in its allies security assurances and is determined on ensuring its own security. Furthermore it has proven to be unwilling to take any risks regarding its security, as can be seen in its pre-emptive strike initiating the Six Day War after the Egyptian

⁷⁷ Which provided Israel with the pretext to invade southern Lebanon and instigate the 1982 War Over Lebanon ; Louis René Beres, "Security or Armageddon: Israel's Nuclear Strategy", (D.C. Health and Company, 1986), 83

⁷⁸ Efraim Karsh; Martin S. Navias; Philip Sabin, "Non Conventional Weapons proliferation in the Middle East: Tackling the spread of Nuclear, Chemical and Biological Capabilities "(Claredon Press, 1993), 208-209

⁷⁹ Frank Barnaby, "The Invisible Bomb: The Nuclear Arms Race in the Middle East", (I.B. Tauris & Co Ltd, 1993), 91

⁸⁰ Chemical And Biological Weapons in the Middle East, (Carnegie Endowment for International Peace, April 2002), <http://carnegieendowment.org/2002/04/16/chemical-and-biological-weapons-in-middle-east-pub-11745>

decision to remove UN Peacekeepers from the Sinai and closure of the Strait of Tiran, which were perceived as hostile acts. Moreover, following the 1973 October War, Nixon's offer to sell a nuclear power reactor to Egypt heightened Israel's perceptions of insecurity, despite its recent military victory and the conclusion of two Egyptian-Israeli disengagement agreements. Former Prime Minister Ariel Sharon articulated this perception by the following statement: "We felt that the reason Israel was attacked several times, without provocation, was because some of our neighbors thought they could overpower us, and we wanted to create a situation in which this temptation would no longer exist."⁸¹

Current Security Status: Despite the existence of peace treaties with other actors in the region today, Israel is still currently faced with security threats emanating from state and non-state actors. Israel. Data from the Global Peace Index indicates that Israel ranks among the most insecure countries in terms of ongoing domestic/international conflicts, societal safety, and security and militarization⁸². Israelis still face a constant threat of aggression by its regional adversaries, however this threat has largely decreased since the 1980's onwards. Indeed, with the end of the Yom Kippur War, Arab nationalism was in decline which led to further polarization between Arab states, and managing to achieve a peace agreement with one of the major states in the region in 1979 helped to slightly reduce threats to Israeli security.

Based on the evidence above it is possible to conclude that Israel has faced, and continues to face, significant and continuous threats to its security. This case study suggests that a state of "Extreme Insecurity" between 1948 and the 1980's is what pushed Israel to develop nuclear weapons, and its current state of "Relative Insecurity" is what keeps it from abandoning its nuclear weapons and abiding to the NPT.

The "Security Theory" therefore provides a compelling explanation for Israel's decision not to join the NPT, and to forgo nuclear weapons development. Indeed, Prime Minister Eshkol's statement that "Israel has the knowledge to make atomic bombs" in the wake of the Six Day War suggests that Israel's motivations for acquiring the bomb were for deterrence reasons⁸³. According to the Israeli perspective, Israel's nuclear weapons are

⁸¹ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East," (University Press Florida, 2007), 87

⁸² Indeed, it consistently ranks among the top 10 most insecure states in the World; Global Peace Index, *Visions of Humanity*, <http://visionofhumanity.org/indexes/global-peace-index/>

⁸³ Frank Barnaby, "The Invisible Bomb: The Nuclear Arms Race in the Middle East", (I.B. Tauris & Co Ltd, 1993), 6

insurance against Islamic or Arab hostilities, and the state's very survival depends on having these weapons⁸⁴.

3.1.2 Israeli Economic And Political Integration And Dependence On Foreign Aid

A key characteristic of the Israeli case study lies in the fact that since Israel's creation, it has been dependent on the provision of aid political support of powerful states, particularly Western ones. Indeed, since 1949, a variety of military, economic and technical aid has been provided to Israel, notably by the United States⁸⁵. Other donors to Israel have included Germany, the Soviet Union in 1948 and France in the 1950's. From 1950 until 1965, Israel achieved rapid and dramatic rates of economic growth, made possible by the large sums of capital inflows from donor states⁸⁶. Indeed, in 1985, Official Development Assistance (ODA) comprised of 8,5% of its Gross National Income (GNI). This resulted in Israel having large resources available for domestic use, and Israel has reached an income per capita level similar to many developed industrialized countries.⁸⁷ Further than just economic support, Israel has received much political support from powerful states. This political support for Israel has come in the form of UN votes in its favor, the vetoing of United Nations Security Council resolutions against it, and negotiations with actors hostile to Israel⁸⁸. US rationale behind this provision of aid is motivated by a will to "secure a just and lasting comprehensive peace between Israel and its neighbors" and to "reaffirm its commitment to a democratic Israel," which suggests that the stability of the Israeli state is in US interests more than anything else, and that Israel's possession of Nuclear Weapons is a lesser priority for them than regional stability to maintain their influence⁸⁹.

