



**The Nuclear Non-Proliferation Treaty**  
**And**  
**Regime Theories**

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## **Forord**

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# Chapter 1: Introduction

## 1.1. Introduction and Research Question

Since the beginning of the atomic age, nuclear weapons proliferation has been one of the major security issues facing the international society, and a growing concern for the consequences of a potential spread of nuclear weapons in the aftermath of World War II led to the negotiation of the Nuclear Non-proliferation Treaty (NPT) in 1968. The two main purposes of the treaty was to prevent the spread of nuclear weapons to non-nuclear-weapon states, and for the five recognised nuclear weapon states to disarm and reduce their stockpiles of nuclear weapons. The NPT is the centrepiece of a network of interlocking, overlapping, and mutually reinforcing mechanisms and arrangements that are commonly referred to as the international non-proliferation regime<sup>1</sup>. Since the first nuclear weapons were developed in 1945, nuclear proliferation has emerged as a significant international security relation's problem in the international society. John F. Kennedy<sup>2</sup> predicted in the early 1960s that 20 to 30 states would soon be in possession of nuclear weapons. The possession of nuclear weapons has become an important power tool in the nuclear age, and yet only a handful of states are today in the possession of what has been referred to as the "absolute weapon". The NPT has, since it entered into force in 1970, become the most widely accepted international arms control agreement with 190 signatory members<sup>3</sup>. Still, after the end of the Cold War, concerns about nuclear weapons proliferation has grown rather than subsided, and continue to be one of the major challenges to international order. The research conducted in this thesis has grown out from interest rooted in the failed prediction made by John F. Kennedy, meaning that why are one witnessing the nuclear weapons situation in the international society that one do today and how important have the role of the NPT been in states decision to forgo or acquire nuclear weapons. In other words how can the nuclear weapons situation in the international society today be correlated either directly or indirectly to the work of the NPT as an international regime?

States use a lot of time and efforts to create and maintain international institutions to help them solve problems in the international society. Therefore, one would assume that they

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<sup>1</sup> Mitchell Reiss. 1995. p 331

<sup>2</sup> Joseph Cirincione. 2007. p 28

<sup>3</sup> [www.nupi.no/content/download/1150/31600/version/1/file/hhd02-3.pdf](http://www.nupi.no/content/download/1150/31600/version/1/file/hhd02-3.pdf)

also want to know how well they fit or match the reality towards which they are directed<sup>4</sup>. In this thesis I will look at how the Nuclear Non-Proliferation Treaty have performed as an international regime and how well it has fitted or matched the reality it is directed towards. An international regime is defined as "a set of mutual expectations, rules and regulations, plans, organizational energies and financial commitments which have been accepted by a group of states"<sup>5</sup>. I will base my research on two separate, but related questions. The first question is an empirical question, which will be based around different empirical facts. The second question is a theoretical question that seeks to explore how different theories of international relations and their view on international regimes can explain the empirical facts and how these empirical facts consist with their theoretical explanation of international regimes. The two research questions this thesis will try to answer sounds as follows:

- (1) To what degree has the Non-proliferation Treaty been able to achieved its goals?**
- (2) How can the degree of success or failure connected to goal achievement be explained according to different regime theories?**

To answer the first question, I will need to look at what constitutes the goals of the treaty and how the treaty has been able to contribute directly or indirectly to the degree of goal achievement. To establish a degree of goal achievement one first need to establish what constitutes regime effectiveness, and how one need to go about when it comes to measure its effect. Although few doubt that international institutions are an important feature of the contemporary international system, theorists in the field of international relations are deeply divided about how and why international institutions are formed and maintained, and what role they play in the international society<sup>6</sup>. The three theories of international relations I have chosen to use in this thesis regarding my second question are neorealism, neoliberalism, and constructivism. The reason why I have chosen these three theories will be elaborated in chapter 2. While all of the three theories of international relations presented in this thesis, base their arguments on the structure of the international system when it comes to international cooperation, they differ in their view of what constitutes the structure, and provide different arguments for when and why one are able to expect or experience international cooperation. They will therefore also most likely have different arguments for why the goal achievements of the NPT have been a failure or a success.

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<sup>4</sup> Alexander Wendt. 2001. p 1043

<sup>5</sup> Roger K. Smith. 1987. p 256

<sup>6</sup> John Baylis, Steve Smith, and Patricia Owns. 2008. p 298

## 1.2. Regime Effectiveness

According to Arild Underdal<sup>7</sup>, one of the basic questions in the study of international cooperation is; why are some collective problems solved more easily or effectively than others? This question may be decomposed into several sub-questions: One pertains to the conditions under which some kind of cooperative arrangement can or is likely to be established. Another pertains to the condition under which the arrangement that is established will be effective, in some precise meaning of that word. At least two good reasons can be given for shifting some of our research efforts from the former to the latter question. One is simply that if our goal is to understand the conditions for "success" and the causes of "failure" in international problem solving, one must have a sound definition and a valid indicator of success. Focusing merely on the establishment of joint arrangement would clearly not meet this requirement. Analytically, institutions can be significant in two respects: they may be more or less *effective*, and they may be more or less *robust*. While effectiveness involves a static perspective in the sense that it can be determined at and for any given point in time, robustness is essentially a dynamic measure of the significance of regimes, the application of which presupposes a relevant change in the regime environment. Regime effectiveness comprises two overlapping ideas. First, a regime is effective to the extent that its members abide by its norms and rules. Second, a regime is effective to the extent that it achieves certain objectives or fulfils certain purposes. In contrast, regime robustness refers to the "staying power" of international institutions in the face of exogenous challenges and to the extent to which prior institutional choices constrain collective decisions and behaviour in later periods, i.e. to the extent to which institutional history matters. In other words, institutions that change with every shift of power among their members or whenever the most powerful participants find that their interests are no longer optimally served by the current regime, lack robustness<sup>8</sup>. So even if a regime is not effective it may be robust, meaning that as long as there exists a willingness by one or several states to preserve the regime, it may continue to remain as an international institution. Even if a regime is not effective in the sense that it is progressing towards a goal, it may be a mean to preserve status quo or a belief that the institution will be able to serve some purpose over time. States use a lot of time and efforts to create international institutions and in some occasions it will be wiser to maintain an institution rather than try

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<sup>7</sup> Arild Underdal. 1992. p 227

<sup>8</sup> Andreas Hasenclever, Peter Mayer, and Volker Rittberger. 1997. p 2

to establish a new one every time a problem surfaces. Regarding my first research question, and the degree of goal achievement of the NPT, I will place emphasis on the former.

Any attempt at designing a framework for the study of regime effectiveness must cope with at least three questions: (1) what precisely constitutes the object to be evaluated? To answer this question one needs to determine whether the interested is solely in the substantive arrangement, or also in the costs incurred in producing and maintaining it<sup>9</sup>. In this thesis I shall deal only with the treaty itself and what I would like to refer to as a macro perspective; the costs of producing or maintaining it will not be considered in this thesis. (2) Against which standard is the object to be evaluated? Defining an evaluation standard involves at least two main steps. One is to determine the point of reference against which actual achievement is to be compared; the other is to determine what might be called the unit of measurement. It seems that there are basically two points of reference that merit serious consideration in this context. One is the hypothetical state of affair that would have come about had the regime not existed, this is a counter-factual question. This point of reference leads us to conceive of “effectiveness” in terms of *relative improvement* caused by the regime. The other option is to evaluate a regime against some concept of collective optimum. This is the appropriate perspective if the goal is to determine to what extent a collective problem is in fact “solved” under present arrangements. These two approaches are clearly complementary. Even a regime leading to a substantial improvement may fall short of being “perfect”<sup>10</sup>. When it comes to the standard the object is to be evaluated against regarding the aim of study, it is the latter standard that will be considered in this thesis. The NPT is divided into three different pillars. These are non-proliferation, the right to peaceful use of nuclear technology, and disarmament. In this thesis I have chosen to exclude the pillar regarding right to peaceful use of nuclear technology, and focused on the pillars that deal with nuclear weapons. When it comes to goal achievement I have therefore chosen to focus only on two pillars non-proliferation and disarmament. So when it comes to what extent the collective problem of nuclear proliferation is in fact “solved” under present arrangement, one needs to look at to what degree the regime has been able to achieve its goals, mainly preventing proliferation of nuclear weapons and the work towards complete disarmament of nuclear weapons. (3) How do we operationally go about comparing the object to our standard; in other words, what kind of measurement operations do we have to

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<sup>9</sup> Arild Underdal. 1992. p 229

<sup>10</sup> Arild Underdal. 1992. p 230-231



perform in order to attribute a certain score of 'effectiveness' to a certain object (regime)<sup>11</sup>? When it comes to measuring the effect of the NPT there is no set measurements of what constitutes effect other than a subjective opinion on what degree the treaty has been able to achieve its goals. So the degree of goal achievement will be a subjective conception of success or failure based on the empirical facts collected during the research of this thesis.

### **1.3. Method**

This thesis will be based on two research questions. The first question will be answered based on a subjective understanding of the degree of success or failure according to the goal achievement of the Nuclear Non-Proliferation Treaty. Since my first question is based on a subjective understanding on my interpretation of the empirical material used to conduct this research, others may on the same information provided in this thesis come to a different conclusion. The second research question is a comparison between three different theories of international regimes, viewed from neorealism, neoliberalism, and constructivism, and how they can explain the "success" or "failure" of the NPT established in my first question. Both questions will be based on case studies. Case studies is characterized by research that is directed towards studying a large quantity of information about few units or cases, and that the focus for the analysis is directed towards one or several entities that represents the research "case(s)"<sup>12</sup>.

The great advantage of the cases study is that by focusing on a few single cases, where each of them can be intensively examined even when the research resources at the investigators disposal are relatively limited<sup>13</sup>. In this thesis I will look closer at twelve different cases eight states and four arms control agreements. The states I have chosen to use are South Africa, Argentina, Brazil, Egypt, India, Pakistan, North Korea (DPRK), and Iran, and when it comes to the arms control agreements I have chosen START I, START II, SORT, and the ABM treaty<sup>14</sup>. The cases have been selected on two criteria's. First criteria are their relevance for the study. This research is trying to understand why states chose to forgo or acquire nuclear weapons therefore a state that don't have the capability or at any time considered developing nuclear weapons is not relevant for this study. For the arms reduction

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<sup>11</sup> Arild Underdal. 1992. p 228-229

<sup>12</sup> Tove Thagaard. 2002. p 47

<sup>13</sup> Arend Lijphart. 1971. p 691

<sup>14</sup> START (Strategic Arms Reduction Treaty), SORT (Strategic Offensive Reduction Treaty or Moscow Treaty), and the ABM treaty (Anti Ballistic Missile Treaty).

agreements, relevance will be based on agreements that aim at limiting or reduce nuclear weapons. Second criteria are the availability of information about the cases, also in consideration of the time and recourses available for the research. The amount of information available for this research has been varying among the twelve cases. The reason for my selection of these specific states and arms control agreements will be further elaborated in chapter 4, where they are presented. The scientific status of the case study method is somewhat ambiguous, however, because science is a generalizing activity. A single case can constitute neither the basis for a valid generalization nor the ground for disproving an established generalization. Indirectly, however, case studies can make an important contribution to the establishment of general propositions and thus to theory building in political science<sup>15</sup>.

Case studies can have a comparative design when the reason for the research is to look at the comparison between several cases<sup>16</sup>. The core of the comparative design is to find a theoretical interesting comparison between two or more cases in space and time<sup>17</sup>. The first focus of this thesis is to look at eight different states with the aim of explaining why they have chosen to forgo or acquire nuclear weapons, and to better understand the policies of these states. I will look at differences and similarities that may shed some light on why these states have chosen their nuclear weapons direction, and how the NPT may have influenced their decisions directly or indirectly. In addition to the states I will also look at different arms control agreements and how they may have contributed to the reduction of nuclear weapons in the recognized nuclear weapons states. The second focus is to compare three different views on regime theory and how they can explain the empirical evidences presented in this thesis, and the degree of goal achievement established in my first question. The comparative method should not lapse into the traditional quotation/illustration methodology, where cases are picked that is in accordance with the hypothesis- and hypotheses are rejected if one deviant case is found. All cases should, of course be selected systematically, and the scientific research should be aimed at probabilistic, not universal, generalization<sup>18</sup>. I have tried to select cases that represent different aspects of states acquisition and non-acquisition of nuclear weapons, and arms control agreements that may have different conditions for contributing to nuclear disarmament. The amount of

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<sup>15</sup> Arend Lijphart. 1971. p 691

<sup>16</sup> Tove Thagaard. 2002. p 48

<sup>17</sup> Kristen Ringdal. 2001. p 177

<sup>18</sup> Arendt Lijphart. 1971. p 686

information available to conduct this research have also been a factor for my selection, so in addition to select cases that I have seen relevant for my research, I have also selected cases where it in my opinion have been possible to collect sufficient information to conduct the research itself. The NPT as an international regime has existed for forty years. To limit the time period of the research I have therefore chosen to focus the emphasis of my analysis on the time period between 1990 and 2007. But I don't believe that the analysis can be totally isolated from previous historical happenings. Therefore I have chosen to include events taking place prior to 1990 that I believe has an importance for the analysis.

As a part of the research plan the researcher needs to take a stand at how information is going to be collected. Which method is relevant<sup>19</sup>? I have chosen to base this research solely on written data, in the form of books, scientific articles, and Internet databases. Based on the field of study, I have seen written data as the most relevant, and it has allowed me to collect information that I would not be able to produce. To find the sources used in this thesis I have used the University of Tromsø library, the online article archives Jstore and ArticleFirst. Internet have also been used to collect data, since some of my cases have unfolded presently and some are still unfolding Internet have been a valuable tool, since online sources are continually updated. When it comes to the analysis of written data there are some important questions that need to be asked. One of these questions is when the information was produced? This question has been mostly relevant for the empirical information, to establish when it was produced to place a phenomenon in time, and in comparison to other sources<sup>20</sup>. When it comes to the empirical information I have mainly used sources produced after 1990, because I have chosen to focus my analysis on the time period after the Cold War. I have tried to collect sources that are relatively new, I have strived to find sources produced after 2000 to increase the perspective the source might have on the empirical material it's presenting. The second question is who has produced the information that is being used? This is because we need to determine if the source is valid, and credible<sup>21</sup>. I have tried to select information provided by what I have seen as recognized and well-established scholars within the theoretical framework and the research field in question, this I have done to make as sure as possible that the source has a high degree of credibility. In addition I have used books and articles, that I believe have been published

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<sup>19</sup> Tove Thagaard. 2002. p 58

<sup>20</sup> Knut Kjeldstadlie. 2007 p 175

<sup>21</sup> Knut Kjeldstadlie. 2007 p 175

by recognized publishers and periodicals. Uses of Internet also provide a need to analyse the sources with a more critical view than books and articles, which normally have stronger restrictions for publishing. I have tried to basically use Internet sources produced by reliable organizations and institutions. The selection has also been based on the availability of information, especially when it comes to the empirical data, where the availability of information has been varying for each case; the information available have also been varying from theory to theory. Information about how the theories view the NPT has been varying from limited when it comes to neorealism, and absent in the case of neoliberalism and constructivism. A third question is; are the information a first-hand or second-hand source?<sup>22</sup> The source to be preferred is the primary, which means the source that is closest in space and time to the subject that is being researched among the sources that is available. If one got a first-hand source this is the primary, and all others secondary, if one don't have a first-hand source the closest source is the primary<sup>23</sup>. Regarding the international relations theories I have tried to collect primary sources from recognized scholars within the different theories such as Kenneth N. Waltz, John J. Mearsheimer, Robert O. Keohane and Alexander Wendt to the extent it has been possible and secondary sources where primary hasn't been available, or sufficient. According to Kjeldstadli<sup>24</sup> the most desirable is to have multiple independent sources that present the same facts. When it comes to the empirical information regarding both the primary and secondary sources I have tried to find more than one source that presents the same facts to increase the validity of the information, to the extent it has been possible.

#### **1.4. Overview of the thesis**

In chapter 2 I will present the theories that will be used in this thesis, neorealism, neoliberalism and constructivism. Before I look at how the three schools of thought explain the existence of international regimes, I will present a short introduction of the theories and how they view international relations. After each presentation of the three theories of international regimes, I have made a prediction of what we are expected to find in the analysis for the possibility of explaining success or failure according to the different theories. In Chapter 3 I will presents a short introduction of the history of nuclear weapons, and the establishment of the NPT and take a look at the different Articles of the treaty. In

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<sup>22</sup> Knut Kjeldstadlie. 2007. p 177

<sup>23</sup> Knut Kjeldstadlie. 2007. p 177-178

<sup>24</sup> Knut Kjeldstadlie. 2007. p 178

chapter 4 the empirical material that is going to make the basis for my analysis will be presented. The reason for my selection of states and bilateral arms control agreements will be further elaborated in at the beginning of the chapter. In chapter 5 I will return to the two research questions, and present the analysis of the thesis. I have chosen to look at the two research questions separately. When it comes to my first research question, the analysis will be divided into three sections proliferation, disarmament and degree of success. In the proliferation section I will look at the eight countries presented in chapter 4 and how their decision to acquire or forgo nuclear weapons can be seen as a correlation to the NPT and its role as an international regime. In the disarmament section I will look at the work that have been conducted by the five recognized nuclear-weapons states towards reduction of their nuclear stockpiles. After I have established the degree of goal achievement I will return to my second research question and look at how the three different theories of international relations, can explain the degree of success or failure of goal achievement according to their theories of international regimes. In chapter 6 I will turn to the concluding remarks.

## Chapter 2: Regime Theory

I will start this chapter by explaining my choice for the selection of theories, before I give a presentation of the theories and how they view international relations. After this presentation I will look at how the three theories explain international regimes. In addition, after each presentation a prediction of what we are expected to find in the analysis for the possibility of explaining success or failure according to the different theories will be given. In addition during the presentation of the neorealist view on international relations I will also give a brief presentation of what Kenneth Waltz has referred to as the deterrent argument since it will be used in the analysis in chapter 5.

### 2.1. Theoretical Approach

When it comes to the international relations theories, I have chosen neorealism and neoliberalism because the two has been of the most influential approaches to international relations theory the last decades, and even if the two theories are based on the same core assumptions they separate on two main issues that lie at the centre of what is referred to as the neorealist-neoliberal debate. The first issue is the competition in seeking to understand how the structure of the anarchical context of the international system inhibits joint action among states that otherwise share common interests and how states sometimes overcome those inhibitions and achieve cooperation<sup>25</sup>. Along with the different view on the meaning and implications of anarchy, the second issue in the debate is the problem of absolute and relative gains, which I will come back to in more detail in the presentation of the theories. Constructivism on the other hand is part of the category critical international relations theory, which is a family of theories that includes, postmodernism, constructivism, neo-Marxists, feminists, and others. What unites them is a concern with how world politics is “socially constructed,” which involves two basic claims: that the fundamental structures of international politics are social rather than strictly material, and that these structures shape actors identities and interests, rather than just their behaviour<sup>26</sup>. I have chosen constructivism because it offers an alternative understanding to a number of the central themes in international relations theory, including: the meaning of anarchy and balance of

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<sup>25</sup> Joseph Grieco. Robert Powell. Duncan Snidal. 1993. p 729

<sup>26</sup> Alexander Wendt. 1995. p 71

power, the relationship between state identity and interests, an elaboration of power, and the prospect of change in world politics<sup>27</sup>.

### 2.3. Neorealism

Realism is a school of thought that explains international relations in terms of power. Realism as we know it developed in reaction to a liberal tradition that realists called idealism<sup>28</sup>. While classical realism or so called human nature realism who dominated the study of international relations from the late 1940s, is based on the simple assumption that states are led by human beings who have a “will” to power hardwired into them at birth. That is states have an insatiable appetite for power, or what Morgenthau calls “a limitless lust for power,” which means that they constantly look for opportunities to take the offensive and dominate other states, and are therefore inherently aggressive. During the 1970s neorealism came on the scene. Neorealism<sup>29</sup> unlike classical realism, blames security competition among states on the anarchical structure of the international system, and not on human nature<sup>30</sup>. The anarchical structure of the international society forces security seeking states to compete with each other for power, because power is the best means to survive. Meaning that states are not inherently aggressive because they are infused with a will to power; instead states merely aim to survive<sup>31</sup>. The arguments developed by neorealists are deliberately limited to the systemic level of analysis. Meaning that the actor characteristics are given by assumption, rather than treated as variables, where changes in outcomes are explained not on the basis of variables in these actor characteristics, but on the basis of

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<sup>27</sup> Ted Hopf. 1998. p 172

<sup>28</sup> Joshua S. Goldstein and Jon C. Pevehouse. 2006. p 55-56

<sup>29</sup> Neorealism may further be divided into defensive realism presented by Kenneth N. Waltz and offensive realism presented by John J. Mearsheimer. While they are both structural theories of international politics, meaning that states are concerned mainly with figuring out how to survive in a world where there is no agency to protect them from each other, and hence power is the key to their survival. Offensive realism parts company with defensive realism over the question of how much power states want. For defensive realists, the international structure provides states with little incentive to seek additional increments of power; instead it pushes them to maintain the existing balance of power. Preserving power, rather than increasing it, is the main goal of states. Offensive realists, on the other hand, believe that status quo powers are really found in world politics, because the international system creates powerful incentives for states to look for opportunities to gain power at the expense of rivals, and to take advantage of those situations when the benefit outweighs the costs (John J. Mearsheimer. 2001. p 21).