This dependence on actors, particularly the United States, means that Israel remains vulnerable to political pressure by donor states. For example, France embargoed its supply of arms, ammunitions and spare parts to Israel in objection over its decision to launch the Six Day

⁸⁴ Ibid, 50

⁸⁵ Israel has been the largest recipient of U.S. foreign aid for many years since 1949 ; "Foreign Aid Explorer", *USAid*, <https://explorer.usaid.gov/cd/ISR>

⁸⁶ Indeed, Israel's GNP grew by an average rate of over 11%

⁸⁷ Halevi, Nadav. "A Brief Economic History of Modern Israel". EH.Net Encyclopedia. March 16, 2008; <http://eh.net/encyclopedia/a-brief-economic-history-of-modern-israel/>

⁸⁸ Louis René Beres, "Security or Armageddon: Israel's Nuclear Strategy", (D.C. Health and Company, 1986)

⁸⁹ Duncan L. Clarke, "US Security Assistance to Egypt and Israel: Politically Untouchable?", *Middle East Journal*, Vol. 51, No. 2 (Spring, 1997), pp. 200-214

War. The United States also suspended the supply of arms to Israel on several occasions⁹⁰. It is interesting to note that foreign aid was provided both despite Israel's refusal to sign the NPT and after the "realization" of Israeli Nuclear Weapons capabilities by other states. This challenges the Economic and Political integration approach to why States join international security regimes, as this theory rests on the assumption that the dependence of a state on another will be used to apply political pressure for it to join the regime. However, in the facts, the United States' consistently refused to condition to provision of aid to Israel's signing of the NPT⁹¹.

Another interesting finding that challenges the Economic and Political Integration theory, lies in the fact that Israel began a process of economic liberalization during the same period of time that it pursued and achieved Nuclear weapons capability. Indeed, in the 1960's Israel shifted from its initial extensive government controlled economy and pursued economic liberalization, notably through increased foreign trade⁹². This, as well as the fact that Israel is an active member in many international programs and organizations (such as the OECD, the Paris Club, and the World Bank), provides proof that Israel is highly integrated into the international community, and would not be considered as isolated. According to the Economic and Political Integration theory, however, Israel's international integration should have provided impediments to its nuclear weapons program, and lead it to join the NPT. Thus, Israel's current presence in the international community challenges this theory.

3.1.3 Assessing The Impact Of Israel's Informal Security Guarantees

A formal Treaty pledging military guarantees to Israel has never been concluded. Even the U.S., Israel's strongest ally, has only provided it with a general commitment to Israel's security and to an informal promise to support Israel in case of an Arab surprise attack.

This did not satisfy Israel, who wanted a formal defense Treaty. Michael Karpin's in depth study of the Israeli program has suggested that if the United States had agreed to a formal

⁹⁰ In 1976, when Israel did not go along with US request to accept the intermediate agreement with Egypt; and in 1982 when the US opposed Israel's conduct of the Lebanon War; Louis René Beres, "Security or Armageddon: Israel's Nuclear Strategy", (D.C. Health and Company, 1986), 94

⁹¹ This despite several previous efforts by US officials to tie military assistance to Israel's signature to the NPT. In 1979 for instance, the senate explicitly rejected this conditioned aid. ; Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East," (University Press Florida, 2007), 106

⁹² Restrictions on imports were replaced by reduced tariff protection, and more realistic exchange rates were put in place. Several Partial trade agreements with the European Economic Community (EEC) lead to a Free Trade Agreement (FTA) of Industrial goods in 1975, and another FTA with the U.S. came into force in 1985. ; Halevi, Nadav. "A Brief Economic History of Modern Israel". EH.Net Encyclopedia. March 16, 2008, <http://eh.net/encyclopedia/a-brief-economic-history-of-modern-israel/>

Israeli Security Guarantee, then Ben Gurion's determination to acquire nuclear weapons might not have pushed them to achieve the nuclear weapons threshold in the 1960's⁹³. Indeed, during the 1963 Eshkol-Kennedy Exchanges, the Israeli prime minister asked the United States for the signing of a formal defense pact, to which the U.S. President tacitly linked such a security guarantee to Israel's "handing over" of the Dimona reactor⁹⁴. However, in the end the U.S. State Department opposed giving Israel a formal security guarantee, as its commitment to Israel's security already existed.

Despite not having any formal security guarantees, Israel does in fact benefit from a multitude of informal security guarantees, notably from the United States, during Israel's key decisive period to pursue nuclear weapons development. Indeed, President Kennedy's May 8th 1963 statement pledged U.S. support to Israel's security⁹⁵. This informal security guarantee has persisted in time, and in 2006, President Bush Jr. became the first one to unambiguously state that Washington would defend Israel by military force⁹⁶. There are also a multitude of security-related bilateral agreements between Israel and other states, which, without being explicit defense Treaties, brings about a tacit form of protection; The U.S. currently has 39 Security-Related bilateral agreements and Treaties with Israel⁹⁷.

Israel's development of nuclear weapons suggests that the protective value of these security guarantees is dependent on the perceptions of state decision makers. Some authors argue that Israel did indeed fall under the U.S. security umbrella when it made its decision to go nuclear, given the extent of the aid it has been provided and U.S. informal pledges to Israel's security⁹⁸. Others further argue that in actual facts, the U.S. would never allow the elimination of Israel, as it would undermine the credibility of its other alliances.

It is therefore of great relevance that Israel, since its creation, has strongly pursued a strategy of security independence. Indeed, the tragic events of the Holocaust have caused Israel to be extremely weary of relying on foreign powers for security. Israel has adopted a strategy

⁹³ Michael Karpin, "The Bomb in the Basement. How Israel Went Nuclear and What That Means for the World" (New-York: Simon & Schuster, 2007), 94

⁹⁴ Kennedy writing that U.S. commitment to and support of Israel would be "seriously jeopardized" if Israel would not allow the U.S. to obtain reliable information on Dimona. ; Avner Cohen, "Israel and the Bomb", (Columbia University Press, 1998), 167

⁹⁵ Avner Cohen, "Israel and the Bomb", (Columbia University Press, 1998), 167

⁹⁶ Glenn Kessler, "Bush Says U.S. Would Defend Israel Militarily" *Washington Post*, Feb 2006, <http://www.washingtonpost.com/wp-dyn/content/article/2006/02/01/AR2006020102134.html>

⁹⁷ Jennifer Kavanagh, "U.S. Security-Related Agreements in Force since 1955: Introducing a New Database", *RAND Corporation*, (2014), 49

⁹⁸ James A. Russel, "Nuclear Proliferation and the Middle East's Security Dilemma: The Case of Saudi Arabia", (Stanford University Press, 2012), 47-68

of being as self-sufficient as possible in regards to security; they fought and won the three Arab-Israeli wars on their own, and their conventional military power, particularly the Israeli Defense Forces (IDF) has provided them military superiority over its regional adversaries. Israeli Chief of General Staff (and later Defense Minister) Moshe Dayan publicly told the United States that Israel does not ask them to “shed the blood of a single American soldier for Israel’s Defense.”⁹⁹ This posture of security independence is evident with the Israeli refusal to rely on the United States’ *de facto* security guarantee. Israeli suspicion of the United States in particular was motivated by President Truman’s withdrawal of support for the UN Partition Plan for Palestine, and the placing of an embargo on American Weapons to the Middle East in 1948. Israeli fears of vulnerability were put into words by Ernst David Bergmann, the first chairman of the Israel Atomic Energy Commission: “Nuclear Weapons would ensure that we shall never again be led as lambs to the slaughter.”¹⁰⁰

It is therefore important to note that given the lack of a formal security guarantee by a powerful state, Israel did not take this factor into account when it made its decision to pursue nuclear weapons. In accordance with the Security Assurance Theory, we can assume that it was Israel’s deep suspicion of foreign powers’ commitments to defend the Jewish people, and therefore inexistence of a perceived security guarantee, that is in part what drove it to develop nuclear weapons capability¹⁰¹. What this case study further tells us, is that informal security guarantees have little impact on a state’s decision to join international regimes, especially when it is faced with extensive security threats.

3.1.4 Conclusions from the Israeli Case study

When assessing the validity of each of the proposed theories, we can see that the Israeli case study presents a strong correlation between threats to security causing states not to join international security regimes. Indeed, publicly Israel puts forward several reasons for not ratifying the NPT. First, Israel believes that the IAEA safeguards are inadequate in stemming the development of nuclear weapons. Secondly, it is unwilling to make what it believes is a

⁹⁹ Louis René Beres, “Security or Armageddon: Israel’s Nuclear Strategy”, (D.C. Health and Company, 1986)

¹⁰⁰ Gawdat Bahgat, “Proliferation of Nuclear Weapons in the Middle East,” (University Press Florida, 2007), 88

¹⁰¹ Ibid.,

unilateral concession¹⁰². Therefore the Security argument makes a strong case for the Israeli case study.

The Economic and Political Integration Theory makes less of a convincing argument in regards to this case study. This theory would predict that Israel's dependence on other states, particularly the U.S. – a strong advocate of non-proliferation – as well as its participation in the world market and international organizations, would provide Israel with strong incentives and pressures to join the NPT and abandon its nuclear weapons. Because this was not the case we can therefore draw the conclusion that Israeli threats to security were of a higher priority than its economic wellbeing when making its decisions to “go nuclear” and “stay nuclear.”

Finally, Israel's decision not to join the NPT in light of its lack of formal security assurances, but multitude of informal guarantees would suggest that the Security Assurances theory is only applicable in regards to a *protégé's* perception of the legitimacy of the security guarantee. Indeed, Gurion's decision to strengthen Israel's commitment to develop nuclear weapons after having failed to receive a formal security guarantee highlights the validity of the Security Assurances Theory only in light of formal guarantees.