<sup>30</sup> Classical realists or human nature realists recognize that international anarchy the absence of a governing authority over the great powers causes states to worry about the balance of power. But that structural constraint is treated as a second-order cause of state behavior. The principal driving force in international politics is the will to power inherent in every state in the system, and it pushes each of them to strive for supremacy (John J. Mearsheimer. 2001. p 19).

<sup>31</sup> John J. Mearsheimer. 2001. p 19

change in the attribute of the system itself<sup>32</sup>. Realism as a theory in general is an effort to explain both the behaviour of individual states and the characteristics of the international system as a whole. They are pessimists when it comes to international politics, they agree that creating a peaceful world would be desirable, but they see no easy way to escape the harsh world of security competition and war. The ontological given is that sovereign states are the constitutive components of the international system, states are treated as the principle actors in world politics. Therefore the theory focuses mainly on great powers, because these states dominate and shape international politics and they also cause the deadliest wars<sup>33</sup>. The international system is anarchical, it is a self-help system, and the structure of the international system, which all states must deal with, largely shapes their foreign policies. The anarchical structure of the international society states that there is no higher authority that can constrain or channel the behaviour of states. Realists tend not to draw sharp distinctions between “good” and “bad” states, because all great powers act according to the same logic regardless of their culture, political system, or who runs the government. Sovereign states are rational<sup>34</sup> self-seeking actors resolutely if not exclusively concerned with relative gains because they must function in an anarchical environment in which their security and well-being ultimately rest on their ability to mobilize their own resources against external threats. For realists, the fundamental analytical argument, the basic explanation for the behaviour of states, is the distribution of power in the international system and the place of a given state within that distribution, calculations about power dominate states thinking, and that states compete for power among themselves<sup>35</sup>. Realists argue that the general insecurity of international anarchy leads states to worry not simply how well they fare themselves (absolute gains) but how well they fare compared to other states (relative gains). The concern of fare compared to others makes cooperation difficult, even when states share common interests, because even if all states involved in the cooperation gain from working together, there is always an overhanging fear that one or more of the states will defect from the cooperation and gain more relative to the other states. To use the words of Kenneth Waltz: *“When faced with the possibility of cooperation for mutual gain, states that feel insecure must ask how the gain will be divided. They are compelled to ask not ‘Will both of us gain?’ ‘But ‘who will gain more?’ ‘If an expected gain*

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<sup>32</sup> Robert O. Keohane in Stephen D. Krasner. 1983. p 143

<sup>33</sup> John J. Mearsheimer. 2001. p 19

<sup>34</sup> Actors act rational when they have weight the expected cost and benefits of different courses of action, and the one with the maximum valuable outcome for the actor is the one that are chosen (Alexander Wendt 2001).

<sup>35</sup> John J. Mearsheimer. 2001. p 17



*is to be divided, say, in the ratio of two to one, one state may use its disproportionate gain to implement a policy intended to damage or destroy the other. Even the prospect of large absolute gains for both parties does not elicit their cooperation so long as each fears how the other will use its increased capabilities”<sup>36</sup>.*

Waltz argument is that War becomes less likely as the costs of war rise in relations to possible gains. Deterrent is not a theory; Instead deterrent policies derive from structural theory, which emphasizes that the units of an international-political system must tend to their own security as best they can. In contrasts to dissuasion by defence, dissuasion by deterrence operates by frightening a state out of attacking, not because of the difficulty of launching an attack but because the expected reaction of the opponent may result in one’s own severe punishment. Deterrent depends on fear, and to create fear nuclear weapons are the best possible means<sup>37</sup>.

#### **2.4. Neoliberalism**

The liberal tradition in International Relations is closely connected with the emergency of the modern liberal state. Liberal philosophers, beginning with John Lock in the seventeenth century, saw great potential for human progress in modern civil society and capitalist economy, both of which could flourish in states, which guaranteed individual liberty. Liberals generally take a positive view of human nature. They have great faith in human reasons and they are convinced that rational principles can be applied to international affairs. Liberals recognize that states are self-interested and competitive up to a point. But they also believe that states share many interests and can thus engage in collaborative and cooperative social action, which results in greater benefits for the states involved<sup>38</sup>. The neoliberal approach stresses the importance of international institutions in reducing the inherent conflict that realists assume in an international system. The reasoning is based on the core liberal idea that seeking long-term mutual gains is often more rational than maximizing individual short-term gains. The neoliberal approach differs from earlier liberal approaches in that it concedes to realism several important assumptions, among them, that states are unitary actors rationally pursuing their self-interests, and that they operate within an anarchical structure. They try to show that even in a world of unitary rational states the

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<sup>36</sup> Duncan Snidal. 1991 p 703

<sup>37</sup> Scott D. Sagan and Kenneth N. Waltz. 2003. p 5, 154

<sup>38</sup> Robert Jackson and Georg Sørensen. 2003. p 106

realist pessimism about international cooperation is not valid. States can create mutual rules, expectations, and institutions to promote behaviour that enhance the possibilities for mutual gains. Neoliberals like Robert O. Keohane have used the game theory of Prisoners Dilemma<sup>39</sup> to illustrate the neoliberal argument that cooperation is possible, even within an anarchical structure. In the game of Prisoners Dilemma each player can gain by individually defecting, but both lose when both defect. The narrow, self-serving behaviour of each player leads to a bad outcome for both; one they could have improved by cooperation. The dilemma can be resolved if the game is played over and over again, where states deal with each other in repeated interactions<sup>40</sup>. Keohane is the author of the so called contractual (or functional) theory of regimes, which focuses on the institutionalization of a growing sector of international behaviour and for which the label “neoliberal institutionalism” has come into use<sup>41</sup>. Functionalism means that the functions performed by institutions help us understand the creation, maintenance and evolution of international regime. Understanding the functions of regimes, therefore, is also holding the key to explaining their very existence. Since world politics lack authoritative governmental institutions, and is characterised by pervasive uncertainty, a major function of international regimes is to facilitate the making of mutually beneficial agreements among states, so that the structural condition of anarchy does not lead to complete “war of all against all”, meaning that international regimes help to make governments’ expectations consistent with one another. Regimes are therefore developed in part because actors in world politics believe that with such arrangements they will be able to make mutually beneficial agreements that would otherwise be difficult or impossible to attain<sup>42</sup>.

## **2.5. Constructivism**

Constructivism is characterised by an emphasis on the importance of normative as well as material structures, on the role of identity in shaping political action, and on the mutually constitutive relationship between agents and structures, and take a more sociological than

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<sup>39</sup> The Prisoners Dilemma is a type of non-zero sum game where the players may choose from cooperation or defection. In this game the only concern of each individual player is maximising his own payoffs, without any concern for the other player's payoff. Cooperation is strictly dominated by defection; this means that no matter what the other player does, one player will always gain a better payoff by playing defect. Since in any situation playing defect is more beneficial than playing cooperation, all rational players will play defect, all things been equal. So the equilibrium is for both players to defect even if the individual award would be Pareto-efficient if they both chose to cooperate (This definition is from the internet cyclopaedia, wikipedia).

<sup>40</sup> Joshua S. Goldstein and Jon C. Pevehouse. 2005. p 101-102

<sup>41</sup> Hasenclever. Mayer. Rittberger. 1997. p 28

<sup>42</sup> Robert O. Keohane in Stephen D. Krasner. 1983. p 148, 150

economic approach to systemic theory. On this basis, they have argued that states are not structurally or exogenously given but constructed by historical contingent interactions. Constructivism is like neorealism and neoliberalism a structural theory of the international system that makes the following core claims: (1) States are the principal units of analysis for political theory; (2) the key structures in the states system are intersubjective, rather than material; and (3) state identities and interests are in important part constructed by these social structures, rather than given exogenously to the system by human nature or domestic politics<sup>43</sup>. Where neorealist and constructivist structuralism really, differ, however, is in their assumption about what structure is made of. Neorealists think it is made only of a distribution of material capabilities, whereas constructivists think it is also made of social relationships. Social structures have three elements; shared knowledge, material resources, and practises<sup>44</sup>. Social identities and interests are always in process during interaction. They may be relatively stable in certain contexts, in which case it can be useful to treat them as given. However, this stability is an ongoing accomplishment of practises that represents self and others in certain ways, not a given fact about the system. Identification is a continuum from negative to positive. In the absence of positive identification, interests will be defined without regard to the other, who will instead be viewed as an object to be manipulated for the gratification of the self. Constructivism refers to positive identification with the welfare of another, such that the other is seen as a cognitive extension of the self, rather than independent. Because of corporate needs for differentiation, this identification would rarely be complete, but to the extent that it exists, there will be an empathic rather than instrumental or situational interdependency between self and other. This is a basis for feeling of solidarity, community, and loyalty and thus for collective definitions of interests. Having such interests does not mean that actors are irrational or no longer calculate costs and benefits, rather, they do so on a higher level of social aggregation<sup>45</sup>. Constructivists are critical of rationalist theories of international politics, and contrasts with rationalism in three important respects. First, where rationalists assume that actors are atomistic egoists, constructivists treat them as deeply social. In the sense that their identities are constituted by the institutionalised norm, values and ideas of the social environment in which they act. Second, instead of treating actors' interests as exogenously determined, as given prior to social interaction, constructivists treat interests as endogenous to such interaction, as a

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<sup>43</sup> Alexander Wendt. 1994. p 385

<sup>44</sup> Alexander Wendt. 1995. p 73

<sup>45</sup> Alexander Wendt. 1994. p 386

consequence of identity acquisition, as learnt through processes of communication, reflection on experience, and role enactment. Third, while rationalists view society as a strategic realm, a place where actors rationally pursue their interests, constructivists see it as a constitutive realm, the site that generates actors as knowledgeable social and political agents, the realm that makes them who they are<sup>46</sup>.

## **2.6. Definition of Regimes and Regime Theories**

When John Ruggie first introduced the concept of international regimes to international relations theory in 1975, he defined regimes as "a set of mutual expectations, rules and regulations, plans, organizational energies and financial commitments which have been accepted by a group of states"<sup>47</sup>. A wider and the most used definition was presented in 1983 by Stephen D. Krasner, where he defined international regimes as; "*sets of implicit or explicit principles, norms, rules and decision making procedures around which actors expectations converge in a given area of international relations*". Principles are beliefs of facts, causation, and rectitude. Norms are standards of behaviour defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for action. Decision making procedures are prevailing practices for making and implementing collective choice"<sup>48</sup>. When it comes to explaining regimes as international institutions, we often separate between three theories, the power based, interest based, and knowledge based. In fact we can talk about three different schools of thought within the study of international regimes corresponding to these three approaches: realists, who emphasize how power and considerations of relative power position affect the content, and circumscribe the effectiveness and robustness, of international regimes. Neoliberals stress self-interest as a motive for cooperation among states and likewise for the creation of, and compliance with, international regimes. Constructivists point out that both the perception of interests and the meaning of power capabilities is dependent on actor's causal and social knowledge<sup>49</sup>. On the one side are the realist and neoliberals, which see action as driven by logic of anticipated consequences (rationality) and prior preferences. On the other side are constructivists who see action as driven by logic of appropriateness (norms) and sense of identity<sup>50</sup>.

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<sup>46</sup> Burchill. Devetak. Linklater, Paterson, Reus-Smith, and True. 2001. p 219

<sup>47</sup> Roger K. Smith. 1987. p 256

<sup>48</sup> Stephen D. Krasner 1983. p 2

<sup>49</sup> Hasenclever. Mayer. Rittberger. 1997. p 211

<sup>50</sup> Alexander Wendt. 2001. p 1024

## 2.7. Power Based

Although neorealism envisions a world that is fundamentally competitive, cooperation between states do occur, it is sometimes difficult to achieve, however, and always difficult to sustain. Nevertheless, cooperation among states has its limits, mainly because it is constrained by the dominating logic of security competition, which no amount of cooperation can eliminate. However they believe that those rules reflect states calculation of self-interests based primarily on the international distribution of power. The most powerful states, in the system create and shape institutions so they can maintain their share of world power, or even increase it. In this view, institutions are essentially, arenas for acting out power relationship.<sup>51</sup> Meaning that international institutions are shaped and limited by the states that found and sustain, them and have little independent effect. While neorealists like Waltz and Mearsheimer have argued that the international regimes is a reflection of the most powerful states in the system. They have not provided a thorough explanation of how these international regimes work, so by supplementing neorealist with the more general realist theory of hegemonic stability, we will be able to create a framework on how international regimes may function from a neorealist perspective.

The theory of hegemonic stability begins with recognition of the intensely competitive nature of international relations. The security and political interests of states are primary and determine the international context within which economic forces must operate. The origin of the hegemonic stability theory can be traced back to Kindleberger's statement that "*for the world economy to be stabilized there has to be a stabilizer, one stabilizer*". The theory in its simplest form, links the existence of effective international institutions to a unipolar (hegemony) configuration of power in the issue-area in question. The theory claims that the existence of a hegemonic power is a necessary condition although it is not a sufficient condition for the development of stable international institutions. Meaning that without the existence of a hegemonic power international cooperation in trade, monetary, and most other matters in international affairs becomes exceptionally difficult, if not impossible to achieve<sup>52</sup>. A hegemon according to Mearshimer<sup>53</sup> "*is a state that is so powerful that it dominates all the other states in the system. No other state has the military wherewithal to put up a serious fight against it. In essence, a hegemony is the only great power in the*

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<sup>51</sup> John J. Mearsheimer. 1994-95. p 9, 13 and Kenneth N. Waltz. 2000. p 26

<sup>52</sup> Robert Gilpin. 1987. p 85

<sup>53</sup> John J. Mearsheimer. 2001. p 40

*system*". The existence of a hegemonic power doesn't necessarily mean that it is a domination of the entire world; according to Mearsheimer<sup>54</sup> we can separate more narrowly between global hegemon, which dominates the world, and regional hegemon, which dominates distinct geographical areas.

The theory claims that the presence of a single, strongly dominant actor in international politics leads to collective desirable outcomes for *all* states in the international system<sup>55</sup>. They may use coercion to enforce adherence to rules; or they may rely largely on positive sanctions, the provision of benefits to those who cooperate. Both hegemonic powers and the smaller states may have incentives to collaborate in maintaining a regime, the hegemonic power gains the ability to shape and dominate its international environment, while providing a sufficient flow of benefits to small and middle powers to persuade them to comply<sup>56</sup>. According to the theory of hegemonic stability we would assume that there must be a sufficient incentive from the hegemonic power to willingly provide a public good, and also to bear the full costs of its provision for cooperation to occur. This outcome will be most likely when a single state, a hegemonic power, is sufficiently large relative to all other states in the system that it will capture a share of the benefit of the public good larger than the entire cost of providing it. States may enjoy the collective goods provided by the hegemonic power regardless of whether or not they contribute to the maintenance of the good, often referred to as the "free rider" problem. The hegemonic power must prevent cheating and free riding, by enforcing the rules of the regime and encourage others to share the costs of maintaining the system<sup>57</sup>.

Cooperation is more difficult to achieve when states are attuned to relative-gains logic, rather than absolute-gains logic. This is because states concerned with absolute gains need only make sure that the pie is expanding and that they are getting at least some portion of the increase, while states that worry about relative gains must care also about how the pie is divided. Such relative gains concerns can keep states from embarking on, or continuing to support, cooperative ventures with others, even when cheating is not a problem<sup>58</sup>. Moreover, improving one's short- or long-term prospects of survival is not the only motive

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<sup>54</sup> John J. Mearsheimer. 2001. p 40

<sup>55</sup> Duncan Snidal. 1985. p 579

<sup>56</sup> Robert O. Keohane in Ole R. Holsti, Randolph M. Siverson, and Alexander L. George . 1980. p 136

<sup>57</sup> Duncan Snidal. 1985. p 581 and Robert Gilpin. 1987. p 74

<sup>58</sup> Hasenclever, Mayer, Rittberger. 1997. p 116 and John J. Mearsheimer. 1994-95. p 12

that makes states attentive to how well their partners do compared to themselves. States also fear that their partners may be able to turn their relative advantage into greater bargaining power in the issue-area in question and beyond. This, in turn, would enable them to drive even better bargains up to a point where the relatively disadvantaged partner's capacity for autonomous choice, at least in the issue-area at hand, may be seriously hampered. Thus states seek to avoid relative losses, not only because survival is their fundamental goal, but also because they value their independency and autonomy<sup>59</sup>. Relative gains concerns tend to be suppressed when the states in question share a common adversary or when the power difference between them is so large that no conceivable gap in pay-offs from cooperation is likely to affect their relative position as a noticeable degree. States whose power base is generally shrinking tend to be more sensitive to relative losses than rising hegemonic powers<sup>60</sup>. This realist analysis of the cooperation problem does not only suggest a hypotheses about the likelihood of states working together for mutual advantage, but also one about the form that any collaboration that might be achieved is likely to take: choosing defensive positional aims create a tendency for states to cooperate on terms that ensure a balanced distribution of gains, i.e. one which "roughly maintains pre-cooperation balances of capabilities". Since such a distribution of benefits from cooperation often does not result "automatically", states regularly offer side-payments or other concessions to dissipate otherwise disadvantaged partners' concerns about relative losses. Conversely, if gains are unable and attempts to redress this problem are not made or fail to take effect, ongoing cooperative ventures are likely to come under stress or even break down altogether<sup>61</sup>. Once the (unipolar) power structure that underlies a given regime dissolves, the regime itself, is bound to collapse or turn into an ineffective cluster of norms and rules which are violated whenever states perceive this to be in their best interest. Hegemonic decline can result either from the absolute decline of the dominant actor or from positive but differential growth rates through which secondary powers "catch up" to a former leader<sup>62</sup>. Another factor that might lead to the dissolvent of the regime, is if other states begin to regard the actions of the hegemon as self-serving and contrary to their own political and economic interests<sup>63</sup>

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<sup>59</sup> Hasenclever. Mayer. Rittberger. 1997. p 117

<sup>60</sup> Hasenclever. Mayer. Rittberger. 1997. p 119

<sup>61</sup> Hasenclever. Mayer. Rittberger. 1997. p 120

<sup>62</sup> Duncan Snidal. 1985. p 585

<sup>63</sup> Robert Gilpin. 1987. p 73

### **2.7.1. Prediction of theory**

Realist's explanation for nuclear acquisition is based on the structure of the system, to protect their own survival in an anarchic structure states are concerned of military capability relative to other states. States formulate their security policies, on the basis of worst-case assumptions and are wary of the time required for them to catch up with the technology and military capability of other states. The result is a constant effort by states to increase their capability to defend themselves and deter aggression. Therefore realists believe that states would not ordinarily forgo their rights to manufacture weapons that may deter potential adversaries and increase their own power and prestige. According to realism the NPT needs the presence of a hegemonic power. It should be willing and capable of providing benign politics such as economic rewards, or coercive policies such as economic and military sanctions, to keep subordinate states from acquiring nuclear weapons<sup>64</sup>. Thus, the explanatory factor for the degree of success or failure of the Nuclear Non-Proliferation treaty according to the theory of hegemonic stability will be explained by the presence of a hegemonic power in the international society that has an interest to prevent nuclear proliferation and benign and coercive means to do so. Even if the regime is not effective it may be robust as long as it is in the interest of the hegemonic power to maintain it, based on its coercive and non-coercive power.