3.2 *The Strategic Considerations Behind Libya's Nuclear Policy*

On December 19th, 2003, Libya announced that it had been conducting talks with the United States and the United Kingdom regarding the rollback of its weapons of mass destruction, and more importantly its nuclear weapons program. Despite having signed the NPT in July 1968 and subsequently becoming a party to it in 1975, Libyan Leader Muammar Gaddafi had made clear indications of his desire for nuclear weapons and pursued efforts to acquire them starting from his seizure of power in 1969. Indeed Libya's efforts to acquire nuclear technology from foreign sources commenced shortly after the Gaddafi took power¹⁰³. Though Libya had not achieved nuclear weapons capability by 2003, it had pursued this ambition in violation of the NPT; particularly through the failure to report nuclear developments to the IAEA. Plans to import nuclear power reactors from the Soviets, the training abroad of numerous students in nuclear science and technology, the operation of nuclear research centers

¹⁰² Louis René Beres, “Security or Armageddon: Israel's Nuclear Strategy”, (D.C. Health and Company, 1986), 74

¹⁰³ This was made possible with the help of foreign sources such as China, Pakistan and Russia ; Gawdat Bahgat, “Proliferation of Nuclear Weapons in the Middle East,” (University Press Florida, 2007), 125-126

and nuclear assistance from Pakistan were all strong indicators of Libya's search for nuclear weapons capability. Moreover, Gaddafi had made multiple statements about his desire to for nuclear weapons and his efforts to acquire them¹⁰⁴¹⁰⁵. I therefore classify pre-2003 Libya as a "non-adherer" of the NPT, and post-2003 Libya as a participant to this international security regime. Libya's 2003 decision to re-integrate the nuclear nonproliferation regime was done through it's pledge to declare all nuclear activities to the IAEA and it's signature of the NPT's Additional Protocol (AP), gaining it praise from the international community¹⁰⁶. It should be noted that Libyan authorities claim that it was they who alerted Washington and London of their program out of good faith, however U.S. and British officials claim that they were the ones who pressed Libyan leadership to rollback¹⁰⁷.

The Libyan case study thus provides important evidence on which factors motivate states to revoke international regimes of security, by analyzing the strategic decision behind Gaddafi's nuclear weapons program. Analyzing the strategic decision to abandon nuclear weapons, the Libyan case study also provides key information on which motivations come into play in a state's decision to abandon security independence and integrate such regimes of security.

3.2.1 *The Initial Lack Of Significant Threats To Libyan Security*

During the period in which Libya decided to pursue Nuclear weapons development, a regional rival never threatened Libya's national security. The only threat it was subjected to was the international community's condemnation of Libya's links to terrorism towards the end of the 20th century. Though Libya had been involved militarily in neighboring Chad for almost 20 years, and directly involved in the Chadian civil war from 1978 to 1987, this threat did not threaten the regime's survival. Indeed, Libya's conventional capabilities were superior to the

¹⁰⁴ On July 25 2006, Libyan leader Muammar Gadhafi admits that Libya was attempting to construct a nuclear weapon. He claims that Libya had been near to accomplishing this goal. "World News in Brief: Libya 'nearly had a nuclear bomb,'" *The Independent*, 25 July 2006; http://www.nti.org/media/pdfs/libya_nuclear.pdf?_=1316466791

¹⁰⁵ Frank Barnaby, "The Invisible Bomb: The Nuclear Arms Race in the Middle East", (I.B. Tauris & Co Ltd, 1993), 97-99

¹⁰⁶ However Libyan officials have expressed their discontent with the lack of rewards and inadequate benefits for this tradeoff. Indeed, Libyan leaders made their decision to re-integrate the nonproliferation regime based on expectations of security guarantees offered by the U.S., Europe, and Japan. Among other expectations, they envisioned international support to turn their military nuclear weapons program into a peaceful civilian nuclear program; Wannis Otman; Erling Karlberg, "The Libyan Economy: Economic Diversification and International Repositioning"(Springer-Verlag Berlin Heidelberg, 2007), 25-26

¹⁰⁷ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East, " (University Press Florida, 2007), 125-126

much weaker state of Chad ¹⁰⁸ . Furthermore, though Libya adopted a militant and uncompromising stand against Israel in the Arab-Israeli conflict, Libya's fight and stand in the conflict was more ideological than it was to alleviate national security concerns. In 2004, Gaddafi stated in his address to the General People's Congress of Tripoli: "In 1969 and the early 1970s we did not reflect on where or against whom we could use the nuclear bomb. Such issues were not considered. All that was important was to build the bomb¹⁰⁹". This suggests that no particular security threat had motivated Libyan leaders in their pursuit of the bomb. These findings challenge the "Security Theory" in that they suggest that other factors than threats to security came into play when deciding to acquire and develop nuclear weapons. Some authors argue that Libya sought to accelerate its nuclear program in the late 1980's for security considerations after U.S. airstrikes to Tripoli and Benghazi in 1986¹¹⁰. However tensions with the United States only became threatening in the mid 1980's onwards, and do not explain why Libya first sought nuclear weapons 1969 onwards. Instead, others estimate that Gaddafi sought nuclear weapons mainly in order to balance the Israeli nuclear weapons arsenal, and provide a nuclear threat on behalf of all Arab states. Indeed, there are strong indications that it was factors such as Arab Nationalism and Gaddafi's leadership aspirations, rather than security threats, that pushed Libya to develop the nuclear weapons and violate the NPT regime¹¹¹.