### **2.8. Interest-Based**

According to Keohane, international cooperation occurs when actors adjust their behaviour to the actual or anticipated preference of others through a process of policy coordination. With this definition in mind, we can differentiate among cooperation, harmony, and discord. Harmony and cooperation are usually not distinguished clearly from one another. Yet, in the study of world politics they should be, because harmony is apolitical. Meaning that under harmony no communication is necessary, and no influence needs to be exercised. Cooperation, by contrast, is highly political, as somehow patterns of behaviour must be altered. This change may be accomplished through negative as well as positive inducements. Indeed, strategies that involve treats and punishment, as well as promises and rewards, are more effective in attaining cooperative outcomes than those that rely on persuasion and good example. Cooperation, therefore, does not imply an absence of

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<sup>64</sup> T.V. Paul. 2000. p 6



conflict. On the contrary, it is typically mixed with conflict and reflects partially successful efforts to overcome conflict, real or potential. Cooperation takes place only in situations in which actors perceive that their policies are actually or potentially in conflict, not where there is harmony. Cooperation should not be viewed as the absence of conflict, but rather as a reaction to conflict or potential conflict. Without the spectre of conflict, there would be no need to cooperate<sup>65</sup>. Whether a hegemony exists or not, international regimes depend on the existence of patterns of common or complementary interests that are perceived, or capable of being perceived by political actors. The incentive to form international regimes from a neorealist perspective depends most fundamentally on the existence of shared interests. This makes joint action to produce joint gains rational<sup>66</sup>. Ronald Coase argued that the presence of externalities alone does not necessarily prevent effective coordination among independent actors. Under certain conditions, declared Coase, bargaining among these actors could lead to solutions that are Pareto-optimal<sup>67</sup> regardless of the rules of legal liability. The Coase theorem has frequently been used to show the efficiency of bargaining without central authority, and it has occasionally been applied specifically to international relations. The principle of sovereignty in effect establishes rules of liability that put the burden of external affairs on those who suffer from them. The Coase theorem could therefore be interpreted, as predicting that problems of collective action could easily be overcome in international politics through bargaining and mutual adjustment. Coase specified three crucial conditions for this conclusion to hold: (a) a legal framework establishing liability for actions, presumably supported by governmental authority, (b) perfect information, and (c) zero transaction costs including organization costs and costs of making side-payments. If all these key conditions were met in the international society, ad hoc agreements would be costless and international regimes unnecessary. On the other hand, by inverting the Coase theorem also allows us to analyse international institutions largely as a response to problems of property rights, uncertainty, and transaction costs. Inverting the Coase theorem provides us therefore with a list of conditions, where at least one must apply if regimes are to be of value in facilitating agreements among governments:

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<sup>65</sup> Robert O. Keohane. 2005. p 51

<sup>66</sup> Robert O. Keohane. 2005. p 78

<sup>67</sup> A necessary but not sufficient condition for cooperation to emerge through agreement between rational actors is the mutual perception of some integrative potential, i.e. the possibility of achieving some cooperative solution(s) preferred to the best available non-cooperative outcome by at least one actor, and perceived as worse by none of its prospective partners. The outer limit of the integrative potential is normally referred to as the "Pareto frontier". When this frontier is reached, the outcome for any one party cannot be further improved without thereby leaving some other(s) worse off (Arild Underdal, 1987).

(a) lack of clear legal frameworks establishing liability for actions, (b) information imperfections, and (c) positive transaction costs<sup>68</sup>.

In international society, according to neoliberalism, all of these conditions are met all of the time. World governments does not exist, information is extremely costly and often impossible to obtain. Transaction costs, including costs of organization and side-payments, are often very high. Yet, the Coase theorem is useful not merely as a way of categorizing these familiar problems but because it suggests how international regimes can improve actors' ability to make mutually beneficial agreements. From the deficiency of self-help systems, we get a need for international regimes. Insofar as they fill this need, international regimes perform the functions of establishing patterns of legal liability, providing relatively symmetrical information, and arranging the costs of bargaining to make specific agreements more easily. This typology therefore allows us to specify regime functions, as devises to make agreements possible, and therefore to understand the demand for international regimes. Insofar as international regimes can correct institutional defects in the international society along any of these three dimensions, (a) liability, (b) information, and (c) transaction costs, they may become efficient devices for the achievement of state purposes. Therefore, international regimes are developed in part because actors in world politics believe that with such arrangements they will be able to make, mutually beneficial agreements that would otherwise be difficult or impossible to obtain. Regimes arise because actors forgo independent decision making in order to deal with collective problems. They do so in their own self-interests because jointly accessible outcomes are preferable to those that are or might be reached independently. It is in their interests mutually to establish arrangements to shape their subsequent behaviour and allow expectations to converge, thus solving the dilemmas of independent decision-making<sup>69</sup>.

### **2.8.1. Prediction of theory**

International regimes, and the institutions and procedures that develop in conjunction with them, perform the function of reducing uncertainty and risk according to neoliberalism, by linking discrete issues to one another and by improving the quantity and quality of information available to participants<sup>70</sup>. This means that the success of an international

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<sup>68</sup> Robert Keohane. 2005. p 85-88 and Robert O. Keohane in Stephen D. Krasner. 1983. p 154

<sup>69</sup> Robert O. Keohane. 2005. p 85-88 and Robert O. Keohane in Stephen D. Krasner. 1983. p 154

<sup>70</sup> Robert O. Keohane in Stephen D. Krasner. 1983. p 150, 161

regime is based on its capability to deliver quantity and quality of information to the member states and hence, reducing the uncertainty in the anarchical structured international society. Therefore, the explanatory factor for the degree of success or failure of the Nuclear Non-Proliferation treaty according to interest-based theory of regimes is the quantity and quality of information that the regime is capable of producing for its member states. From a neoliberal view, there has to be a consensus among the majority of the signatory states for the regime to prevail. The will to maintain the regime may come from a shown effect, or it may be robust because of the belief in a potential future effect, since regimes are more costly to produce than to maintain.

## **2.9. Knowledge-Based**

Constructivist approaches to the study of international politics stress ideas and knowledge as explanatory variables. The constructivists would argue that that the state-egoism assumption is problematic because we should not make a priori assumption about state identity in anarchy. In other words, by understanding that identities are created through interaction, we open the door to systemic change. The constructivist argue that assuming a selfish identity and thus a self-help system, is either useful, because it blocks the opportunity for systemic change, or accurate because identities are made and not given<sup>71</sup>.

A constructivist analysis on cooperation would concentrate on how the expectations produced by behaviour affect identities and interests. The process of creating institutions is one of internalizing new understanding of oneself as well as others, of acquiring new role identities, not just of creating external constraints on the behaviour of exogenously constituted actors. Unintentionally, the process by which egotists learn to cooperate is at the same time a process of reconstructing their interests in terms of shared commitments to social norms. Over time, this will tend to transform a positive interdependence of outcomes into one of utilities or collective interests organized around the norms in question. These norms will resist change because they are tied to actors' commitment to their identities and interests, not merely because of transaction costs. The process of cooperation tends to redefine egotistic reasons, even if these were its starting point, by reconstituting identities and interests in terms of new intersubjective understandings and commitments<sup>72</sup>. Intersubjective systemic structures consist of the shared understandings, expectations, and

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<sup>71</sup> Johnatan Mercer. 1995. p 232

<sup>72</sup> Alexander Wendt. 1992. p 417

social knowledge embedded in international institutions and threat complexes, in terms of which states define their identities and interests. Intersubjective structures help determine how much “slack” exists in a states system for dynamics of collective identity formation to develop. The greater the degree of conflict in a system, the more the states will fear each other and defend egotistic identities by engaging in relative gains thinking and resisting the factors that might undermine it. Constructivists argue that the demand for regimes depends on actors’ perception of international problems, which is, in part, produced by their causal and normative beliefs<sup>73</sup>. A security dilemma according to the theory of constructivism is a social structure composed of intersubjective understandings in which states are so distrustful that they make worst-case assumptions about each other’s intentions. As a result, they define their interests in self-help terms. A security community on the other hand is a different social structure, one composed of shared knowledge in which states trust one another to resolve disputes without war<sup>74</sup>. According to Alexander Wendt<sup>75</sup>, the international society would be less stable if states applied a logic of consequences to their actions. Wendt’s argument is that internalized norms may explain much of the rule abiding we observe in international life. Regimes do more than merely manipulate incentives affecting the utility calculations of rational actors. They comprise understandings shared by the members concerning the rights conduct in circumscribed situations. Not only do they prescribe certain actions in defined circumstances, they also serve as commonly used points of reference for the determination and the assessment of individual behaviour. International regimes therefore can be conceptualised as principles and shared understandings of desirable and acceptable forms of social behaviour<sup>76</sup>.

### **2.9.1 Prediction of theory**

Anarchy *may* be a self-help system; opposite it may also be a collective security system that is not self-help in any sense. The resulting logic depends on conceptions of self and others; anarchy of friends is different from one of enemies. If states may threaten each other's security in their first encounter, because of unit-level factors, then competitive dynamics may ensue, generating egoistic conceptions of self. New anarchies may even be particularly susceptible to such outcomes. However, if states bring a friendly or respectful attitude to such an encounter, then different dynamics of identity formation may ensue. Anarchic

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<sup>73</sup> Alexander Wendt. 1994. p 389 and Hasenclever. Mayer. Rittberger. 1997. p 137

<sup>74</sup> Alexander Wendt. 1995. p 73

<sup>75</sup> Alexander Wendt. 2001.p 1025

<sup>76</sup> Hasenclever. Mayer. Rittberger. 1997. p 163

structures explain little by themselves: the importance is the identity and interests that states brings to their interactions and the subsequent impact of the latter on the former. Self-help presupposes self-interest; it does not explain it<sup>77</sup>. The explanatory factor for the degree of success or failure of the NPT according to constructivism is the ability and willingness by states to escape the security dilemma. They may do so by creating a new identity by a willingness to follow the norms and rules of the regime, and showing a collective interest in a nuclear-free international society, thus reducing the fear among states for a potential nuclear conflict. By changing identity, foes may become friends and the need for nuclear weapons becomes less demanding.

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<sup>77</sup> Alexander Wendt. 1994. p 387

## Chapter 3: The Nuclear Non-Proliferation Treaty

In this chapter I will give a brief historical presentation of the establishment of the NPT, before I look closer at the different articles of the treaty.

### 3.1 History of the NPT

In August 1945, two nuclear bombs known as "Little Boy" and "Fat Man" were dropped over the Japanese cities Hiroshima and Nagasaki at the order of former U.S. President Harry S. Truman. The nuclear bombs were a result of the Manhattan Project created in August 1942. Soon after using the bomb, Truman began wrestling with how to control it. "The hope of civilization," he said in his message to Congress in October 1945, "lies in international arrangements looking to the possible renunciation of the use and development of the atomic bomb". By 1946, he had worked out a detailed plan that included many of the nuclear non-proliferation proposals still debated today. This included a ban on the production of any new weapons or the fissile material for weapons, international control of nuclear fuel, a strict inspection regime, and complete nuclear disarmament<sup>78</sup>. Seven years later on December 8 1953, President Dwight D. Eisenhower presented an imaginative nuclear initiative to the United Nations General Assembly, known as the "Atoms for Peace" speech. Eisenhower began his speech by warning of two impending atomic realities. First he advised that the means to produce nuclear weapons, then possessed by only a few states, would eventually spread to other countries, possibly all others. The speech contained many of the most important elements of today's nuclear non-proliferation strategy: the International Atomic Energy Agency (IAEA), the concept of nuclear safeguards, and most importantly, the norm of nuclear non-proliferation<sup>79</sup>. During the first decade of the "nuclear age", three countries developed nuclear weapons: the United States in 1945, Soviet Union in 1949, and United Kingdom in 1952. The next decade two new countries joined the "nuclear club", France in 1960, and China in 1964. The Nuclear Non-Proliferation Treaty opened for signatures on July 1, 1968. When the treaty was signed, it divided the signatory states into two different categories, the states recognised as "nuclear weapons states" (NWS) and the states recognised as the "non-nuclear-weapons states" (NNWS). The states that fall under the category as NWS are the five countries that tested their nuclear weapons prior to January 1, 1967: the United States, Soviet Union, Great Britain, France, and China. When the treaty

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<sup>78</sup> Joseph Cirincione. 2007. p 14

<sup>79</sup> Arms Control Association: [http://www.armscontrol.org/act/2003\\_12/Lavoy](http://www.armscontrol.org/act/2003_12/Lavoy)

was first signed it was originally valid for a period of twenty-five years. On May 11, 1995 more than 170 countries attended the NPT Review and Extension Conference in New York, the result of the conference was an extension of the NPT for an indefinite duration and without conditions<sup>80</sup>.

### 3.2. Text of the Treaty

The NPT is divided into three different pillars. These are non-proliferation, the right to peaceful use of nuclear technology, and disarmament. These pillars make the fundamental value of the treaty and act as the guidelines for the signatory states. Underlying the non-proliferation regime is the major incentive to acquire nuclear weapons based on a national security concerns. To eliminate such incentives, the concerns must be allayed. In the case of many countries the concerns have been met through a nuclear umbrella offered by alliances. Other countries have been given a measure of assurance by the declarations made by NWS in the UN Security Council, who have promised abstaining from use of nuclear weapons against NNWS<sup>81</sup>. The NPT is based on the consideration of the devastation that would befall all mankind by a nuclear war. Consequently there is a strong impetus to avert the danger of nuclear war and thereby safeguard the security of nations. It is felt that, the proliferation of nuclear weapons would seriously enhance the danger of nuclear war.

Under Article I and Article II of the treaty what can be viewed as the non-proliferation pillar. *The NWS agree not to transfer to any recipient whatsoever nuclear weapons or any other nuclear explosives devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any NNWS to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices. And each NNWS party to the treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices*<sup>82</sup>. The separation between NWS and NNWS makes the NPT a asymmetrical regime because while the treaty places similar obligations on both NWS and NNWS to prevent the proliferation of these weapons, it allows the five

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<sup>80</sup> [www.nupi.no/content/download/1150/31600/version/1/file/hhd02-3.pdf](http://www.nupi.no/content/download/1150/31600/version/1/file/hhd02-3.pdf)

<sup>81</sup> Hans Blix in Jørn Gjelstad and Olav Njølstad. 1996. p 126

<sup>82</sup> <http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf>

recognised NWS legally permitted to be in the possession of nuclear weapons, something that are denied all other parties to the treaty.

In most cases where there is a lack of incentive for states to participate in international institutions it may be necessary to create an incentive by using the "carrot" principle. The carrot for NNWS to sign the NPT is basically in return of foregoing the acquisition of nuclear weapons as long as the nuclear states commit to provide them with nuclear technology suitable for the development of nuclear energy industry. Creating an incentive to join the treaty in exchange of nuclear energy capability that the majority of the member states most likely would not be able to achieve other vice. Countries that build their first nuclear reactor usually need outside technical help. The only countries that have built their first reactor entirely unaided were the US, Soviet Union, and France<sup>83</sup>. Article IV of the treaty gives the member states the inalienable right to develop research, production, and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of the NPT. *All the parties to the treaty undertake to facilitate, and have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful use of nuclear technology. Member states of the NPT in a position to do so shall also cooperate in contributing alone or together with other states or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of the NNWS party to the treaty, with due consideration for the needs of the developing areas of the world*<sup>84</sup>. The regime and the IAEA are put in a difficult double role where it is supposed to prevent the proliferation of nuclear weapons, and at the same time promote and provide the use of civil nuclear energy. There is no guarantee that the help that has been received by states from IAEA to produce nuclear energy for civil purposes will later not be used to produce nuclear weapons.

The disarmament pillar is mainly based in Article VI of the treaty. Where *each of the party to the treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at any early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control*<sup>85</sup>.

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<sup>83</sup> Chaim Kauffman. 2006. p 318

<sup>84</sup> <http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf>

<sup>85</sup> <http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf>



According to the disarmament pillar of the treaty, NWS are not strictly required to disarm and destroy all their nuclear weapons; rather they are required to negotiate in good faith the elimination of nuclear arsenals in their possessions.

### **3.3. Safeguards and the UN Security Council**

A regime's transparency depends on the purpose for which the regime seeks information, i.e. the demand for information and the incentives and capacity of relevant actors to provide that information as well as the strategies the regime adopts to increase transparency<sup>86</sup>. Ever since IAEA was founded in 1957, this safeguard system has provided an indispensable instrument for nuclear non-proliferation and peaceful nuclear cooperation. In recognition of this, the NPT makes it mandatory for all NNWS parties to conclude comprehensive safeguards agreements with the IAEA, and thus allow for the application of safeguards to all of their sources or special fissionable material. Article III of the NPT provides that *each NNWS party to the treaty undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the IAEA in accordance with the Statute of the IAEA and the agency's safeguards system, for the exclusive purpose of verification of the fulfilment of its obligations assumed under the treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices*<sup>87</sup>.

IAEA has no means in itself to force states to abide by the rules of the NPT. It was established independently from the United Nations under its own international treaty but its relationship with the UN is regulated by a special agreement between the two institutions. Article III of the agreement obligates, the IAEA to report to the Security Council and General Assembly any case of non-compliance by signatory states to the Treaty.

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<sup>86</sup> Ronald B. Mitchell. 1998. p 110

<sup>87</sup> <http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf>

## Chapter 4: Case Studies

Explaining the dynamics of nuclear acquisition and non-acquisition has significance for foreign policy and international relations theory. In the policy realm, non-proliferation goals can be achieved only if we understand what causes states to acquire or forgo nuclear weapons<sup>88</sup>. In this chapter, my aim is to look at different empirical cases regarding nuclear proliferation and disarmament. To be able to establish a degree of goal achievement, we need first to look at how the NPT as a regime has been able to directly or indirectly contribute to nuclear non-acquisition of some states, and also why the regime may not be able to prevent nuclear acquisition by other states. Regarding nuclear proliferation, I have chosen to look closer at eight different countries that I think would help explaining the dynamics of nuclear acquisition and non-acquisition. It is further necessary to look at the work conducted in the five recognized NWS towards the goal of Article VI of the treaty and reduction in their nuclear stockpiles. Concerning disarmament, I will look at different bilateral nuclear arms reduction agreements between the United States and Russia.

The first two cases to be presented are Argentina and Brazil. The reason why I examined two states is because they are all relatively large powers with the technical and economical capability to acquire nuclear weapons. My third case is Egypt who at one point tried to pursue nuclear weapons, and has only enjoyed a cold peace with its nuclear neighbour. However, they have all chosen to abstain from nuclear weapons, being examples of why states choose non-acquisition. The fourth state I examined is South Africa. South Africa was the first state to develop and dismantle a nuclear arsenal. Coming fifth and sixth, I have chosen India and Pakistan even if they are not members of the NPT because along with Israel, they are the only states that have not signed the NPT. In 1998 they both developed nuclear weapons, and exemplify why states choose nuclear acquisition. North Korea, became the first and only state to leave the NPT in 2003, in pursuit of nuclear weapons, and is the seventh case. My last case is the Islamic Republic of Iran. Iran has been accused by the international society, of having a secret nuclear weapons program because of its extensive work on uranium enrichment program. Iran on the other side has consistently claimed that its efforts are only intended to serve peaceful purposes.

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<sup>88</sup> T.V. Paul. 2000. p 3

One of the main purposes of the NPT is the reduction of nuclear weapons in the international society. According to Article VI, each of the parties to the treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, with complete disarmament as the ultimate goal. Regarding cases that represent the nuclear disarmament, I have chosen to study four bilateral nuclear arms reduction agreements between the United States and Russia. The four treaties are the START I, START II, SORT, and the ABM Treaty. To the best of my knowledge, these were the only ones, except from the NPT, where there were arms reduction agreements among the five NWS. Neither was I able to discover the existence of any bilateral or multilateral agreements among the five NWS, except those between the US and Russia.

#### **4.1. Argentina**

The history of the Argentine nuclear energy program, the oldest and most sophisticated in Latin America, is one of slow but steady progress marked largely by stability, professionalism, and the quest for energy interdependence<sup>89</sup>. In 1967 Argentina signed the Treaty for the Prohibition of Nuclear Weapons in Latin America, also known as the Treaty of Tlatelolco<sup>90</sup>, but did not ratify it at the time<sup>91</sup>. During the 1970s and much of the 1980s, Argentina was one of a handful of countries suspected of wanting to acquire nuclear weapons. The starting point of atomic energy development was established in 1950 with the Comision Nacional de Energia Atomica (CNEA). Although no specific weapons program was authorized, by the 1970s it was apparent that Argentina was developing technology suitable for such a program. In 1983, CNEA President Admiral Castro Madero announced that Argentina had acquired the technology to enrich uranium<sup>92</sup>. The rationale for acquisition of atomic energy facilities and the importance given to this area by successive governments, is multi-faceted. One primary motive was to reverse Argentina's relative decline from one of the world's richest countries in the 1940s to an isolated poor nation that had lost its trading position. Competition with Brazil and fear of a possible alliance between Brazil and the US

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<sup>89</sup> Mitchell Reiss. 1995. p 46

<sup>90</sup> The Treaty of Tlatelolco attempts to establish Latin America and the Caribbean as a nuclear-weapons-free-zone. It prohibits contracting parties in this region from producing, testing, or possessing nuclear weapons in their territories. It forbids the receipt, deployment, or installation of any nuclear weapons. The contracting parties agree to use any nuclear material and facilities under their jurisdiction exclusively for peaceful purposes. It does require each contracting party to negotiate multilateral or bilateral agreements with IAEA for the application of its safeguards to its nuclear activities (Robert F. Mozley 1998. p 205).

<sup>91</sup> Mitchell Reiss. 1995. p 64

<sup>92</sup> T.V Paul. 2000. p 104-105

also encouraged Argentine rulers to pursue a nuclear program. The Argentines did not fear an attack by any of their neighbours. Instead, they wanted to obtain military equality with Brazil and preponderance over Chile in order to maintain a balance of power in the region and to prevent any politico-military alliance between these two countries<sup>93</sup>. In January 1994, Argentina acceded to the Treaty of Tlatelolco and accepted IAEA inspections of all its nuclear activities. The same year, it joined the Nuclear Suppliers Group, accepting restrictions on the kind of nuclear technology it could export. Argentina joined the NPT on February 10, 1995<sup>94</sup>

#### **4.2. Brazil**

Like Argentina, the international community saw Brazil during the 1970s and 1980s as a potential nuclear weapon state. These suspicions were spurred by Brazil's competition with Argentina to be the first to go nuclear, as well as by its desire for regional leadership and international status commensurate with the country's size, population, and natural resources<sup>95</sup>. Brazil initiated research on nuclear technology as early as 1945 when it signed a nuclear co-operation agreement with the United States. With the establishment of military rule in 1964, the armed forces began to show interest in nuclear technology for security objectives. In 1967, the military-run National Security Council declared that nuclear energy would be a permanent national objective, as one of the most important goals in the country's national security doctrine<sup>96</sup>. Brazil signed the Treaty of Tlatelolco in 1967 and ratified it the following year but refused to waive the entry-into-force provisions contained in Article 28. The treaty's handling of peaceful nuclear explosions proved a sticking point<sup>97</sup>. Until the early 1970s, Brazil had a modest nuclear program, but in June 1975, Brazil and West Germany signed an \$ 80 billion agreement that provided Brazil with complex fuel-cycle technology and two power reactors. This would be more than ample to produce quantities of plutonium sufficient for a half-dozen or more nuclear weapons a year. Although the agreement provided for more stringent international inspections than the standard IAEA arrangements, it was feared, especially by the United States, that the uranium-enrichment and spent-fuel reprocessing facilities could provide Brazil with weapons grade materials that it could divert to a future weapons program. International suspicions intensified as

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<sup>93</sup> T.V. Paul. 2000. p 103-104

<sup>94</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 386

<sup>95</sup> Mitchell Reiss. 1995. p 48

<sup>96</sup> T.V Paul. 2000. p 107 and  
FAS: <http://www.fas.org/nuke/guide/brazil/nuke/index.html>

<sup>97</sup> Mitchell Reiss. 1995. p 64

Brazil's nuclear intentions became clouded in secrecy when the military began a parallel program in 1975<sup>98</sup>. In 1990, Brazil renounced its secret program and began a series of steps towards binding non-proliferation commitments. A significant milestone on the non-proliferation path came in 1994, when Brazil brought into force the Treaty of Tlatelolco. Brazil finally signed and ratified both the NPT and the Comprehensive Test Ban Treaty in 1998<sup>99</sup>

### 4.3. Egypt

Egypt has fought several wars and enjoyed only a "cold peace" with a neighbour that possesses both nuclear weapons and a significant edge in conventional military capability. It was one of the first third world countries to embark on a civil nuclear program. Egypt has trained a large number of capable nuclear scientists, and had talked frequently about pursuing an ambitious nuclear power program. Yet, while Egypt seemed to fit the profile of a country with a reasonable strong likelihood of pursuing nuclear weapons, there are few if any signs that it is headed in that direction<sup>100</sup>. Egypt's formal entry into the nuclear field came in 1955 with the creation of the Egyptian Atomic Energy Authority (AEA). The motivation at the time was apparently peaceful, to enable Egypt to reap economic and other benefits from its new and promising technology. The Egyptian nuclear programs early concentration on civilian applications shifted toward a more conscious interest in the military option in response to concerns about Israel's nuclear intentions<sup>101</sup>. During the early 1960s, the Egyptian government through several steps, boosted its budget for nuclear programs, stepped up its efforts to recruit and train nuclear scientists, approached a wide range of countries for assistance, examined prospects for mining thorium and uranium in Egypt, and explored elements of the nuclear fuel cycle that could eventually enable it to produce fissile material for nuclear weapons<sup>102</sup>. Several attempts were apparently made during the 1960s to purchase nuclear weapons or weapons technology from the Soviet Union and China, but the requests were denied<sup>103</sup>. Egypt's crushing defeat in the Six Day War of June 1967 was a critical turning point in its efforts to acquire nuclear weapons. The loss of oil from the Sinai, the closure of the Suez Canal, and the decrease in foreign

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<sup>98</sup> T.V Paul. 2000. p 107-108

<sup>99</sup> Cirincione, Wolfsthal, and Rajkumar. 2005. p 397

<sup>100</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 43-44

<sup>101</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 45

<sup>102</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 45-45

<sup>103</sup> Gawdat Bahgat. 2007. p 413 and

NTI: [http://www.nti.org/e\\_research/profiles/Egypt/Nuclear/index.html](http://www.nti.org/e_research/profiles/Egypt/Nuclear/index.html)

assistance in the aftermath of the war had a devastating impact on the Egyptian economy. Consequently, funding for the nuclear program was frozen<sup>104</sup>. In 1979, Egypt and Israel signed a peace treaty. Although it did not include an Israeli<sup>105</sup> commitment to give up nuclear weapons or sign the NPT, it resulted in a strong bilateral relationship with the United States. This was perhaps of greater importance to Egypt. For about a quarter century, U.S.-Egyptian relations had been strained by Egypt's close political ties, and arms supply relationship with the Soviet Union, Egypt's belligerency toward Israel, and its prominent position in the Non-Aligned Movement<sup>106</sup>. The connection with the United States, from that time onwards, has brought benefits to Egypt that go well beyond material support, both economic and military. Egypt's role as America's partner in the Arab-Israeli peace process, often as Washington's trusted agent in dealing with the Arab world, has reinforced Egypt's standing in the Middle East and elsewhere. The relationship has also had important payoffs for Egyptian security<sup>107</sup>. Despite the narrowing of options, Egypt has not completely closed off all future paths to nuclear weapons. Even today, if Egypt makes the political decision to acquire nuclear weapons, it might succeed because it has the necessary scientific talent. In case Egypt would be prepared to make significant sacrifices in terms of other national priorities, it would be able to find the economic resources to support a nuclear weapons program. Needless to say, this would not be easy, quick, cheap, or without high risk. Egypt currently lacks the facilities and expertise to produce fissile material<sup>108</sup>.

#### **4.4. South Africa**

South Africa was a neutral power in the 1970s and 1980s that clandestinely built a small nuclear arsenal, and then voluntarily dismantled it. South Africa benefited in its nuclear pursuit from its alliance with the United States and the United Kingdom in the 1940s and 1950s<sup>109</sup>. In March 24, 1993 before a special joint session of the South African parliament and a national radio audience, President F.W. de Klerk disclosed, "At one stage South Africa did develop a limited nuclear deterrent capability, of seven nuclear fission devices." He explained, "Early in 1990, final effects was given to decisions that all the nuclear

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<sup>104</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 46-47

<sup>105</sup> Even if Israel have never has admitted to having nuclear weapons, or conducted nuclear tests, there is an international consensus that they possess a nuclear arsenal that consists of between 60-80 nuclear warheads.

<sup>106</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 48-49

<sup>107</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 49

<sup>108</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 56 and Gawdat Bahgat. 2007. p 420

<sup>109</sup> Stephen F. Burgess. 2006. p519

devices should be dismantled and destroyed." According to de Klerk, "All the hardware and design information was destroyed" by the time South Africa, signed the NPT in July 1991. De Klerk's announcement provided official confirmation of what many had long suspected: that South Africa had surreptitiously acquired a small nuclear arsenal<sup>110</sup>. However, no one would have predicted that after building these devices, South Africa would become the first and only example of nuclear "rollback," voluntarily and unilaterally dismantling its nuclear arsenal<sup>111</sup>. South African scientists had demonstrated the feasibility of nuclear uranium enrichment in 1967 and the country was developing an increasingly sophisticated defence industry. Confronted with growing domestic, regional, and global treats and possessing the capability to build nuclear weapons in 1970, the South African government opted to reject the NPT and to pursue a nuclear arsenal<sup>112</sup>. Extensive nuclear embargoes and boycotts were imposed on South Africa from the mid-1970s. These embargoes were inefficient in economic terms and they were seen by South Africa as anti-apartheid bullying rather than as being selectively targeted against the nuclear weapons program<sup>113</sup>.

South Africa has been a pioneer in nuclear research and uranium production. As a result, it sat on the board of governors of the International Atomic Energy Agency until 1977 when it was expelled for covert nuclear activities. It began construction of an unsafeguarded pilot uranium-enrichment plant in 1971 at Valindaba outside Pretoria. Here it began producing enriched uranium in 1977, its decision to produce weapons-grade enriched uranium was driven partly by U.S. sanctions. The Carter administration in 1977 as part of its global non-proliferation policy, decided to suspend the U.S. contract to provide South Africa with low-enriched uranium, unless they acceded to the NPT<sup>114</sup>. After Portugal withdrew from their colonies in southwest Africa in 1975, a lot of the former colonies choose to turn to communism. The same year the Soviet Union started providing aid to the Marxist regime in Angola, and Cuban troops were deployed to support the regime against South African-backed rebels. According to de Klerk, the nuclear weapons were built to provide "a limited nuclear deterrent capability," necessitated by "a Soviet expansionist threat in Southern Africa, as well as prevailing uncertainty concerning the designs of the Warsaw Pact members". Considering South Africa's relative international isolation it would most likely

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<sup>110</sup> Mitchell Reiss. 1995. p 7

<sup>111</sup> Mitchell Reiss. 1995. p 7

<sup>112</sup> Stephen F. Burgess. 2006. p520

<sup>113</sup> Peter Liberman. 2001. p 69

<sup>114</sup> T.V. Paul. 2000. p 114

not be able to rely on outside assistance should it be attacked<sup>115</sup>? The South African nuclear strategy was reportedly to use the bomb as a political tool to achieve its security objectives. This strategy involved three phases. In the first phase, the South African government would adopt a policy of neither confirming nor denying its nuclear possession to maximize uncertainty. The second phase would occur if the country were militarily threatened. South Africa would then secretly inform Western governments, especially the United States, of its nuclear status to try to persuade it to come to South Africa's rescue. If such appeals did not produce the expected results, South Africa would move on to the third phase, acknowledging openly, or testing publicly, a nuclear bomb that would compel the West to intervene on South Africa's behalf. The strategy has been termed "catalytic deterrence," based on arousing concerns in the West about South Africa using nuclear weapons in a crisis and thereby encouraging the West to intervene to protect it<sup>116</sup>. As a precursor to signing the NPT, which it did in the summer of 1991, South Africa invited the IAEA to make on-site inspections. During a series of visits, the South African government permitted IAEA personnel unprecedented access for their inspections of HEU facilities and weapon production sites<sup>117</sup>. South Africa formally joined the NPT on July 10, 1991. Not all the pieces of the nuclear cores had been melted down and reshaped by this time. This step was accomplished by the time it signed a safeguards agreement with the IAEA eight weeks later. The same month South Africa resumed its seat at the IAEA General Conference for the first time in twelve years<sup>118</sup>.

#### **4.5. India**

Before international nuclear safeguards came into effect, the Canadians sold India a 40-megawatt research reactor, which started working in 1960. By the early 1970s, India had built one of the most sophisticated nuclear programs in the developing world while ensuring that many nuclear facilities were not subject to IAEA safeguards. When it became apparent that India was violating the agreement it had made with Canada by using the reactor to produce plutonium for weapons, Canada stopped its assistance. It took India ten years after starting to process plutonium in 1964 before they conducted their first nuclear underground test. With the nuclear-power plants India has developed since 1974, it was assumed in 1998 that it had to have about 400 kilograms of weapon-grade plutonium, or probably enough to

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<sup>115</sup> Peter Liberman. 2001. p 59 and Mitchell Reiss, Robert S. Litwak. 1994. p 213

<sup>116</sup> T.V. Paul. 2000. p 114

<sup>117</sup> Stephen F. Burgess. 2006. p524

<sup>118</sup> Mitchell Reiss. 1995. p 19



make sixty weapons<sup>119</sup>. India became the sixth declared nuclear state in May 1998, when it conducted five nuclear tests. The precise number of nuclear weapons India possesses is still not known. India is a member of the IAEA, and from 1947 to 1964, it maintained a lofty position of demanding universal nuclear disarmament. In contrast to its former lofty position, India has refused to sign the NPT, which it views as "discriminatory" and has kept a strong opposition against the treaty. India has a long history of rivalry with its neighbours, and in 1962, India fought a war with China over border disputes, and lost part of the Kashmir region to China. India has also fought three wars against its neighbour Pakistan, in 1947, 1965 and 1971, since its independence from Great Britain in 1947. Animosity between the two nations almost led to the outbreak of hostilities in 1987 and 1990. India is the world's most densely populated democracy and wants to be treated as one of the major powers in international society<sup>120</sup>.

#### **4.6. Pakistan**

*"If India builds the bomb, we will eat grass or leaves, even go hungry. But we will get one of our own. We have no alternative".* Former Pakistani President Zulfikar Ali Bhutto<sup>121</sup>.

Although Pakistan was reported to have developed nuclear weapons capability as early as 1987, it conducted its first nuclear tests in 1998, following India's five tests two weeks earlier. Pakistan began nuclear energy research in 1955 with the establishment of the Pakistan Atomic Energy Commission. Until 1971, the nuclear program was largely for peaceful purposes, but the defeat in the 1971 war with India set in motion a weapon armament of Pakistan's nuclear program. India's nuclear test in 1974 increased pressure on Pakistan, who did not accept India's contentions that the test was peaceful and that India did not plan a nuclear arsenal. Pakistan's nuclear plans became more intense when it failed to obtain security guarantees from major powers. Outnumbered and outgunned by their much larger and wealthier neighbour, nuclear weapons was a vital alternative to ensuring its sovereignty and survival. The Soviet invasion of Afghanistan in 1979 strengthened Pakistan's alliance with the United States, which substantially helped its nuclear program. During the Soviet Union's invasion of Afghanistan, the United States supported Pakistan, which in turn would funnel military and logistical assistance to the Afghan resistance to

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<sup>119</sup> Robert F. Mozley. 1998. p 187 and Mitchell Reiss. 1995. p 185

<sup>120</sup> T.V. Paul. 2000. p 125, and Mitchell Reiss. 1995. p 183 and Heidi Kristine Toft, and Laila Bokhari. 2004. p 9-41.

<sup>121</sup> Heidi Kristine Toft and Laila Bokhari. 2004. p 9

counter Soviet influence. In 1981 the U.S. provided Pakistan with a six-year \$3,2 billion aid package. Later, in 1986, U.S. Congress approved a second assistance package, totalling over \$ 4 billion<sup>122</sup>. Following Soviet withdrawal from Afghanistan in 1989, the United States curtailed its ties with Pakistan and increased pressure on it to stop its nuclear program. The loss of U.S. support may have increased Pakistan's desire for nuclear weapons, helped considerably by China, which is believed to have transferred blueprints, enriched uranium, and ring magnets for uranium processing and trained Pakistani nuclear engineers<sup>123</sup>.

#### **4.7. Democratic Peoples Republic of Korea (DPRK)**

Despite all of its resources, North Korea (DPRK) has been unable to develop economic strength. Under the strong dictatorship that has ruled the country since the Korean War, its major efforts has been to develop its industrial base transforming a previously agricultural country into an industrial nation emphasizing heavy industry and self-sufficiency. Its only political relationship has been with other Communist countries, particularly the Soviet Union and China. During the 1990s, North Korea found itself more isolated than at any other time in its brief history. The Soviet Union, who was North Korea's single largest source of advanced military equipment, had been dissolved<sup>124</sup>. China, North Korea's other strategic partner, moved to advance its national interests by engaging in a prosperous trade with the Republic of Korea and by allowing the simultaneous admission of both Koreas into the United Nations. South Korea skilfully obtained diplomatic recognition from Russia and China during this period, but North Korea failed to gain "cross-recognition" from Japan and the United States<sup>125</sup>.

The first reactor that was built in the country, was a small research reactor provided by the Soviet Union in 1967. In 1986 North Korea began construction of a 200MW reactor at Youngbyon and a 600-800MW reactor near Taechon. Together the two nuclear plants produced enough kilograms of plutonium to produce up to forty-five nuclear bombs a year. North Korea has good reasons to develop nuclear reactors for peaceful purposes. It needs them as a source of electrical power, having no oil reserves or foreign currency to buy oil. In its isolation, North Korea has always wanted to be self-sufficient, and thus chose to

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<sup>122</sup> Mitchell Reiss. 1995. p 186-187

<sup>123</sup> T.V. Paul. 2000. p 132-137 and Heidi Kristine Toft, Laila Bokhari. 2004. p 9-41.

<sup>124</sup> Mitchell Reiss. 1995. p 231

<sup>125</sup> Mitchell Reiss. 1995. p 231 and Robert F. Mozley. 1998. p 173

develop nuclear reactors that could operate with natural uranium<sup>126</sup>. North Korea has been a member of the IAEA since 1974, but did not join the NPT until 1985, partially motivated by Moscow's promise of four nuclear power reactors. A safeguard agreement with the IAEA should have been signed within eighteen months, by mid-1987, but the DPRK failed to conclude the agreements. After the U.S. withdrew their nuclear weapons from the Republic of Korea in 1991, the North and the South agreed to make the peninsula a nuclear weapons free zone. This "Joint Declaration of the Denuclearization of the Korean peninsula", stipulated that the two parties would not test, manufacture, produce, introduce, possess, store, deploy, or use nuclear weapons; and that they would not possess facilities for nuclear reprocessing and uranium enrichment. However problems agreeing on mutual inspections agreements almost put a stop for the declaration until the DPRK signed an inspection agreement with the IAEA in January 1992. During much of 1992, the IAEA quietly went about its business in North Korea. The North responded positively to the IAEA's request for permission to visit any site, even ones not listed on the initial declaration. In September, inspection of one such site was limited to the visible part of what appeared to be a one-story building under military control. It was in fact one of two sites that Pyongyang had tried to hide from international inspectors. In late November 1992, the IAEA started to turn up the pressure. Hans Blix accused North Korea of not declaring all of its nuclear facilities<sup>127</sup>. Samples taken by the IAEA showed a variety of radioactive by-products that suggested numerous instances of reprocessing activities. This means that north Korea's statement regarding its past plutonium production were not consistent with what the samples revealed and indicated that North Korea possessed more plutonium than it had declared to the IAEA and the international society<sup>128</sup>. On March 12, North Korea declared that it was withdrawing from the NPT. Three months later, North Korea suspended its withdrawal from the NPT but continued to refuse full inspections<sup>129</sup>.