The Security argument is further challenged when analyzing Libya's decision to re-integrate the NPT regime. Indeed, with the U.S. led war in Iraq, many policymakers and scholars suggest that Libya's decision to abandon its nuclear weapons was made out of fear for American and British intervention in Libya¹¹². It is reported that Gaddafi stated to the Italian Prime Minister Silvio Berlusconi that "[He] will do whatever the Americans want, because I saw what happened in Iraq, and I was afraid.¹¹³" Indeed, it was only five days after the capture of Saddam Hussein that Gaddafi decided to come forward and announce his surrender of nuclear weapons. This behavior counters the logic put forward behind the Security theory, as this logic would suggest that Security Threats, such as the one posed by U.S. and British

¹⁰⁸ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East," (University Press Florida, 2007), 146

¹⁰⁹ Målfrid Braut-Hegghammer, "Libya's Nuclear Turnaround: Perspectives from Tripoli", *Middle East Journal*, Vol. 62, No. 1 (Winter, 2008), pp. 55-72

¹¹⁰ Bruno Tertrais, "Security Guarantees and Nuclear Non-Proliferation", (Note n° 14/11, Fondation pour la Recherche Stratégique, 2011), 5

¹¹¹ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East," (University Press Florida, 2007), 127

¹¹² Ibid.,

¹¹³ Sammy Salama, "Was Libyan WMD Disarmament a Significant Success for Nonproliferation?" Center for Nonproliferation Studies, September 2004, <http://www.nti.org/analysis/articles/was-libyan-wmd-disarmament-success/>

intervention, would accelerate nuclear weapons development, rather than counter it. Therefore once again, we can see that the Libyan case study does not provide convincing evidence for Security threats being the main driver of security independence.

3.2.2 Economic And Political Integration – The Main Driver Behind Libya's Nuclear Rollback

In the early 1990's, UN Security Council resolutions imposing economic and diplomatic sanctions on Libya cost it the loss of \$26,5 billion, crippling it's economy and isolating it from the global economic and diplomatic system¹¹⁴. In 2010, however, Libya's GNP per capita more than doubled from what it was in 2002¹¹⁵. This set of data portrays the extent to which international sanctions can be disastrous on a state's economy, as well as the benefits of re-integrating the global system.

In 1951, Libya was one of the poorest countries in the World. However, the discovery of huge oil deposits in the mid 1950's changed this, meaning that at the time of the 1969 *coup d'état*, Libya was a wealthy country under centralized autocratic rule. Indeed, Libya's resource abundance meant that it was not dependent on foreign aid and was relatively free from economic and political pressures from the international community. In the 1970's Libya adopted the centralized socialist model of strong state intervention. Indeed, for the majority of Gaddafi's rule, bilateral relations between Libya and the west were characterized by suspicion and hostility, but Libya's relative wealth meant that it could remain relatively independent in it's decision making. For instance, it was during this period that Libya nationalized several American oil companies, and used oil as a political weapon along with other Arab States in the 1973 Oil Embargo¹¹⁶. It was in this context of relative economic independence and political influence that Libya decided to pursue nuclear weapons development.

By the late 1980's, however, the Libyan government tentatively introduced measures of economic liberalization. Throughout the 1980's corruption, favoritism and unemployment plagued Libya's economy, added to this several bilateral sanctions were imposed upon it for

¹¹⁴ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East," (University Press Florida, 2007), 144

¹¹⁵ "GNI per capita", *World Bank Group*, 2017, <https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?locations=LY>

¹¹⁶ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East," (University Press Florida, 2007), 144

reason of its involvement in terrorist activities and organizations¹¹⁷. This situation as further aggravated by the 1990's when coordinated efforts by the international community to condemn Libya's involvement in international terrorism had disastrous effects on Libya's economy. Indeed, a combination of bilateral sanctions by European states and the United States and UN Security Council Resolutions in 1992 and 1993 imposed economic embargos and diplomatic sanctions resulted in stagnant economic growth, high unemployment and a heightened isolation from the international community. By 2003 Libya's oil production was less than half of what it was in the 1970's¹¹⁸. Libya's nuclear program in particular was seen as a major contributor to its isolation¹¹⁹.

Faced this international isolation and significant decline in GDP, exerted immense pressure on Libyan leaders to re-integrate the global economic and diplomatic system. Libyan leaders became convinced that the economic and political rewards of renouncing their WMD program exceeded the potential military benefits¹²⁰. Indeed an article from the *Financial Times* in 2004 highlights how over a decade of economic and diplomatic isolation had pushed Gaddafi to invest diplomatically and financially to the re-establishment of international legitimacy¹²¹. Therefore there is clear evidence that it was when the pressures of international isolation became too much to bear that Libya made the decision to give up its nuclear weapons program. This displays, in accordance with the Economic and Political Integration Theory, how domestic and political reforms and conditions strongly impact foreign policy. A need for integration into the global economic system pushed Libya to play by the global rules; this was made obvious by growing economic partnerships with the International Monetary Fund (IMF) and the World Bank (WB) as well as other foreign investors which provided incentives for Libya to abandon its nuclear weapons. There is much evidence suggesting that Libya believed that it would strongly benefit from abandoning its nuclear weapons by re-integrating the global system. Indeed Libya's Prime Minister Shukri Ghanim stated in 2004: "The United States should act