The United States and North Korea negotiated for several months during the summer and fall of 1994, a process that resulted in the Agreed Framework. The deal consisted of trade obligations, provided North Korea agreed to freeze and eventually dismantle its nuclear facilities and eliminate its nuclear weapons capability. The deal was in exchange for construction of two modern nuclear power reactors and normal relations with the United

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<sup>126</sup> Robert F. Mozley. 1998. p 182

<sup>127</sup> Mitchell Reiss. 1995. p 245-280

<sup>128</sup> Joseph Cirincione, Jon B. Wolfstah, and Miriam Rajkumar. 2005. p 285

<sup>129</sup> Mitchell Reiss. 1995. p 245-280

States, in addition to oil for use in conventional power plants, ultimately about 500,000 metric tons a year<sup>130</sup>. After having been confronted by the United States over its alleged uranium enrichment program in 2002, North Korea expelled IAEA inspectors from the country and removed all IAEA monitoring equipment and seals from its nuclear facilities. In January 2003, North Korea once again announced that it was withdrawing from the NPT<sup>131</sup>. Later that year a multilateral dialogue known as The Six-Party Talks<sup>132</sup> began in Beijing with the aim of ending North Korea's nuclear weapons program. In return, North Korea wanted the United States to stop its hostile policy, stop obstructing North Korea's economic growth, and energy aid<sup>133</sup>. The nuclear crisis on the Korean peninsula continued to deteriorate throughout 2006, reaching a low point when North Korea conducted a nuclear test. The agreement took a turn in 2007 when North Korea extended invitations to the IAEA and opened the door to re-establishing its relationship with the agency. The same year North Korea began shutting down and sealing its main nuclear facility at Yonbyon under IAEA supervision<sup>134</sup>.

#### **4.8. Iran**

Iran has consistently denied the existence of a nuclear weapons program since the time of the Shah. The country has openly admitted its ambitions to acquire nuclear technology and Iran has consistently insisted that all of its efforts are intended to serve peaceful purposes. Experts have long questioned Iran's need for nuclear power, given its vast gas and oil resources. Iran has since the late 1960s insisted that it will run out of fossil fuel and that nuclear power is cost-effective enough in the near term to allow it to profit by freeing up oil and gas for export<sup>135</sup>. The Iranian nuclear program started in 1957 when Iran and the United States signed a civil nuclear cooperation agreement that laid the groundwork for the delivery of a light water research reactor. In 1968 Iran signed the NPT, and its safeguards agreement with IAEA entered into force in 1974. The nuclear program came to a halt shortly after the 1979 revolution with the establishment of the Islamic Republic. There are

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<sup>130</sup> Joseph Cirincione, Jon B. Wolfstah, and Miriam Rajkumar. 2005. p 287

<sup>131</sup> Joseph Cirincione, Jon B. Wolfstah, and Miriam Rajkumar. 2005. p 282

<sup>132</sup> The participant states in the Six-Party Talks are The United States, Russia, China, Japan, South Korea and North Korea.

<sup>133</sup> NTI: [http://www.nti.org/e\\_research/profiles/NK/Nuclear/index.html](http://www.nti.org/e_research/profiles/NK/Nuclear/index.html)

<sup>134</sup> NTI: [http://www.nti.org/e\\_research/profiles/NK/Nuclear/index.html](http://www.nti.org/e_research/profiles/NK/Nuclear/index.html)

<sup>135</sup> Anthony H. Cordesman and Khalid R. Al-Rodhan. 2006. p 99

strong indications that Ayatollah Khomeini revived Iran's nuclear weapons program after Iraq started to use chemical weapons against Iran during the Iran-Iraq War (1980-88)<sup>136</sup>.

On September 16, 2002, Reza Aghazadeh, the president of the Atomic Energy Agency of Iran, declared that: "*Iran is embarking on a long-term plan, based on the merits of energy mix, to construct nuclear power plants with a total capacity of 6,000MW....*" Later that year, the U.S. accused Iran of pursuing nuclear weapons and demanded that it cooperated with the IAEA inspection. Iranian officials denied the accusations and claimed that the country's nuclear facilities were only used for peaceful purposes. The argument has also been raised that Iran cannot rely on other countries to supply their nuclear fuel, as they can stop it anytime due to political pressure. Iran sees Western efforts to deny them of an indigenous fuel cycle as discriminatory and that Iran's right to do so is documented in article IV of NPT<sup>137</sup>. IAEA experts and inspectors have visited Iran on several occasions. On June 6, 2003, a preliminary report was published by IAEA that concluded that Iran had failed to meet its obligations under its Safeguards Agreement. And Iran was forced to admit to the IAEA that it was building a secret installation to enrich uranium, which could be used to produce material for nuclear weapons.<sup>138</sup> Despite Iran's earlier commitment to stop all enrichment and centrifuge projects, Iran declared on June 27, 2004, that it would continue to manufacture centrifuges and experiment with uranium hexafluoride, two of the activities of most concern to the IAEA. Iran argued that past U.S. sanctions and other efforts to isolate Iran had showed that their national security required self-sufficiency, for their energy needs to be met<sup>139</sup>. In February 2005, the IAEA stated that, "*we at the IAEA lack conclusive evidence (than proves Iranian nuclear weapons capability). We have yet to see a smoking gun that would convict Tehran*"<sup>140</sup>. However on September 24, 2005, the IAEA found Iran once again in non-compliance with its Safeguards Agreements, and the UN have since passed several Security Council resolutions requesting Iran to stop its enrichment and reprocessing related work<sup>141</sup>.

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<sup>136</sup> Anthony H. Cordesman and Khalid R. Al-Rodhan. 2006. p 107

<sup>137</sup> Gawdat Bahgat. 2006. p 323 and Anthony H. Cordesman and Khalid R. Al-Rodhan. 2006. p 125-126

<sup>138</sup> Anthony H. Cordesman and Khalid R. Al-Rodhan. 2006. p 126

<sup>139</sup> Anthony H. Cordesman and Khalid R. Al-Rodhan. 2006. p 104

<sup>140</sup> IAEA: <http://www.iaea.org/NewsCenter/Transcripts/2005/derspiegel21022005.html>

<sup>141</sup> NTI: [http://www.nti.org/e\\_research/profiles/Iran/Nuclear/1825\\_4968.html](http://www.nti.org/e_research/profiles/Iran/Nuclear/1825_4968.html)

Iran has since the establishment of the Islamic Republic, been viewing the United States as an enemy of the state. In October 2001, American troops invaded Afghanistan and overthrew the Taliban regime. Two years later, American troops were deployed to Iraq to topple Saddam Hussein's regime. This led to American military presence on Iran's east and west borders. On the east side of Iran are the two nuclear powers Pakistan and India. On its northwest side is Israel that Ayatollah Khomeini has declared as Iran's sworn enemy and hostility towards Israel has become a central part in the ideological framework of the Islamic Republic. Iran does not recognize Israel as a state and sees it as occupying Muslim land. Accordingly, Iran has supported anti-Israel organizations such as Hezbollah, Hamas, and Jihad<sup>142</sup>.

#### **4.9. Arms Control Agreements**

The Anti-Ballistic Missile Treaty<sup>143</sup> was a bilateral treaty between the U.S. and Soviet Union on the limitation of the anti-ballistic missile systems used in defending areas against missile-delivery nuclear weapons. The U.S. first proposed the treaty in 1967. The Soviet Union did not accept this proposal but in its counter proposal suggested that negotiations on ABM defences should include discussions of strategic offensive arms. The U.S. accepted this counter proposal on 1 July 1968, at the signing of the Nuclear Non-proliferation Treaty. On 17 November 1969, the United States and Soviet Union began the Strategic Arms Limitation Talks (SALT I) on limiting both ABM defensive systems and strategic nuclear offensive systems. Subsequently, the talks were concluded with the two SALT I agreements: An Interim Agreement on certain measures limiting strategic offensive arms (SALT I) and The ABM Treaty on the limitation of strategic defensive systems, were signed on 26 May 1972. The two sides agreed to limit ABM systems and refrain from deploying ABM systems for the defence of their countries or an individual region except as provided by the Treaty<sup>144</sup>.

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<sup>142</sup> Gawdat Bahgat. 2006. p 315 and Gawdat Bahgat. 2005. p 29

<sup>143</sup> The ABM Treaty prohibits the deployment of anti-ballistic missile systems for defence, The term 'ABM Systems' has been defined in the treaty as any system designed to counter strategic ballistic missiles or their elements in flight trajectory (Jozef Goldblat. 2002. p 71-72).

<sup>144</sup> Center for Nonproliferation: <http://www.cns.miis.edu/pubs/inven/pdfs/abm.pdf>

After almost ten years of difficult negotiations, the U.S. and Soviet Union signed the Strategic Arms Reduction Treaty (START) in 1991. Under START<sup>145</sup>, the United States and the Soviet Union committed themselves to making reductions in their strategic nuclear forces for an initial period of seven years<sup>146</sup>. When the Soviet Union dissolved in 1991, three independent republics, Belarus, Kazakhstan, and Ukraine<sup>147</sup>, found themselves with strategic nuclear weapons deployed on their territories as well as significant amounts of nuclear material. At the time of the Soviet Union's collapse almost 8000 nuclear weapons were deployed in Belarus, in Kazakhstan more than 1,400 strategic nuclear weapons were deployed on its territory, as well as a still undisclosed number of tactical nuclear arms. At the time of its independence, Ukraine was the deployment site for more than 1,900 strategic nuclear weapons. Gaining operational control over those weapons would have made Ukraine the world's third-largest nuclear weapon state after Russia and the United States<sup>148</sup>. On 23 May 1992 the Lisbon Protocol to START I was signed, and made the START I a five-nation, multiparty treaty. The protocol and appended presidential letters obliged Belarus, Kazakhstan, and Ukraine to accede to the NPT as NNWS. The parties exchanged instruments of ratification at the Budapest summit in 1994. An extensive series of on-site inspections and an exchange of geographical and technical data for all systems, with regular updates, complemented each party's national technical means to monitor compliance with the treaty<sup>149</sup>. START I was signed for fifteen years duration and could be extended for successive five years period by agreement among the parties. START II that was signed in January 1993 complemented rather than replace, the earlier START I, in that the earlier Treaty's provisions remained unchanged unless specifically modified by START II. The Treaty established a limit on strategic weapons for each party, with complete reductions of all intercontinental ballistic missiles to be implemented in two phases. By the end of phase one the United States and Russia were to reduce their total deployed strategic nuclear warheads to 3,800-4,250 and by the end of phase two, each party's total number of total number of deployed strategic nuclear warheads should not exceed 3,000-3,500. Initially,

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<sup>145</sup> The treaty sets limits on the number of intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and heavy bombers to 1,600 and attributed warheads-an agreed-upon number of warheads that are associated with each weapon system to 6,000 (Jeffery A. Larsen. 2002)

<sup>146</sup> Michael A. Levi and Michale E. O'Hanlon. 2005. p 145

<sup>147</sup> At no time did the non-Russian republics obtain operational control or the ability to launch the weapons. However, the deployment of nuclear weapons outside Russia raised the possibility that they might eventually fall under the control of the countries of which they were deployed (Joseph Cirincione, Jon B. Wolfstah, and Miriam Rajkumar. 2005. p 366).

<sup>148</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 365-373

<sup>149</sup> Jeffery A. Larsen. 2002. p 389

phase one was to be fully implemented within seven years of the entry into force of START I, and phase two by 1 January 2003. However, these timeframes were extended to the end of December 2004 and December 2007. The May 2002 Strategic Offensive Reduction Treaty (SORT), also known as the Moscow Treaty, committed the U.S. and Russia to reduce their deployed strategic nuclear forces to 1,700-2,200 warheads apiece. Unlike past strategic arms control agreements between Moscow and Washington, SORT does not specify which warheads are to be reduced or how reduction shall be implemented. The Treaty states that the two sides will limit their strategic forces in accordance with earlier statements made by president George W. Bush and president Vladimir Putin. These vague statements allow each side to interpret and implement its reductions as they see fit. In addition SORT has no provision for assessing compliance. Instead, the U.S. and Russia have agreed to rely on the 1991 START I treaty for verifying implementation. However START I expires on December 5, 2009, three years before the SORT limit takes effect<sup>150</sup>.

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<sup>150</sup> Arms Control Association: <http://www.armscontrol.org/factsheets/sort-glance>



## Chapter 5: Analysis

In this chapter I will return to my two research questions: **To what degree has the Non-Proliferation Treaty been able to achieve its goals? How can the degrees of success or failure connected to goal achievement be explained according to different regime theories?** As elaborated in chapter 1, the goals of the treaty that will be considered in this thesis are prevention of nuclear proliferation and the work of the five NWS to reduce and fully disarm their nuclear arsenals. The analysis of my first research question will be separated into three sections. In the first section, the eight case countries presented in chapter 4 will be analysed. I will look at the role the NPT has played or been unable to play, directly or indirectly, in the countries' decision to either forgo or acquire nuclear weapons or such capability. The second section will deal with the extent of the treaty to achieve success when it comes to disarmament among the five NWS according to Article IV. Finally, the combined degree of goal achievement of the NPT will be discussed.

### 5.1. Proliferation

When the NPT was opened for signing in 1968, both Argentina and Brazil opposed the non-proliferation regime because of its discriminatory nature, and during the 1970s and 1980s Argentina and Brazil were eyed by the international society as potential nuclear weapon states<sup>151</sup>. The nuclear supplier's restriction<sup>152</sup> imposed on nuclear commerce, forced Argentina and Brazil to either develop advanced technologies indigenously or go without. This technology-denial strategy increased the amount of time needed to complete projects and raised costs<sup>153</sup>. Bilateral cooperation between the two neighbours began in 1991 by the signing of the Quadripartite Agreement among Argentina, Brazil, ABACC<sup>154</sup>, and the IAEA. As part of its basic undertakings, the agreement stipulated that safeguards would apply on all nuclear material in all nuclear activities within their territories. Shortly after

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<sup>151</sup> Mitchell Reiss. 1995. p 48

<sup>152</sup> The Zangger Committee was set up in 1970 by parties to the NPT to put together a detailed list of what could not be sold, transferred, or received by adherents of the treaty without triggering the application of IAEA safeguards. This list would allow a common understanding of the rules regarding safeguards required for companies or nations attempting to supply material or equipment to other nations. Today the committee is known as the Nuclear Suppliers Group and in 2005 it had forty four member states (Robert F. Mozley. 1998. p 151)

<sup>153</sup> Mitchell Reiss. 1995. p 67

<sup>154</sup> Argentine-Brazilian Accounting and Control Commission (ABACC), was meant to integrate the ABACC's inspections with that of the IAEA safeguards agreement. Exchange of nuclear material inventories and mutual inspections began in late 1994 after the ABACC's inauguration. (Joseph Cirincione, Jon B. Wolfsthal and Miriam Rajkumar. 2005. p 385-386)

this, in 1994, Argentina and Brazil chose to fully implement the revisited Treaty of Tlatelolco, which they both had signed in 1967 but refused to ratify. The signings of the two agreements were steps towards transparency in their nuclear programs<sup>155</sup>. Argentina formally joined the NPT in 1995, followed by Brazil in 1996.

What was the motive behind the two states decision to cooperate through bilateral agreements? The incentive to build nuclear weapons would stem from the ability to gain regional dominance, and international prestige. On the other hand, both Argentina and Brazil faced significant disincentives to peruse nuclear weapons and would most likely benefit more from cooperation on nuclear issues<sup>156</sup>. There has been no real conflict amongst Argentina and Brazil for either to feel threatened by the other, hence development of nuclear weapons from either one would most likely harm their security environment more than it would benefit it. An arms race would involve enormous costs. Development and deployment of nuclear weapons is expensive, and millions or even billions of dollars, are required to produce and maintain a nuclear arsenal. In addition to finances, there are usually heavy political costs to be paid for nuclear acquisition, along with opportunity costs, referring to what the state could otherwise be doing with the resources poured into a nuclear weapons program<sup>157</sup>. As Mitchell Reiss<sup>158</sup> has pointed out, nuclear bilateral cooperation will benefit both countries, in ways that each one could not have accomplished alone. Through bilateral cooperation they were able to increase economic cooperation and reduce mistrust and suspicion, thus increasing their own security as well as that of the rest of Latin America. They foreclosed a potential nuclear arms race that would have diverted attention, energy, and money from more urgent domestic problems. The signing of different agreements, including the NPT by Buenos Aires and Brasilia, provided a symbolic effect on their dedication to support the different treaties and agreements and the work on non-proliferation and adhere to non-acquisition of nuclear weapons and continue to maintain a nuclear free Latin America. The decision by Argentina and Brazil stemmed from bilateral cooperation, rather than international pressure. NPT in addition to the Quadripartite Agreement and the treaty of Tlatelolco has provided a framework for the possibility to increase cooperation, reduce mistrust and suspicion, improve security, and provide economical benefits.

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<sup>155</sup> Mitchell Reiss. 1995. p 64-65

<sup>156</sup> T.V. Paul. 2000. p 110

<sup>157</sup> Joseph Cirincione. 2007. p 81

<sup>158</sup> Mitchell Reiss. 1995. p 68

After the Egyptian-Israeli peace treaty in 1979, Egypt's nuclear weapons program was put on ice. The peace treaty ended in a robust bilateral relationship between Egypt and the U.S., including an agreement of \$2 billion annually in economic and military assistance to Egypt. This created a strong incentive for Cairo to refuse the acquisition of nuclear weapons. In addition to economic development, and close ties with the U.S., two other factors may have contributed to its incentive: regional leadership and stability and peace in the region<sup>159</sup>. Egypt has become highly dependent on American aid. Should Egypt decide to reconsider its nuclear choice and restart its pursuit of nuclear weapons, it would most likely not be able to do so without generating a powerful international reaction, and most likely jeopardise its economic and diplomatic ties with the U.S.<sup>160</sup>. Because Egypt is vulnerable to external sources, the country has been under pressure to "play by the rules" of the international community, including those of nuclear non-proliferation<sup>161</sup>. Egypt signed the NPT in 1968 and ratified the treaty in 1981. It became a subject to safeguards and inspections by the IAEA, making it less likely for Egypt to procure the necessary equipment, materials, and technology without raising red flags and being detected<sup>162</sup>. Egypt has become a strong supporter of a nuclear weapons free Middle East during the last decades. However, at the NPT Review and Extension Conference in April and May of 1995, Egypt took the position that it could not support making the NPT permanent unless Israel took concrete steps towards joining the treaty<sup>163</sup>. Regardless of international pressure, Israel has maintained its nuclear weapons capability. Under current circumstances, Egypt seems likely to be prepared to continue tolerating the nuclear imbalance with Israel and refraining from pursuing a nuclear weapons capability of its own<sup>164</sup>. Indeed the most plausible path to an Egyptian weapons program would require the combination of several elements. The unravelling of the peace with Israel, a nuclear-armed Iran, the fraying of U.S.-Egyptian ties, and lowering of the perceived penalties associated with a country going nuclear<sup>165</sup>.

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<sup>159</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 44 and Gawdat Bahgat. 2007. p 414

<sup>160</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 67, 57

<sup>161</sup> Gawdat Bahgat. 2007. p 417

<sup>162</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 57

<sup>163</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 54 and NTI: [http://www.nti.org/e\\_research/profiles/Egypty/Nuclear/index.html](http://www.nti.org/e_research/profiles/Egypty/Nuclear/index.html)

<sup>164</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 59 and Gawdat Bahgat. 2007. p 419

<sup>165</sup> Kurt M. Campbell, Robert J. Einhorn, Mitchell B. Reiss. 2004. p 72

Among the states that have built nuclear weapons, South Africa was the first country to dismantle a small nuclear arsenal acquired during the 1970s and 1980s. This took place in 1991. The South African nuclear weapons program sprang from the security environment in Southern Africa during the 1970s and 1980s, characterized by extended conflicts and enduring rivalries combined with near-isolation inflicted by the international society. South Africa's nuclear weapons may be regarded as a political tool. Pretoria never confirmed nor denied the possession of nuclear weapons creating uncertainty among its rivals<sup>166</sup>. In 1988 South Africa, Cuba, and Angola formally agreed to Namibia's independence and the withdrawal of Cuban forces, and two years later the end of the Cold War and the "fall" of communism in The Soviet Union and Eastern Europe led to an implosion of the Soviet Union as an expansionist world power in Southern Africa<sup>167</sup>. The disintegration of communism therefore marked a significant change in South Africa's threat environment and when Pretoria decided to rollback its nuclear program, no other nuclear power threatened their security. –South Africa also witnessed the beginning of the abolishment of the apartheid regime and the racial segregation that had been enforced in the country since 1948. The possibility of a black majority government inheriting technology or any undeclared nuclear material, may have been unsettling, given the traditional support for the ANC by Libya and the Palestine Liberation Organization (PLO)<sup>168</sup>. Pretoria's decision to disarm and sign the NPT may also have been put on the agenda to improve relations with the international society. As Liberman and Reiss<sup>169</sup> pointed out, former South African President De Klerk's decision to engage in fundamental political change in 1989 opened the door to economic and diplomatic opportunities that could be attained more quickly by joining the NPT. Even if pressure on Pretoria prior to 1990, did not change their nuclear status, an avalanche of new western anti-apartheid sanctions in 1985 and 1986, combined with a debt crisis in South Africa, might have put the NPT on the agenda<sup>170</sup>. The nuclear weapons arsenal prevented improved relations with the West, especially the U.S. They stood as a barrier to a South African membership in the NPT. This denied Pretoria valuable access to peaceful nuclear technology and international cooperation on nuclear energy matters and would ensure that foreign customers (i.e., Germany and France) could continue

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<sup>166</sup> T.V. Paul. 2000. p 115

<sup>167</sup> Peter Liberman. 2001. p 59, 75

<sup>168</sup> Mitchell Reiss. 1995. p 20 and Mitchell Reiss, and Robert S. Litwak. 1994. P 218

<sup>169</sup> Peter Liberman. 2001. P 84 and Mitchell Reiss. 1995. P 32

<sup>170</sup> Peter Liberman. 2001. P 79

to purchase South African uranium<sup>171</sup>. It can be argued that dismantlement of both apartheid and nuclear weapons, not only one of them, were prerequisites for a better international relationship. Three factors could therefore explain Pretoria's decision to dismantle its nuclear weapons: a change in the security environment, the abolishment of the apartheid regime, and the need to improve relations with the international society. Which of the three factors was the more important, is difficult to establish. Even if the NPT did not directly contribute to Pretoria's nuclear weapons rollback, it is reasonable to single out the treaty as a new agenda had to be found in this respect.

India and Pakistan both openly declared their nuclear weapons capabilities in May 1998 by conducting several nuclear tests. India's motivations to develop nuclear weapons may originate from three factors. Firstly, there was a national security perspective, secondly, a perceived deterrent against China<sup>172</sup>, and finally establishment as a major power in the international society. India and Pakistan have been locked in a conflict in the region of Kashmir since the two countries became independent from the United Kingdom in 1947<sup>173</sup>. Pakistan could have chosen to sign the NPT at an early stage after the Cold War, and maintained a good relationship with the U.S. This would certainly have ensured economical benefits. Rather, Islamabad chose to maintain its nuclear weapons program. This is the most often-cited example of a state that neglects the well being of its people for a nuclear weapons capability<sup>174</sup>. Pakistan's biggest security threat has been, and still is, India. Most likely, Pakistan saw the need to counter balance India's nuclear and conventional superiority as more important than economical benefits. As Toft and Bokhari<sup>175</sup> points out, it was necessary for Pakistan to begin a nuclear weapons program to counterbalance and deter India, even if the economical costs would be tremendous. New Delhi and Islamabad have both chosen to stand outside the NPT in exchange for the possession of nuclear weapons. India and Pakistan developed nuclear weapons as non-signatory members of the NPT. Because they did not violate the treaty, a direct failure of this cannot be argued. On the other hand, the NPT have not succeeded in providing an incentive for incorporating India and Pakistan into the treaty, and the discriminatory nature of the treaty seems to

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<sup>171</sup> Mitchell Reiss. 1995. P 21

<sup>172</sup> China tested its first nuclear bomb in 1964, and became a member of the NPT in 1992, with the status as a NWS.

<sup>173</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 240

<sup>174</sup> Joseph Cirincione. 2007. p 77

<sup>175</sup> Heidi Kristine and Toft, Laila Bokhari. 2004. p 26 and Joseph Cirincione, Jon B. Wolfsthal, and Miriam Reajkumar 2005. p 240

provide a difficult task for their incorporation. Should the two decide to sign the NPT, they would enter the treaty as NNWS, since they did not test their nuclear weapons prior to 1967, and hence not receive the same rights as the five NWS. The discriminatory status of NPT has been the main reason for India's refusal to sign it. The NPT can, in practice, not be rewritten. Nevertheless, some regulations may need re-interpretation<sup>176</sup>, if the treaty wants to include the only three states that persist as non-members. Even though South Africa has demonstrated that a country can reverse course, getting two rivaling countries to dismantle advanced nuclear programs in tandem, represents a complex challenge<sup>177</sup>. Besides, the penalties imposed on India and Pakistan was modest and short lived. Although the U.S. imposed sanctions in the immediate aftermath of the nuclear tests, Washington started lifting them within six months<sup>178</sup>. The decision by USA to lift sanctions contributed to undermine the NPT, This perilous path may inspire others to develop nuclear weapons considering the penalty for doing so may apparently be mild or non-existing.

After the Cold War and the "fall" of communism and the Soviet Union, North Korea has found itself isolated from its previous supporters and the international society. Because of North Korea's isolation, it is difficult to establish a thorough explanation or rationale behind the incentive for Pyongyang's pursuit of a nuclear weapons program. Since the end of the Korean War in 1953, the U.S. has kept a strong military presence on the Korean peninsula, including nuclear weapons. North Korea became a member of the NPT in 1985. But it was not until the U.S. agreed to remove the nuclear arsenal from the peninsula in 1991 that North Korea decided to implement IAEA Safeguards<sup>179</sup>. The first IAEA inspections took place on May 25, 1992<sup>180</sup>. The opening of inspections by IAEA created better and important transparency and information about the North Korean nuclear facilities and weapons program. According to Mitchell Reiss<sup>181</sup>, IAEA performed a remarkable job of nuclear detective work. North Korea's unwillingness to fully cooperate with the IAEA and its announcement of withdrawal in 1993 can be seen as an indicator that DPRK was involved in suspicious nuclear activities. Therefore, IAEA provided vital information to the international society and removed the opportunity for North Korea to produce a clandestine nuclear weapons program. While the U.S.-North Korean relationship improved after the

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<sup>176</sup> Sverre Lodegaard and Helene Revhaug. 2005. p 43

<sup>177</sup> Mitchell Reiss. 1995. p 67

<sup>178</sup> Kurt M. Campbell, Robert J. Einhorn, and Mitchell B. Reiss. 2004. p 318

<sup>179</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 285

<sup>180</sup> Mitchell Reiss and Robert S. Litwak. 1994. p 141

<sup>181</sup> Mitchell Reiss. 1995. p 284

1994 Agreed Framework negotiation, the relationship deteriorated after 2001 and the establishment of the Bush doctrine. Many incoming officials had actively opposed the Agreed Framework and were highly sceptical of North Korea's commitment to give up its nuclear weapons program<sup>182</sup>. After having been confronted by the U.S. over its alleged uranium enrichment program in 2002, North Korea announced that it was withdrawing from the NPT in 2003<sup>183</sup>. North Korea may have developed its nuclear weapons program as a political instrument to be used in achieving diplomatic negotiations. The U.S. and South Korea among many other states would most likely go a long way in preventing a North Korean nuclear armament and reducing the fear of a nuclear arms race in South Asia. The Six-Party talks between North Korea, South Korea, Japan, China, Russia and the U.S. began in 2003 to quell North Korea's nuclear ambitions. However, the talks broke down in 2005 and North Korea claimed that it had "manufactured" nuclear weapons as a deterrent to US hostility<sup>184</sup>. This led ultimately to the nuclear test in 2006. Then, in 2007 the Six-Party talks resumed. This resulted in agreement by North Korea to dismantle its nuclear weapons and existing nuclear program<sup>185</sup> in return for economic and energy assistance. This would also result in improved relations with the US, South Korea, and Japan. In July, 2007, the IAEA confirmed that Yongbyon nuclear facility had been shut down and sealed<sup>186</sup>. North Korea's willingness to resume to the Six-Party talks so soon after its nuclear test, can be seen as an example that the nuclear weapons program in addition to work as a potential deterrent, may have been developed with the purpose of achieving diplomatic bargaining<sup>187</sup>. Even if the NPT was not able to prevent North Korea from leaving the treaty in 2003, the treaty has played an important role as a whistleblower by providing sufficient and important information and establishing a framework for negotiations to make the DPRK return to the NPT.

Latent proliferation refers to a country's adherence to or, at least for some time, pretension of adhering to, its formal obligations under the NPT while at the same time developing the capability needed for a nuclear weapons program. Such a country can either withdraw from the NPT and build actual weapons on short notice, or simply stay within the NPT while

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<sup>182</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 281

<sup>183</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 282

<sup>184</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 282

<sup>185</sup> NTI: [http://www.nti.org/e\\_research/profiles/NK/Nuclear/index.html](http://www.nti.org/e_research/profiles/NK/Nuclear/index.html)

<sup>186</sup> NTI: [http://www.nti.org/e\\_research/profiles/NK/Nuclear/index.html](http://www.nti.org/e_research/profiles/NK/Nuclear/index.html) and

IAEA: [http://www.iaea.org/About/Policy/GC/GC51/GC51Documents/English/gc51-19\\_en.pdf](http://www.iaea.org/About/Policy/GC/GC51/GC51Documents/English/gc51-19_en.pdf)

<sup>187</sup> Mitchell Reiss. 1995. p 235

maintaining the latent capability for the rapid realization of nuclear weapons. This was the path followed by the DPRK and one that Iran is accused of<sup>188</sup>. Iran is situated in a high conflict zone, in the presence of Pakistan, India, Israel, Russia, and USA. Iran is virtually encircled by nuclear-equipped armies, and may feel the need to balance that with its own weapons<sup>189</sup>. For a long period, the U.S., Israel, and other Western countries, have accused Iran of pursuing a nuclear weapons capability. The controversy over Iran's pursuit of uranium enrichment capability and accused nuclear ambition has been intensified since 2002. Iranian officials have categorically denied these accusations and claimed that their nuclear program is designed for civilian purposes. Iranian officials claim that their country is in peaceful and full compliance with the NPT. The Iranians see the efforts to deny them an indigenous fuel cycle program as discriminatory, rightfully documented by article IV of the NPT. Iran has had hostile relations with the United States since the establishment of the Islamic Republic in 1979. Since then, Iran has held an almost paranoid and conspiratorial view of America's role and action in the Middle East. The country has seen almost every US initiative as a direct or indirect assault on Iran's national interests<sup>190</sup>. After the U.S. invasion of Afghanistan and Iraq, America has established a significant political and military presence in the Middle East, creating an incentive for a potential Iranian nuclear weapons program<sup>191</sup>. Since late 2002, the IAEA has been vigorously investigating Iran's nuclear facilities, providing necessary information and transparency. IAEA demanded more transparency from Iran in 2006<sup>192</sup> after the agency the previous year stated that Iran was not in full compliance with its Safeguards Agreement. The problem on the other hand, is that Iran does not violate Article IV. Moreover there is serious concern that a nuclear-armed Iran would lead other states in the Gulf and Middle East to re-examine their nuclear options, including possibly Saudi Arabia, Egypt, Syria, and even Turkey<sup>193</sup>. And that Iranian supported terrorist organizations could get a hold of nuclear weapons. This provides a delicate problem for the NPT. It is important to prevent Iran from achieving a nuclear weapons capability but discrimination against Iran's uranium enrichment program seriously damages the treaty's integrity and neutrality, suggesting that some states are not allowed

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<sup>188</sup> Chaim Braun and Christopher F. Chyba. 2004. p 5

<sup>189</sup> Anthony H. Cordesman and Khalid R. Al-Rodan. 2006. p 12 and Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 296-297

<sup>190</sup> Gawdat Bahgat. 2005. p 30

<sup>191</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 297

<sup>192</sup> Anthony H. Cordesman and Khalid R. Al-Rodan. 2006. p 150

<sup>193</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 297, Sverre Lodgaard and Helene Revhaug. 2005. p 38 and Chaim Kaufmann. 2006. p 321



similar rights as others. The work of the IAEA inspections is therefore important to make sure that Iran doesn't violate the treaty and to lower uncertainty about its uranium enrichment program. The continuation of inspections will most likely make it difficult for Iran to conduct a nuclear weapons capability without being detected.

## 5.2. Disarmament

When the NPT was established it permitted the five states that had tested their nuclear weapons prior to 1968 to keep these weapons for the time being, but obligated them under Article VI of the NPT to reduce and fully disarm their nuclear stockpiles. When the NPT was written in 1968, there was no time limit attached to fulfilment of obligations and achievement of complete disarmament. By 1970, the five nuclear powers had a combined nuclear stockpile of 38,100 weapons, with the United States weapons accounting for 68 percent of the total<sup>194</sup>. The U.S. and the Soviet Union signed their first bilateral disarmament treaty in 1972 while the two superpowers still found themselves in a comprehensive nuclear arms race. Soviet and American weapons systems were far from symmetrical and during the SALT I years alone the Soviet ICBMs<sup>195</sup> rose from around 1,000 to around 1,500<sup>196</sup>. The world nuclear stockpile reached its peak in 1986 with the sum of 70,000 plus nuclear warheads<sup>197</sup>. The SALT II agreement was supposed to replace SALT I, but never entered into force, and was superseded by the START I treaty in 1991 five months before the Soviet Union dissolved. The end of the Cold War created a better condition and probability for nuclear disarmament. In contrast to its predecessors, START I successfully reached its goals at its implementation deadline on December 5, 2001. Then the United States and Russia were able to confirm that they had reduced their nuclear stockpiles to a total of 6,000 strategic nuclear warheads each<sup>198</sup>. In addition, all nuclear weapons from the non-Russian republics Belarus, Kazakhstan, and Ukraine left on their territories after their detachment from the Soviet Union were also returned to Russia. The successful denuclearization of Belarus, Kazakhstan, and Ukraine is an unparalleled non-proliferation and security success story, and one that illustrates the value of international norms against

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<sup>194</sup> Joseph Cirincione. 2007. p 36

<sup>195</sup> Intercontinental Ballistic Missile (ICBM) have range of greater than 5,500 km. ICBM's create a problem because they enable a country to break out of a regional context and move towards potential global impact ([www.fas.org](http://www.fas.org)).

<sup>196</sup> Arms Control Association: <http://www.armscontrol.org/documents/salt>

<sup>197</sup> <http://thebulletin.metapress.com/content/c4120650912x74k7/fulltext.pdf>

<sup>198</sup> FAS: <http://www.fas.org/nuke/control/start1/index.html>

the spread of nuclear weapons<sup>199</sup>. The Commission to Assess the Ballistic Missile Threat to the United States that had been given a mandate by the Congress reported its findings on July 15, 1998. The commission warned that: Concerted efforts by a number of overtly or potentially hostile nations to acquire ballistic missiles with biological or nuclear armoury pose a growing threat to the U.S. its deployed forces, friends, and allies. In a speech at the Munich Conference on European Security Policy in February 2001, Secretary of Defence Donald Rumsfeld laid out the Bush administration's rationale for missile defence: *"No responsible U.S. president can say that his defence policy is calculated and designed to leave the American people undefended against known threats. Let there be no doubt; a system of defence need not be perfect; but the American people must not be left completely defenceless"*. On December 13, 2001 President Bush announced that he had given formal notice to Russia that the U.S. would withdraw from the ABM Treaty in six months<sup>200</sup>. START II was supposed to continue the successful disarmament cooperation that START I produced. However, Russia announced its withdrawal from START II due to U.S. refusal to ratify the treaty and to U.S. withdrawal from the ABM Treaty in June 2002. Before the Russian withdrawal from START II, Putin and Bush had agreed to establish SORT. This treaty has been considered as no more than an agreement for short-term disabling of nuclear weapons. There are no provisions on the destruction of the nuclear weapons and other nuclear materials. Moreover, there are no reciprocal verification or inspection measures inherent in the treaty<sup>201</sup>. Today the United States and Russia still find themselves in possession of large quantities of nuclear weapons that clearly surpass the nuclear capability of the other states in possession of nuclear weapons. While the U.S. and Russia have conducted large reductions to their strategic nuclear weapons arsenals, the US after 2001 has been researching a new generation of small nuclear weapons: Robust Nuclear Earth Penetrators (RNEP)<sup>202</sup>, that may be used in conventional warfare<sup>203</sup>. The United States have also aggressively perused a missile defence against potential and emerging long-range missile threats from "irresponsible regimes"<sup>204</sup> These priorities have surfaced on the

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<sup>199</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005 p 379

<sup>200</sup> Jeffrey A. Larsen. 2002. p 297-299

<sup>201</sup> Lars van Dassen and Morten Bremer Maerli. 2007. p 12

<sup>202</sup> The Bush administrations research for Robust Nuclear Earth Penetrators (RNEP) or so-called "bunker busters" was denied funds by U.S. Congress in 2005. From what I have been able to find during my research, these new tactical nuclear weapons have not been put into production based on lack of research and finance.

<sup>203</sup> <http://www.washingtonpost.com/wp-dyn/content/article/2005/04/27/AR2005042702098.html>

[http://www.armscontrol.org/act/2005\\_12/DEC-Bunker](http://www.armscontrol.org/act/2005_12/DEC-Bunker)

<http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=17652&prog=zgp&proj=znp>

<sup>204</sup> Lars van Dassen and Morten Bremer Mærli. 2007. p 3

expense of other important treaties and bilateral agreements like the ABM treaty, and START II<sup>205</sup> and may contribute to erosion of the NPT.

While the United States and Russia have chosen to reduce their nuclear stockpiles through bilateral arms reduction treaties, the three remaining NWS have done this without any extending treaties. Great Britain became a nuclear weapons state in 1952, and according to estimates produced by the Bulletin of the Atomic Scientist the British nuclear arsenal peaked in the 1970s at 350 warheads and has mostly declined since. After 1970, Great Britain has dismantled approximately 150 nuclear weapons and reduced its nuclear stockpile to 200 weapons. However, Great Britain has not conducted any reduction of their nuclear stockpile since 2001. France and China conducted their first nuclear weapons tests in 1960 and 1964, but did not become member of the NPT before 1992. When France signed the NPT, the country was in possession of 540 nuclear weapons. France has since reduced its nuclear stockpile by more than 40 percent after the end of the Cold War, until it stopped the reductions in 2001. Today, France possesses an arsenal of 350 nuclear weapons. China joined NPT as the fourth largest nuclear weapon state with approximately 400 weapons; China has not released official details about the size or composition of its nuclear arsenal, making estimates difficult. According to the “Bulletin of Atomic Scientists”, China did not conduct any relevant reduction of their nuclear arsenal until 2005, when they reduced their nuclear stockpile with 50 percent from 400 to 200 nuclear weapons. Through a series of arms control agreements and unilateral decisions, nuclear weapon states have reduced the global nuclear stockpile to its lowest level in 45 years. The “Bulletin of Atomic Scientists” estimates that the nine nuclear weapon states today possess about 27,000 intact nuclear warheads, of which 97 percent are in US and Russian stockpiles. About 12,500 of these warheads are considered operational, with the balance in reserve or retired and awaiting dismantlement<sup>206</sup>. From a quantitative perspective, the amount of reduction in the nuclear stockpiles of the five NWS in addition to the removal of nuclear weapons from Belarus, Kazakhstan, and Ukraine along with the fully disarmament of South Africa, have contributed largely towards the goal of Article VI of the NPT. On the other hand, despite the success of NWS in reducing nuclear stockpiles, it is hard to convince nations to abandon their nuclear weapon arsenals altogether. This remains a formidable task. The task of

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<sup>205</sup> Sverre Lodgaard and Helene Revhaug. 2005. p 44

<sup>206</sup> <http://thebulletin.metapress.com/content/c4120650912x74k7/fulltext.pdf> and Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 199, 163, 192.

reaching a world free from nuclear arms will most likely remain difficult until the NWS themselves stop seeing nuclear weapons as important to their security and fully renounce them for whatever use. Therefore further reduction of their nuclear stockpiles is important for the continued success of the NPT when it comes to disarmament. Absolute abolishment may be more of a wish than pure realism but this depends on the international political situation and the participants.