¹¹⁷ In 1980's Reagan administration severed all diplomatic and economic ties to Libya, froze its financial assets and imposed extensive economic sanctions. Moreover American oil companies were forced to withdraw ; Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East," (University Press Florida, 2007), 141

¹¹⁸ Ibid.,

¹¹⁹ Norman Cigar, "Libya's Nuclear Disarmament: Lessons and Implications for Nuclear Proliferation", (Marine Corps University Middle East Studies, 2012), 2

¹²⁰ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East," (University Press Florida, 2007), 141

¹²¹ Wannis Otman; Erling Karlberg, "The Libyan Economy: Economic Diversification and International Repositioning "(Springer-Verlag Berlin Heidelberg, 2007), 25-26

quickly to reward his country for abandoning its secret weapons programs.¹²² There is also evidence suggesting that Gaddafi expected international help with the development of civilian nuclear facilities when he made his decision in 2003¹²³.

This major security concession made by Libya, and its subsequent re-integration into the nonproliferation regime, were rewarded with immediate benefits and re-integration into the international community of nations. As actors such as the U.S. took immediate steps to enhance its troubled economic and diplomatic ties with Libya, this resulted in the lifting of travel restrictions, allowing firms to negotiate contracts for their return to Libya, terminating the American Iran-Libyan Sanctions Acts in regards to Libya, the issuance of licenses for trade and investment, and the unfreezing of Libyan assets, among other rewards¹²⁴. Full diplomatic relations were restored between Libya and the United States in May of 2002. These measures brought an end Libya's crippling economic conditions and resulted in rapid GDP growth over the next years.

The Libyan case study therefore validates the Economic and Political Integration Theory, in that a desire, or even a necessity, for economic and diplomatic integration pushed Libya to abide to an international security regime. Moreover, Libya's further participation in institutions such as the IMF and the World Bank provided incentives to abide to international norms. In regards to its initial decision to pursue nuclear weapons development, we can see that it was made at a time in which Libya was economically independent and did not require international integration to prosper.

3.2.3 Lack of Security Assurances and Incentives for Rollback

When Libyan leaders made the decision to pursue nuclear weapons, Libya did not benefit from any formal or informal security guarantees. Indeed, Libya post-1969 strongly pursued military independence; Libya's lack of security guarantees and assurances was made evident after the 1986 U.S. airstrikes. This would support the obvious Security Assurances Theory assumption, according to which states that do not

¹²² Patrick E. Tyler, "Libya Presses U.S. to Move Quickly to End Sanctions," *The New York Times*, 2 January 2004, <http://www.nytimes.com/2004/01/02/world/libya-presses-us-to-move-quickly-to-end-sanctions.html>

¹²³ Norman Cigar, "Libya's Nuclear Disarmament: Lessons and Implications for Nuclear Proliferation", (Marine Corps University Middle East Studies, 2012), 4

¹²⁴ Gawdat Bahgat, "Proliferation of Nuclear Weapons in the Middle East," (University Press Florida, 2007), 127

possess security guarantees will more likely refrain from international regimes on security, favoring to take matters of security into their own hands.

More notably however, is the evidence that suggests that Libya's decision to abandon nuclear weapons, and re-integrate the NPT regime, was in part because it expected to receive security guarantees. Indeed, with the U.S. led invasion of Iraq, Libya sought the assurance that it would not be subject to the same treatment. This expectation was made clear by Gaddafi's son, Sayf Al-Islam, who stated on the Saudi-owned newspaper *Al-Sharq Al-Awsat*, that as part of the agreement by Libya to renounce its nuclear weapons program, the United States has "committed itself to defend us". Moreover that he expected that "agreements on military and security cooperation would follow."¹²⁵ Libyan officials were therefore disappointed not to see this materialize¹²⁶. By 2006, only the United Kingdom had agreed to offer Libya security assurances and strengthen their mutual security relationship in an effort to encourage other countries to follow Libya's lead. In a "Joint Letter of Peace and Cooperation" the U.K. pledged to aid Libya in strengthening its defense capabilities, and both states pledged to work jointly to combat proliferation of WMD¹²⁷. This expectation from the Gaddafi regime suggests that security guarantees provide strong incentives to join international regimes on security.

This would also suggest that the Security Assurances theory comes into play in the cost-benefit analysis of joining international regimes. The case of Libya might also provide limits to this argument in the future; U.S. failure to offer any security guarantees to Libya, and the United Kingdom's participation in the 2011 military intervention against Libya despite the 2006 security agreement, have discredited the credibility of such expectations in further negotiations. Indeed, when future nuclear weapons aspiring states might think twice before striking a deal other states in exchange for security guarantees.

3.2.4 Conclusions From the Libyan Case Study

This case study displays how significant threats and direct risks to Libya's security did not come into play in its decision to pursue nuclear weapons. Rather, economic independence and regional political aspirations pushed Libya to pursue nuclear weapons. We can therefore conclude that in a situation where a state's security is not under significant threat, economic and political power (and therefore independence

¹²⁵ Norman Cigar, "Libya's Nuclear Disarmament: Lessons and Implications for Nuclear Proliferation", (Marine Corps University Middle East Studies, 2012), 4.