### **5.3. Degree of Success**

It is forty years since the nuclear non-proliferation treaty opened for signature in 1968, and up to now, 190 states have signed on. This makes it the most widely accepted international arms control agreement. The large number of signatory states clearly indicates that the NPT has been able to provide a strong norm through an international consensus, that the proliferation of nuclear weapons would seriously enhance the risk of nuclear war, and therefore must be strongly opposed. The significant number of treaty states may be viewed as a measure of success but it needs to be taken into consideration that the majority of these states don't have the technical or financial capability to produce nuclear weapons because nuclear weapons are very difficult to manufacture. Two major obstacles must be overcome. Fissile material is required for their explosive cores<sup>207</sup>, and its nuclear device must be designed. This is not an easy task, even though much information on this subject has been distributed over the years<sup>208</sup>. Despite the spread of nuclear technology during the last decades, building a nuclear bomb still poses significant scientific and engineering challenges. In 2005, around 50 countries could produce nuclear weapons if their governments decided to invest the time, money, and the political efforts to do so<sup>209</sup>. Many of these states would probably not use resources to develop nuclear weapons even without the existence of the NPT, something that also needs to be taken into consideration. Today, ten states have attempted and managed, to produce nuclear weapons throughout the 63 years these weapons has existed. Technological barriers reinforced by IAEA, safeguards and export control regimes such as the Nuclear Suppliers Group. In some instances, these may

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<sup>207</sup> Fissile materials are materials in which atoms can be made to fission, or split, at an exponentially increasing rate, creating a chain reaction in which each fission contributes energy that result in enormous explosive force. The two types of fissile material used in nuclear explosive devices are highly enriched uranium and plutonium. Neither of these materials occurs naturally, and they must be produced, starting with the mining of uranium, by means of an elaborate chain of facilities, many of which are highly complex and very costly. In nature uranium atoms exist as uranium-238 (99.248%) and uranium-235 (0,711%). Plutonium on the other hand is an element produced by irradiating uranium-235 in a nuclear reactor (Jeffrey A. Larsen. 2002. p 124)

<sup>208</sup> Jeffrey A. Larsen. 2002. p 124-125

<sup>209</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 45

have foiled a nuclear weapons program altogether as may have been contributing in the case of Argentina and Brazil's decision to shelve their nuclear weapons programs, in addition to eschewing a nuclear arms race<sup>210</sup>. The technological barriers have on the other hand not affected some of the most nuclear advanced and dedicated states to refrain from nuclear proliferation after 1990. India and Pakistan developed their nuclear weapons as non-signatory members of the treaty while North Korea became the first state to withdraw from the treaty in pursuit of a nuclear weapons capability. None of the three countries were in direct violation of the treaty when they developed their nuclear weapons. While the Treaty with strong support from the Six-Party Talks have been able to provide North Korea with an incentive to return to the negotiation table, and agreed to dismantle its nuclear weapons and return to IAEA inspections, India and Pakistan still continue to stay outside. The case of India and Pakistan shows the difficulty of the treaty to prevent states that regard nuclear weapons as essential to their security and also have the technical and financial capability of perusing nuclear weapons, to do so. Despite these limitations of the NPT, the treaty has established a non-proliferation norm in the international society and is the major international legal obstacle for states seeking nuclear weapons capabilities<sup>211</sup>. In addition, the NPT has been instrumental in creating nuclear transparency and reducing uncertainty through the safeguards agreement and IAEA inspections, e.g. with North Korea and Iran. The treaty has also worked as a framework and provided incentives for states that have been willing to give up their nuclear weapons in return for economical benefits and/or security guaranties, e.g. Ukraine, Belarus, and Kazakhstan. Egypt have also maintained nuclear free, after trying to achieve nuclear weapons during the 1960s, and in return gained economic and military aid provided through bilateral agreements with the United States. South Africa became the first country to fully dismantle its nuclear weapons, and joined the treaty in 1991, and in return established a better relationship with the international society and gained economical benefits. It is clear that the NPT in addition to its close connection to the UN Security Council has been dependent on large economical and military powers to provide carrots and sticks, when it comes to preventing proliferation, and the role has not only, although to a large degree, been filled by the U.S. For decades, friends and allies of America such as Japan, South Korea, Egypt and others - have come to depend on several aspects of American policy when making calculations about their own security and debate the nuclear question. These aspects include the stability of the American nuclear deterrent

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<sup>210</sup> Joseph Cirincione. 2007. p 75

<sup>211</sup> Lars van Dassen and Morten Bremer Mælie. 2007. p 16

and US security guarantees<sup>212</sup>. Although the strong role of the U.S. in the treaty has created positive outcomes, it may also have contributed to negative effects. North Korea may have developed their nuclear weapons as a deterrent against the U.S. conventional superiority and strong presence on the Korean peninsula. The deterrent issue may also have fuelled Iran's decision to pursue uranium enrichment capability. After removal of Saddam Hussein from power in Iraq, Iran has likely seen unconventional weapons as a restraint to possible U.S. military action-particularly given the large US military presence in the region<sup>213</sup>. The end of the Cold War and the end of the nuclear arms race between the United States and the Soviet Union provided a better environment for disarmament. The global number of nuclear weapons has declined from a peak of approximately 70,000 in 1986 to roughly 26,000 in 2006, and reduced the global stockpile of nuclear weapons with over fifty percent. The NPT has since its establishment constituted the backbone of the international nuclear non-proliferation regime, and despite setbacks, the overall impact of the NPT has been gratifying. Even if its achievements have been hard won, and at times increasingly contested<sup>214</sup>, the treaty has achieved a substantial degree of success during the post-Cold War era, meaning that it have achieved an important but still imperfect degree of goal achievement.

#### **5.4. NPT and Regime Theory**

I will now return to my second research question:

**How can the degree of success or failure connected to goal achievement be explained according to different regime theories?**

I will turn my attention to the three international relations theories and their view on international regimes and these will be discussed separately and in the same order as they are presented in chapter 2. In each section, before examining the explanatory factor for the degree of success or failure connected to goal achievement, a brief presentation of the predictions for the theories made in chapter 2 will be undertaken at the beginning of each section.

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<sup>212</sup> Kurt M. Campbell, Robert J. Einhorn, and Mitchell B. Reiss. 2004. p 20

<sup>213</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 297

<sup>214</sup> Lars van Dassen and Morten Bremer Maerli. 2007. p 17

## 5.5. Power based

The power-based perspective of success or failure of the Nuclear Non-Proliferation treaty according to the theory of hegemonic stability will be explained by the presence of hegemonic power in the international society that has an interest to prevent nuclear proliferation and its benign and coercive means to do so.

Kenneth Waltz<sup>215</sup> has seen the spread of nuclear weapons as a stability factor in the international society based on its deterrent effect, and that the likelihood of war decreases as deterrent and defensive capabilities increases. Because they do so, the measured spread of nuclear weapons is to be welcomed rather than feared<sup>216</sup>. The fall of the Berlin Wall in 1989, symbolized the weakening power of the Soviet Union and the end of the Cold War, leaving the U.S. as the most preponderant economic and military power in the international society<sup>217</sup>. Waltz<sup>218</sup> argument is that the winner of the Cold War and sole remaining great power has behaved in the usual manner of unchecked powers. As the world's most influential country, with unequal political, economic, and military assets, the U.S. has been best positioned to direct a diplomatic barrier against the rise of new nuclear powers<sup>219</sup>. For the theory of hegemonic stability to explain the success of the NPT, we would assume that the hegemonic power the US would be able and willing to shape and dominate its international environment, thereby provide an international regime that leads to collective desirable outcomes for *all* states in the international system.

The United States, for long the most dominant power in the world, has the ability to provide a sufficient flow of benefits to small and middle powers to persuade them to comply with the NPT. Belarus, Kazakhstan, and Ukraine, and Egypt serve as good examples. The direct, concerted, and sustained efforts of the U.S. and its willingness to bear the costs of the denuclearization in the former Soviet republics, along with Russia, were critical in settling the non-nuclear status of the newly independent states of Belarus, Kazakhstan, and Ukraine. This occurred through a combination of political, legal, financial, and technical agreements<sup>220</sup>. American domination may also be used as an argument for Egypt's continued non-nuclear weapons situation. Egypt is a strong regional military and

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<sup>215</sup> Scott D. Sagan and Kenneth N. Waltz. 2003. p 41

<sup>216</sup> Scott D. Sagan and Kenneth N. Waltz. 2003. p 41

<sup>217</sup> John J. Mearsheimer. 2001. p 381, and Kenneth N. Waltz. 2000. p 24

<sup>218</sup> Kenneth N. Waltz. 2000. p 24

<sup>219</sup> Mitchell Reiss. 1995. p 329

<sup>220</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 366

economical power but relatively weak compared to the United States. Since a distribution of benefits reaped from cooperation, often does not result "automatically", states regularly offer side-payments or other concessions to dissipate otherwise disadvantaged partners' concerns about relative losses. Side-payments through bilateral relations between Egypt and the United States may be a critical factor in Egypt's continued renunciation of nuclear weapons. Although the relationship does not involve a formal US guarantee to defend Egypt, America's huge stake in maintaining peace between Israel and Egypt provides assurance to Egyptian leaders that the contingency that long ago drove Egypt's interests in nuclear weapons a military confrontation with its nuclear-armed neighbour Israel will remain very remote<sup>221</sup>. On the other hand, nuclear weapons strip conventional forces of most of their functions, according to Waltz<sup>222</sup>. This implies that Egypt by developing nuclear weapons, might have been able to render U.S. military support unnecessary and provide for its own security. The hegemony theory provides a reasonable argument for Egypt's nuclear weapons status and continued membership in the NPT but is contradictory to the nuclear deterrent argument put forward by Waltz.

According to Waltz, the strong U.S. military presence in East Asia with the deployment of 100,000 troops and provision of security guarantees to Japan and South Korea, was intended to keep a new balance of power from emerging, and that this weary effort to maintain a hegemonic position is the surest way to undermine it<sup>223</sup>. The strong presence of American troops on the Korean peninsula did not manage to prevent North Korea from requiring nuclear weapons. North Korea according to Waltz<sup>224</sup> like earlier nuclear states wants the military capability that nuclear weapons afford because it feels weak, isolated, and threatened. On the other hand North Korea has constantly used its nuclear weapons program as a diplomatic bargaining position in the Agreed Framework and Six Party Talks, to achieve economical benefits in the form of oil, and bilateral agreements with the United States, Japan, and South Korea. If a state's security from a neorealist perspective is incredibly enhanced through nuclear deterrent, why have North Korea agreed to dismantle its nuclear weapons production when the U.S. threat is still present? While the deterrent argument provides a good argument, in my opinion based on the U.S.-North Korea hostile relations, North Korea's nuclear weapons program should also be seen as a means to achieve

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<sup>221</sup> Kurt M. Campbell, Robert J. Einhorn, and Mitchell B. Reiss. 2004. p 66

<sup>222</sup> Kenneth N. Waltz. 1990. 739

<sup>223</sup> Kenneth N. Waltz. 2000. p 36

<sup>224</sup> Scott D. Sagan and Kenneth N. Waltz. 2003. p 38



absolute rather than relative gain, in addition as a deterrent effect on the U.S. I base my argument on Pyongyang constant willingness to negotiate on their nuclear capability in return for diplomatic agreements, as mentioned above. As Cirincione concludes North Korea and Iran like other states before them, likely view nuclear weapons as a means to defend themselves, as symbols of national pride and accomplishment, or as bargaining chips to accomplish other goals<sup>225</sup>.

According to Waltz as a neighbour of China, India no doubt feels more secure, and can behave more reasonably, with a nuclear weapons capability than without it. The thought applies as well to Pakistan as India's neighbour<sup>226</sup>, a hostile nuclear state with conventional superiority. And by badgering them about nuclear weapons while being unwilling to guarantee their security, the U.S. damages their relationship with such countries<sup>227</sup>. This clearly indicates that from Waltz's perspective the US should not provide any effort to halt nuclear weapons proliferation in India and Pakistan. While the U.S. did not provide much effort to stop the development of nuclear weapons in Pakistan until 1990, based on Pakistan's strategic value in the campaign to oust Soviet forces from Afghanistan. The end of the Cold War changed the United States view on Pakistan's nuclear weapons program and the U.S. terminated all aid and government-to-government military sales to Pakistan<sup>228</sup>. In 1998 after the nuclear tests, both India and Pakistan became victims of U.S. sanctions<sup>229</sup>, however the sanctions were not imposed for a long period of time, and towards the end of his administration, Clinton had already begun lifting sanctions against India. The U.S. government believed that sanctions were no longer effective either in deterring proliferation in South Asia or in facilitating better relations with India and Pakistan in general<sup>230</sup>. In 2001, sanctions against Pakistan were also lifted, again based on their strategic position regarding the war in Afghanistan, and the fight against terrorism<sup>231</sup>. Waltz<sup>232</sup> has further argued that if a country feels highly insecure and believe that nuclear weapons will make it more secure, America's policy of opposing the spread of nuclear weapons will not easily change this opinion. Any potential chance of bringing the spread of nuclear weapons to a

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<sup>225</sup> Joseph Cirincione. 2007. p 102

<sup>226</sup> Scott D. Sagen and Kenneth N. Waltz. 2003. p 111

<sup>227</sup> Kenneth N. Waltz. 1981. [www.mtholyoke.edu](http://www.mtholyoke.edu)

<sup>228</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 244-245, 246

<sup>229</sup> U.S. Department of State: [http://state.gov/www/regions/sa/fs\\_980618\\_india\\_pak.html](http://state.gov/www/regions/sa/fs_980618_india_pak.html)

<sup>230</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 224

<sup>231</sup> The Guardian: <http://www.guardian.co.uk/world/2001/sep/24/pakistan.afghanistan>

<sup>232</sup> Kenneth N. Waltz. 1981. [www.mtholyoke.edu](http://www.mtholyoke.edu)

full stop exists only if the United States constantly and strenuously tries to achieve that end. To do so carries costs measured in terms of their own interest. Waiving sanctions against the nuclear tests in India and Pakistan, indicates that the United States have not constantly and strenuously tries to achieve that end, and the U.S. foreign policy against the “war on terror” has achieved a higher priority than non-proliferation of nuclear weapons.

Rivalry for regional leadership and military suspicions has fuelled the competition between Argentina and Brazil in nuclear development since the early 1950s<sup>233</sup>. According to Waltz<sup>234</sup>, some countries need nuclear weapons and some do not. He also emphasize, as mentioned earlier, that Brazil and Argentina set themselves on course to become nuclear states but abandoned their efforts, because neither posed a threat to the other. On the other hand, if states are more concerned about relative gains than absolute gain, how can neorealism provide a rational for the bilateral agreements between Argentina and Brazil? Scott D. Sagan<sup>235</sup> points out that from a realist perspective that nuclear restraint is caused by the absence of the fundamental military threat that produces positive proliferation decisions. Each state would prefer to be the only nuclear weapons power in its region. However, that is an unlike outcome if it develops a nuclear arsenal. States is willing to refrain from proliferation if, and only if, its neighbours remain non-nuclear. T.V Paul<sup>236</sup> points out that the hegemonic theory is insufficient to explain the non-nuclear acquisition and the U.S. played no direct role in the regional nuclear rapprochement. America’s hegemony in the western hemisphere was not sufficient to pursue Argentina and Brazil to forgo their nuclear weapons program, even if they were both under constant American pressure from the 1970s to adhere to Tlatelolco and the NPT<sup>237</sup>. U.S. pressure indeed pushed Argentina and Brazil to maintain their opposition to the NPT. Dissatisfaction with nuclear hegemony rather encouraged nationalistic tendencies in these two countries and reinforced their desire for autarkic nuclear policies. While U.S. hegemony in the Western hemisphere was not sufficient to persuade Argentina and Brazil to give up their nuclear weapons programs during the 1970s and 1980s, it may therefore lack an explanatory factor for the nuclear non-acquisition choice of Argentina and Brazil.

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<sup>233</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 385

<sup>234</sup> Scott D. Sagen and Kenneth N. Waltz. 2003. p 111

<sup>235</sup> Scott D. Sagen. 1996-1997. p 61-62

<sup>236</sup> T.V Paul. 2000. p 99-100

<sup>237</sup> Mitchell Reiss and Robert S. Litwak. 1994. p 238

Waltz deterrent argument is a sufficient explanatory factor for South Africa's nuclear development in the 1970s and 1980s when it was a rather isolated country facing a strong rival in its neighbouring countries. Waltz points out that when South Africa found no commensurate threat, it reversed its policy<sup>238</sup>. However, Waltz does not provide us with a rationale for the nuclear weapons rollback that took place during the beginning of the 1990s, and South Africa's decision to give up their nuclear weapons without having a great-power protector<sup>239</sup>. With no other nuclear weapon states in the region, nuclear weapons would have been a tremendous security asset. Since 1968, South Africa refused to join the NPT, despite that every U.S. administration urged South Africa to formally renounce its nuclear ambitions by signing the NPT and placing all its nuclear facilities under international safeguards. America more than any country, has applied pressure on South Africa to accede to the NPT<sup>240</sup>. Even if international pressure and sanction may have contributed to South Africa's nuclear rollback after 1990, a change in the security environment and the dissolution of apartheid, need to be assessed as contributory elements.

Since the removal of Saddam Hussein from power in Iraq, Iran has likely seen unconventional weapons as a deterrent to possible U.S. military action-particularly given the large U.S. military presence in the region and a way to increase Iran's power and prestige in the Persian Gulf<sup>241</sup>. After the IAEA decided Iran showed non-compliance with its Safeguards Agreement in September 2005, the UN have passed several Security Council resolutions requesting Iran to stop its enrichment and reprocessing related work<sup>242</sup>. Iran has continued its work towards uranium enrichment capabilities, regardless of strong international pressure headed by the U.S. The deterrent argument may provide us with a reasonable explanatory factor for Iran's behaviour. Should Iran regardless of its own statements, develop nuclear weapons, US pressure and incentive to stop a state on the brink of nuclear development will (once more) have failed to create an incentive for the state in question. On the contrary, the U.S. pressure on Iran may have had a negative effect. As Shahram Chubin points out, Iran has seen U.S. pressure and hostility as long-standing and not exclusively or principally tied to the nuclear issue. They believe that even if Iran adhered to the Additional Protocol and resolve its problems with the IAEA, U.S. pressure

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<sup>238</sup> Scott D. Sagen and Kenneth N. Waltz. 2003. p 111

<sup>239</sup> T.V. Paul. 2000. p 124

<sup>240</sup> Mitchell Reiss. 1995. p 32

<sup>241</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 297

<sup>242</sup> NTI: [http://www.nti.org/e\\_research/profiles/Iran/index.html](http://www.nti.org/e_research/profiles/Iran/index.html)

would continue<sup>243</sup>. Joseph Cirincione<sup>244</sup> points out in an article from 2006 that the preferred strategy of the dominant faction in the American administration would rather seek the elimination of the Iranian regime in preference to the elimination of the nuclear capability. The American conventional dominance spurs other countries to resort to unconventional means according to Waltz<sup>245</sup>. Therefore, Waltz claims that to understand others' reactions we have to look at America's behaviour. The country's dominance, arrogance, and the unwillingness to ratify existing treaties (CTBT) made and the intention to renounce treaties ratified (ABM treaty), creates a recipe for encouraging other states to go nuclear.

Arms agreements are difficult to reach because their provisions may bear directly on the prospects for unchallenged existence or defeat<sup>246</sup>. It must be asked if a neorealist perspective provide a rational for the major reduction in the NWS nuclear stockpiles? In a nuclear world, peace is maintained by the presence of deterrent forces, strategic arms agreements do not only have military but also economic and political significant. They can help improve international relations. If leaders in the United States and the Soviet Union /Russia came to accept what Waltz refers to as the minority view<sup>247</sup>, and at the same time recognized that a deterrent force greatly reduces conventional requirements on central fronts, then both countries can enjoy security at a lower cost<sup>248</sup>. The cost of producing and maintaining the U.S. nuclear arsenal since 1940 has been estimated to cost almost \$ 6 trillion<sup>249</sup>. Arms reduction treaties between the United States and the Soviet Union/Russia may therefore be explained from the cost of having a large and unnecessary nuclear arsenal way beyond the needed for second strike capability that is necessary to maintain a deterrent. Hence, by reducing their nuclear weapons as suggested by Waltz, the U.S. and Russia will be able to free economical assets, used to maintain their large nuclear arsenal, so they may be spent in more efficient ways. I will assume a rational for the arms agreements between the United States and the Soviet Union also provides a rational for the arms reduction in Great Britain, France and China. These countries have restrained from building a larger than

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<sup>243</sup> Shahram Chubin. 2006. p 75

<sup>244</sup> Arms Control Association: [http://www.armscontrol.org/act/2006\\_11/stopIran](http://www.armscontrol.org/act/2006_11/stopIran)

<sup>245</sup> Scott D. Sagan and Kenneth N. Waltz. 2003. p 150-151

<sup>246</sup> Kenneth N. Waltz. 1990. p 741

<sup>247</sup> According to Waltz nuclear weapons make it possible for states to escape the dynamics of arms racing; yet the United States and the Soviet Union have multiplied their weaponry far beyond the requirements of deterrents. Meaning that as long as a state has second-strike nuclear capability, the capability of retaliate against a nuclear attack, it doesn't matter if a state has a much larger nuclear weapons arsenal (Kenneth N. Waltz. 1990).