¹²⁶ Ibid.,

¹²⁷ Michael Nguyen, "UK Offers Libya Security Assurances", *Arms Control Association*, https://www.armscontrol.org/act/2006_09/UKLibya

from the international community) can drive states to pursue security independence. Evidence in this case suggests that when security threats are lacking, international integration plays a larger role in state decision-making regarding international regimes of security. This would explain why a state such as North Korea does not seek economic and political integration into the international community despite crippling economic conditions brought about by international sanctions and isolation.

Security threats, though not playing a role in Libya's decision to pursue nuclear weapons capability, did play a secondary role in Libya's decision to rollback. This case suggests that when independent states, who do not benefit from security guarantees or assurances, face potential security threats, they are more likely to abandon security independence and make security concessions to re-integrate the international system. Indeed, the correlation between the 2003 Iraq invasion and Gaddafi's decision to rollback challenge the assumptions behind the Security Theory. I therefore classify security risks as a "Secondary Factor" in Libya's decision to rollback.

More importantly however, the Libyan case study highlights the importance of economic and political integration incentives to a country crippled by international isolation. Indeed, in this case study, economic dependence on the international community was the most important factor pushing Libya to re-integrate the NPT's regime and I will therefore classify Economic and Political Integration as the "most important factor" in Libya's decisions to pursue nuclear weapons and rollback.

3.3 Assessing the Significance of Each Theory on State Nuclear Proliferation Behavior

The following Table 1.0 provides a visual ranking of the importance of each factor in Israel's and Libya's decision to pursue nuclear weapons and subsequently abandon them for Libya's case. The importance of each factor was ranked from 0-3 (0 meaning that the factor had no impact and 3 meaning that the factor was most important to the state's decision).

Table 1.0: Ranking of the presence and significance of Security Risks, Economic and Political Integration and Security Guarantees in Israel's and Libya's nuclear weapons decisions:

State's decision	Security Risks		Economic /Political Integration		Security guarantee	
	Presence	Importance	Presence	Importance	Presence	Importance

Israel (1948-Present)	Significant	3	Yes	0	Yes*	0
Libya (1969-2003)	No	0	No	3	No	0
Libya (2003)	Moderate	1	Yes	3	Yes ^o	2

* Only the presence of informal security guarantees

^o Libya believed that it would be receiving a security guarantee

Based on this table, we can draw several conclusions regarding the validity of each theory and the importance of each factor:

Significant threats to security take precedence over other factors: In accordance with the Security Theory, significant risks to security have the most important impact on a state's decision not to abide to international regimes of security. Indeed, we the case comparison seems to indicate that when threats to security are of a certain order, economic integration and informal security guarantees are not taken into account in a state's strategic decision.

Significant threats to security reduce the impact of informal security guarantees: We can conclude, based on the Israeli case study, that threats to security take precedence over informal security assurances and guarantees. Indeed, we can see that security theory seems to be more applicable to state's decision to join international regimes in that security guarantees only had an impact when there was no significant threat to state security, in the case of Libya.

In the absence of significant threats to security Economic and Political Integration is of great importance: This case comparison suggests that economic and political integration is of extreme relevance to state decisions to join an international security regime. This factor however, comes second to security considerations. Indeed, only when there are no significant threats to security do economic and political factors push states to either pursue security independence or abide to a regime.

The Security Assurances theory is only valid if the protected state believes in the legitimacy of the assurance: Indeed, we can see that Security Guarantees had no impact on Israel's decision to undergo nuclear weapons development, as it did not perceive informal security guarantees from the U.S. as legitimate. Moreover Libya's expectation of future security guarantees contributed to its decision to renounce it's nuclear weapons program and re-integrate the NPT.

Therefore in regards to the question of which factors are most important to a State's decision to abide to, or to refrain from international security regimes we can conclude, based on the evidence presented by the case comparison, that significant threats to security are the most important factor in pushing states to refrain or violate such regimes. We can further draw the conclusion that economic and political integration is the most important factor in the absence of significant threats to security. Finally we can see that the security assurances theory is of less relevance in regards to state decisions to join or abide from security regimes, as the impact that they play depends heavily on state leader perceptions and the existence of threats to security.

4. CONCLUSION

The ideas and evidence present in this paper suggest that the widely defended security model explanation for nuclear proliferation and security independence is accurate. They further highlight flaws in the economic and political integration theory and the security assurances theory in highlighting how the incentives that each provide in joining a security regime are not taken into account when significant threats to security are present. However, the evidence provided in the case of Libya suggests that in the absence of significant threats to security, economic and political isolation can push states to join security regimes. Moreover, that in a state of economic and political isolation, security guarantees can provide incentives for potential proliferators to abandon security independence and join international regimes of security. We may therefore conclude that if we are to rank the impact of each factor on a state's decision to refrain from, or abide to, international regimes on security, the Security Theory would be the most accurate in that Security Threats have the most significant impact, followed then by the economic and political integration, and finally security assurances having the least impact on a state's decision.

4.1 Key Implications for Policy and Predictions

If these findings are correct, then it will have important implications for future policies to be applied by advocates of nonproliferation such as the United States. First it should be noted that policies aimed at getting potential nuclear proliferators to abide to the NPT should be differentiated in regards to if the state in question is exposed to significant threats to security or not. Implications for U.S. nonproliferation policy are of particular relevance today, when faced with the Iranian issue. Indeed, on April 2nd 2015, an Iran Nuclear Deal Framework was reached, under this framework Iran tentatively to accepted restrictions on its nuclear program, which was supposed to last for at least a decade, and it also agreed to submit to an

increased intensity of international inspections under a framework deal (by the IIEA) notably. This deal would be known as the Joint Comprehensive Plan of Action (JCPOA), or also referred to as the “Iran nuclear deal” or the “Iran Deal”.

However, on May 8th 2018, the United States, under the administration of President Donald Trump, announced its withdrawal of the JCPOA, and therefore reimpose nuclear-related sanctions on Iran. President Trump declared that the deal was “defective at its core”. As a result of the administration’s decision, U.S. companies with business relationships with Iran were required to sever contracts within 180 days, and the U.S. Treasury will re-impose secondary sanctions against the Central Bank of Iran.

This decision caused concern among scholars and policymakers as to the subsequent economic stability and therefore political stability in Iran¹²⁸. Following this decision, Iran had continued to push forward with its nuclear agenda, as could have been expected according to the findings of this paper which suggests that when a potential proliferator is exposed to significant threats to security, the United States and other powerful states, should seek to address the threats to security instead of aggravating them.

At the moment, with the entry of a new administration in the White House, many scholars and policymakers question whether the US will rejoin the Iran nuclear deal. President Joe Biden has promised to move quickly to rejoin the Iran nuclear deal, however steps to do so have been slow as political pressures inside the US are advocating not to give in too easily on the sanctions.

Based on the findings of this paper, if the U.S. wishes to minimize incentives for Iran to develop nuclear weapons, it should therefore prioritize policies to stabilize the region and encourage reconciliation efforts between Iran, Israel and Saudi Arabia. Moreover, the Biden administration should seek to smooth its relationship with Iran to decrease Iran’s perception of threats to its security, and highlight the economic and political benefits that the 2015 Nuclear Deal provides for the potential proliferator, instead of threatening to break it off entirely and leave Iran even more isolated and vulnerable to threats to security, as the administration has in recent months. By minimizing threats to Iranian security, the U.S. increases the chances that Iranian leaders will value the diplomatic and political benefits of the Nuclear Deal and abiding to the NPT.

In light of this data presented, if tensions between Middle Eastern states do indeed decrease in the near future, the “sticks” or “carrots” method of incentivizing states to adhere to NPT regime should be used to address potential proliferators. If the potential proliferator is economically and diplomatically

¹²⁸ United Nations Secretary-General Antonio Guterres said that he was “deeply concerned” by Trump’s decision and released a statement in support of the continued implementation of the JCPOA. “U.N. chief calls on remaining parties to abide by Iran deal,” Reuters, 8 May 2018, www.reuters.com.

independent and powerful, such as is the case of Saudi Arabia, the United States and other actors should adopt a “sticks” method and sanction behavior that violates the NPT, rather than incentivize adherence. If however the potential proliferator is economically and diplomatically dependent on international integration, and isolation would cripple its economy – as was the case for Iran, – policies should instead adopt a “carrots” method and incentivize adherence to NPT regulations¹²⁹.

Should the tensions further escalate between the Saudi Arabia and Iran in the Middle East, to a point where both their levels of security are significantly threatened, their powerful allies (Russia in the case of Iran, and the U.S. in the case of Saudi Arabia) should envision the provision of formal security guarantees to the potential proliferators, rather than informal ones if they wish to curb nuclear weapons development.

The data presented also provides for several predictions regarding the outcome of the Iran Nuclear Deal. The Libyan case study suggests that as long as the security threats to Iran are minimized, the 2015 Nuclear Deal will hold, as the economic and political incentives provided to Iran in exchange for nuclear compliance have a large influence in a state’s strategic considerations of abiding by international regimes of security.

4.2 *Looking Ahead*

The analysis provided in this research paper was a state-based, “Westphalian” approach to security decisions. It did not take into consideration the forces and factors at the sub-state level that can also affect state decisions. With the rise of sectarian-based conflicts and challenges to state authority posed by non-state actors and militants in the Middle Eastern region, further research should focus on state nuclear development and regime-adherence behavior in light of these new challenges. What impact do non-state actors and militants, who are not bound to rules of war and international regimes, have on state behavior regarding those regimes? What are the chances that non-state military actors, such as the Hezbollah or Boko Haram, might acquire nuclear or otherwise non-conventional weapons capacity? What impact might this have on State adherence to international regimes?

Regional insecurity and conflicts have plagued the Middle East since the end of the First World War. Arab-Israeli tensions as well as the ones in the Persian Gulf region have created and maintained

¹²⁹ The “sticks” and “carrots” analogy is described by Monteiro and Debs. Nuno. P Monteiro; Alexandre Debs, “The Strategic Logic of Nuclear Proliferation”, *International Security*, Vol. 39, No° 2, (2014), 19

significant and persistent threats to individual states' securities in the region. This has translated into an environment of distrust and caution; impeding incentives for states to join international regimes, particularly those pertaining to matters of security.

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