<sup>248</sup> Kenneth N. Waltz. 1990. p 741

<sup>249</sup> Joseph Cirincione, Jon B. Wolfsthal and Miriam Rajkumar. 2005 p 208.

necessary nuclear arsenal, and shown no inclination to engage in a nuclear arms race<sup>250</sup>, like we experienced during the Cold War.

From the evidence provided above, I believe that a power-based view may provide a reasonable explanation in some cases. Nevertheless, it does not explain comprehensively why the NPT has reached a substantial degree of success after the Cold War, as established in section 5.3 of this chapter.

## **5.6. Interest-Based**

According to the prediction in chapter 2. The success of an international regime is based on its capability to deliver quantity and quality of information to the member states, and thereby, reducing the uncertainty in the anarchical structured international society. The explanatory factor for the degree of success or failure of the Nuclear Non-Proliferation treaty according to interest-based theory of regimes, is the quantity and quality of information that the regime is capable of producing for its member states

According to neoliberalism, international institutions are formed and maintained by rational egotistic actors to solve common problems in the international society composed of an anarchical structure. Inversion of the Coase Theorem has demonstrated that at least one of three conditions must be met to allow mutual cooperation to occur in the absence of a centralised authority. The three conditions are: 1) establish a pattern of legal liability; 2) provide relatively symmetrical information; 3) arrange the cost of bargaining so that specific agreements can be more easily made. As exemplified with the game theory of Prisoners Dilemma, many situations in world politics are characterised by conflicts of interests. In such situations, actors have to worry about being deceived and double-crossed. Meaning that in the absence of appropriate institutions, some mutually advantageous bargains will not be made because of uncertainty<sup>251</sup>. One of the most important roles of the NPT is therefore to make governments' expectations consistent with one another by providing quantity and quality of information and reduce the uncertainty among the members of the regime. According to Article III of the treaty: *“Each NNWS party to the treaty undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the IAEA in accordance with the statute of the IAEA and the agency’s*

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<sup>250</sup> Scott D. Sagan and Kenneth N. Waltz. 2003. p 31

<sup>251</sup> Robert O. Keohane. 2005. p 93

*safeguard system, for the exclusive purpose of verification of the fulfilment of its obligations assumed under the NPT with a view of preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices.* The inspection provided by the IAEA as a neutral organization, may therefore need to contribute to transparency and also reduce uncertainty about states nuclear intentions if the neoliberal approach shall have an explanatory factor of the degree of goal achievement.

Today, India, Pakistan, and Israel are the only countries in addition to the five recognised NWS that are not subject to IAEA inspections, but IAEA has the possibility to inspect nuclear facilities in the 185 remaining states. This leaves the treaty with the opportunity to produce a large quantity of information. The ability to do so rests on and depends on the willingness of the parties of the treaty to abide by the rules and allow complete inspections of their nuclear facilities. Therefore it also needs to exist some mechanisms for compliance. International regimes, in a neoliberal perspective, are decentralised institutions. This means that any sanctions for violations of regime principles have to be enacted by the individual members. The regime provides procedures and rules through which such sanctions can be coordinated<sup>252</sup>. One needs to consider that the information that is required to enter into an international regime from this perspective is not merely information about other governments' resources and formal negotiating position. It is also knowledge of their internal evaluation of the situation, intentions, the intensity of their preferences, and their willingness to adhere to an agreement even in adverse future circumstances<sup>253</sup>. Until 1991, the IAEA monitored only facilities declared by the inspected country and did not attempt to reveal undeclared nuclear installations, because it lacked a clear political mandate from its members. In the aftermath of the 1991 Gulf War, however, it was learned that Iraq had secretly developed a network of undeclared nuclear facilities as part of an extensive nuclear weapons program. This led the IAEA's Board of Governors in 1991 to reiterate the IAEA's rights to exercise its previously unused authority to conduct "special inspections" that is, to demand access to undeclared sites where it suspects nuclear activities are being conducted<sup>254</sup>. The inability of the IAEA to reveal the clandestine nuclear weapons program in Iraq left a large question mark on its ability to provide quality of information. Therefore the ability of the agency to provide transparency when it comes to the nuclear weapons

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<sup>252</sup> Robert O. Keohane. 2005. p 98

<sup>253</sup> Robert O. Keohane in Stephen D. Krasner. 1983. p 162

<sup>254</sup> Joseph Cirincione, Jon B. Wolfsthal, Miriam Rajkumar. 2005. p 30

programs in North Korea and Iran have been crucial for its credibility to provide quality information. Since high-quality information reduces uncertainty, one can expect that there will be a demand for international regimes that provide such information<sup>255</sup>.

After the embarrassment in Iraq, the IAEA received vindication in North Korea, where it has performed a remarkable job of nuclear detective work. The agency uncovered unmistakable evidence that North Korea had cheated on its safeguards obligations. This evidence prompted the request for special inspections, and it was the North's subsequent refusal that provided the legal justification for possible UN Security Council action<sup>256</sup>. North Korea ignored the NPT in pursuit of nuclear weapons but inspections provided by IAEA have helped reduce uncertainty about North Korea's intentions through the regime's reluctance to fully cooperate with the agency and provide sufficient and correct information. In both 1993 and 2002, the agency, with help from U.S. intelligence was able to conclude that Pyongyang was hiding information about their nuclear program<sup>257</sup>. The information collected through inspections have created the ability to start diplomatic negotiations in form of the Agreed Framework in 1994 and Six-Part Talks in 2003 to create an incentive for North Korea to recognize the treaty and allow inspections. Through inspections, the IAEA has been able to provide information, albeit not of the highest quality. Nevertheless, it has contributed to insight into North Korea's intentions with their nuclear program and establish countermeasures to make sure North Korea abides by the rules of the NPT. Based on previous interactions, North Korea has shown that they cannot be trusted. Continued inspections to make sure that North Korea abide with legal framework of the NPT and its obligations according to the Six-Party Talks, will be important to make sure they don't cheat again.

During 2003 IAEA inspectors visited Iran on several occasions. The agency was not satisfied with Iran's cooperation and, on June, 6, 2003, a preliminary report was published that concluded that "Iran has failed to meet its obligations under its Safeguards Agreement with respect to the reporting of nuclear material, the subsequent processing and use of that material and the declaration of facilities where the material was stored and processed<sup>258</sup>. Like North Korea, Iran has been reluctant to fully cooperate with IAEA inspections. Iran

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<sup>255</sup> Robert O. Keohane in Stephen D. Krasner. 1983. p 160

<sup>256</sup> Mitchell Reiss. 1995. p 284

<sup>257</sup> NTI: [http://www.nti.org/e\\_research/profiles/NK/Nuclear/index.html](http://www.nti.org/e_research/profiles/NK/Nuclear/index.html)

<sup>258</sup> Anthony H. Cordesman and Khalid R. Al-Rodan. 2006. p 126

has been under constant pressure from the IAEA, the U.S, and the EU 3 (Britain, France, and Germany) to fulfil its obligations according to the safeguards agreement and provide better transparency to increase the quality of information. Since 2005, the UN have passed several Security Council resolutions requesting Iran to stop its enrichment and reprocessing related work<sup>259</sup>, in the hope of making Iran comply with the legal framework of the NPT. The lack of cooperation has revealed Iran's possibility of cheating, comparable to that of North Korea. The uncertainty of its intentions has focused attention by the international society to be aware of Iran's future actions. This has led to demand for special inspections and continued pressure on Iran to ratify the Additional Protocol. As Sharam Chubin<sup>260</sup> points out, the IAEA has dealt with the Iran case with considerable success. It has conducted by one estimate, over 1,600 man/days of inspections. Today much more is known about Iran and the international society has made good strides in understanding the nature and scope of its nuclear program. The continued work of IAEA inspectors to provide information about Iran's future intentions with their uranium enrichment program may be crucial for its further success. Should Iran, despite its own statements, develop nuclear weapons without IAEA detecting it, it would seriously damage the agency's credibility. Continual inspections would most likely prevent Iran from doing so without creating suspicion. Doubtless, it is important that IAEA continues to be informed about the uranium enrichment program in Iran, and that Iran accepts unlimited inspections to provide essential information according to the legal framework of the NPT.

From a neoliberal perspective cooperation in the international society enables states to focus their concerns on absolute rather than relative gains, meaning that through mutual cooperation states can be more concerned about their own welfare and not just that of others. In addition to providing information to the members of the treaty in general, IAEA inspections have also been used as a bilateral assurance mechanism. As we have seen through the 1970s in the case of Brazil and Argentina, the nuclear interaction between these countries caused grave international concern. Yet both the regional non-proliferation regime and the bilateral mechanisms developed between the two countries lately have revealed a capacity to pursue nuclear development while ensuring political stability characterised by mutual assurance and confidence building<sup>261</sup>, hence crating the ability for both states to

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<sup>259</sup> NTI: [http://www.nti.org/e\\_research/profiles/Iran/Nuclear/index.html](http://www.nti.org/e_research/profiles/Iran/Nuclear/index.html)

<sup>260</sup> Shahram Chubin. 2006. p 101

<sup>261</sup> Mitchell Reiss and Robert S. Litwak. 1994. p 240



focus on absolute rather than relative gains. Their example demonstrates how two countries have successfully cooperated on controversial, sensitive, and highly political issues, to their mutual benefits<sup>262</sup>. This provides a good example of neoliberal perspective. However Neoliberalism answer to a large extent why states continue to cooperate with the NPT as long as it is in their interest, where it lack a thorough explanation is what leads to change in states preferences and their decision to join the NPT long after its establishment, to better understand why there is a change in states preferences Keohane<sup>263</sup> refer to constructivism and learning.

South Africa developed its nuclear weapons as a non-signatory state to the NPT. The judicial implication was that IAEA had no right or obligation to apply safeguards to any of South Africa's nuclear facilities. From a neoliberal perspective, it may therefore not be seen as a failure of the regime since IAEA had no responsibility to provide information about South Africa's nuclear activities. Pretoria's decision to dismantle its nuclear weapons program may be explained by a change in the characteristics of the international system after 1990, which resulted in a change of behaviour. From an absolute gains perspective, South Africa's decision to increase their economic gain through closer ties with the international society may have depended on their decision regarding nuclear weapons. When they relinquished these weapons, South Africa re-entered the community of nations and began to peruse its true national interests<sup>264</sup>. Subsequent to South Africa's decision to join the NPT in 1991, it voluntarily gave access to all production records of the Y Plant and informed IAEA inspectors that they could "go anywhere, anytime". South Africa supplied detailed documentation on nuclear activity, including imports and exports, dismantling and accountancy records, and offered to accept any particular safeguards arrangements deemed necessary<sup>265</sup>. IAEA have conducted approximately 115 inspections in South Africa and seems reasonably assured that that the inventory of nuclear plant and materiel declared by South Africa is complete. The inspectors have at least not discovered anything that suggests otherwise<sup>266</sup>.

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<sup>262</sup> Mitchell Reiss. 1995. p 71

<sup>263</sup> Robert O. Keohane. 2005. p 132

<sup>264</sup> Mitchell Reiss. 1995. p 32

<sup>265</sup> Mitchell Reiss. 1995. p 19

<sup>266</sup> Mitchell Reiss and Robert S. Litwak. 1994. p 219

Even considering recent enhancements, Egypt's nuclear research program remains quite limited. Its infrastructure has expanded and its nuclear specialists are gaining useful experience in areas of relevance to a military program. The relatively small scale of the facilities and activities involved and the fact that IAEA safeguards will apply in most cases, significantly reduce opportunities to exploit Egypt's research program to acquire nuclear weapons<sup>267</sup>.

India and Pakistan, like South Africa, developed their nuclear weapons as non-signatory members of the NPT. From a neoliberal perspective these countries should not be labelled failures in this context. On the contrary, India and Pakistan provide examples of states more concerned with relative rather than absolute gain. This results in an inability to reach a Pareto-optimal solution. This illustrates that mutual cooperation is not always possible or sufficient even if we apply an established pattern of legal liability, provide relatively symmetrical information and arrange the costs of bargaining so that specific agreements can be more easily made. In some situations, states will always be more concerned about their own security rather than welfare. To sum up, the neorealism may provide a better explanatory factor for the nuclear weapons development in India and Pakistan than the neoliberalism, and states under some circumstances will be more concerned about relative than absolute gains. The bilateral arms control agreements between the U.S. and Russia, in the form of the START I, START II and SORT treaties, were created to provide mutual assurance through bilateral inspections that they were both reducing their respective nuclear arsenals. START I was also able to include the former Soviet republics of Belarus, Kazakhstan, and Ukraine, and able to provide information about their non-nuclear status after 2001. Regimes help states cooperate by reducing transaction costs and particularly because through reducing uncertainty in the external environment. From a neoliberal perspective, each government is better equipped, with regimes in place, to assume that its counterparts will follow predictable and cooperative policies<sup>268</sup>, based on the information they provide.

The bilateral arms control agreement between the two former superpowers does not include verification of verification on their adherence to the agreements by a neutral actor. Therefore, the international society must rely on the information provided by the United

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<sup>267</sup> Kurt M. Campbell, Robert J. Einhorn, and Mitchell B. Reiss. 2004. p 53

<sup>268</sup> Robert O. Keohane. 1984. p 114

States and Russia, respectively, and that they actually have conducted the reductions they claim to have carried out. Great Britain, France, and China have conducted disarmament procedures outside any additional agreements to the NPT. Leading the signatory members of the NPT to rely on the information provided by Great Britain, France and China that they are following the agreements they have made in accordance with Article VI of the treaty. According to Keohane, international regimes reduce uncertainty by abating asymmetries of information through a process of upgrading the general level of available information<sup>269</sup>. Likewise, one would also expect the parties of the treaty to desire information about Great Britain, France and China's adherence to the agreement, and their external delivery of symmetrical information. Keohane claims that egotists may obey rules because the consequence of violating them would damage not only a mutually beneficial set of arrangements but also the violator's reputation, and thus his ability to make future agreements<sup>270</sup>. However, Keohane does not provide a rational why Great Britain, France and China should be trusted more than others as far as misleading outsiders is concerned.

Consequent to this line of arguments, it is fair to conclude that while the quality and quantity of information provided by the IAEA safeguards through NPT, even if sometimes imperfect (e.g. North Korea and Iran), may be adequate for some states as well as insufficient for others, to join in mutual cooperation.

### **5.7. Knowledge based**

The explanatory factor for the degree of success or failure of the NPT according to constructivism (see chapter 2) and escape the security dilemma, is the ability and willingness by states to create a new identity. This is achieved by willingness to follow the NPT's norms, rules, and conduct in a collective interest in a nuclear free international society. Resulting in reduced fear among states for a potential nuclear conflict. By changing identity, foes can become friends, and the need for nuclear weapons become less demanding.

Social identities according to constructivism are a set of meanings that an actor attributes to itself while taking the perspective of others, that is, as a social object. Social identities and interests are always in process during interaction. They may be relatively stable in certain

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<sup>269</sup> Robert O. Keohane. 2005. p 94

<sup>270</sup> Robert O. Keohane. 2005. p 126

contexts, in which case it can be useful to treat them as given. Therefore the ability to overcome collective action problems depends in part on whether actors' social identities generate self-interests or collective interests<sup>271</sup>.

The motivations of Argentina and Brazil to join efforts in the nuclear field changed over time. The nuclear weapons program started in both countries during the 1950s and came to a halt during the 1980s. Goals shifted with the appearance of civilian governments in both countries, the new leaders were concerned with exerting greater control over the nuclear programs that the military had influenced in Argentina's case, or had partially hijacked, in Brazil's case. The transition from military rule to election of civilian president in both countries in the mid-1980s infused the bilateral relationship with renewed momentum<sup>272</sup>. Resulting in a shift of identity, and also a new interest in the bilateral agreements to escape a security dilemma, through information and knowledge. The process started by the Argentine-Brazilian nuclear cooperation agreements in the 1980s. It raised expectations about the role of confidence building measures and policies aimed at the reduction of mutual suspicion. Such measures were seen as setting the basis for an eventual emergency of a "security community" in which both Argentina and Brazil explicitly retreated from the nuclear threshold<sup>273</sup>, through a shared insight of best way forward. The bilateral agreement was made possible through an international framework that encouraged commitment to non-acquisition of nuclear weapons. To use the words of Wendt<sup>274</sup>, through repeated acts of reciprocal cooperation, actors form mutual expectations that enable them to continue cooperation. South Africa's nuclear weapons withdrawal may also be explained from a result of change in identity based on extensive political change of identity. Going from minority apartheid rule to democratic government provide, from a constructivist viewpoint, an explanation factor for the decision to eradicate nuclear weapons. As de Klerk made clear by words and deeds, the South African decision to scrap its nuclear weapons was not taken in isolation but was only one, albeit important, element in a complete reversal of national and international policies. This included the abolition of apartheid and the replacement of a policy of regional destabilization with cooperation and friendship<sup>275</sup>. This created a symbol of South Africa's commitment to establish a better and improved relationship with the

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<sup>271</sup> Alexander Wendt. 1994. p 385-386

<sup>272</sup> Mitchell Reiss. 1995. p 54, 67, T.V. Paul. 2000. p 111 and Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 399

<sup>273</sup> Mitchell Reiss and Robert S. Litwak. 1994. p 243

<sup>274</sup> Alexander Wendt. 1994. p 390

<sup>275</sup> Mitchell Reiss and Robert S. Litwak. 1994. p 217

international society and halt nuclear proliferation. While constructivism provides a reasonable explanation for Argentina, Brazil, and South Africa's choices based on shifts in identities, the argument would have been stronger if democracies have been less inclined to acquire nuclear weapons than totalitarian or military regimes.

Since 1979 Egypt has enjoyed a prolonged period of peace. The government maintains a large and strong army but Egypt has not been involved in a large-scale hostile activity since the 1973 Yom Kippur war against Israel<sup>276</sup>. The ratification of NPT by Egypt in 1981 has turned Egypt into the forefront for establishing a nuclear free Middle East and providing peace and stability to the region. Its continued dedication to NPT has paved the ground for prosperity economical and militarily through bilateral agreements with the U.S., and identification of itself as a non-proliferation state. On the other hand, analysts have raised concerns about whether oppositional groups would uphold existing treaties that the government has signed in case there would be a shift in government structure<sup>277</sup>. In 1999, Mohammed Sayyid al-Tantawi, Sheik of al-Azhar and the highest-ranking cleric in Egypt, called on Arabs and Muslims "to acquire nuclear weapons as an answer to Israeli threat". Should Egyptian identity change to a more fundamentalist Islamic regime it might result in a turn-around in Egypt's current long-standing nuclear policy<sup>278</sup>.

India's development of nuclear weapons, in addition to a deterrent against China, may be seen as to reshape its identity and international status as a great power<sup>279</sup>. A fundamental principle of the constructivist social theory is that people act towards objects, including other actors, based on the meaning that the objective has for them. States act differently towards enemies than they do towards friends simply because enemies may be threatening and friends are not<sup>280</sup>. India has continued to identify China as a rival after the Sino-Indian Boarder War in 1962. Competitive security systems are sustained according to constructivism, by practices that create insecurity and distrust. In this case, transformative practices should attempt to teach other states that one's own state can be trusted and should not be viewed as a threat to their security<sup>281</sup>, which the bilateral agreements between Argentina and Brazil provide an example of. Yet, by themselves, such practices cannot

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<sup>276</sup> Gawdat Bhagat. 2007. p 419

<sup>277</sup> Sara Kristine Eriksen. 2007. p 22

<sup>278</sup> Kurt M. Campbell, Robert J. Eirkorn, and Mitchell B. Reiss. 2004. P 70

<sup>279</sup> Joseph Cirincione, Jon B. Wolfsthal, Miriam Rajkumar. 2005. P 399

<sup>280</sup> Alexander Wendt. 1992. p 396.

<sup>281</sup> Alexander Wendt. 1992. p 421

transform a competitive security system if they are not reciprocated by alter. Then they will expose ego to a “sucker” payoff and quickly wither on the vine<sup>282</sup>. Had India signed NPT, it would have provided a symbolic signal towards China, Pakistan, and the international society that they are willing to show conduct according to the nuclear non-proliferation norm. At the same time, similar logic applies to Pakistan. Indian membership in the NPT “community” would most likely have been easier to establish without China’s nuclear arsenal. Efforts to enhance stability and security in South Asia have been complicated by many factors. India’s dislike of the discrimination demonstrated by a few declared nuclear weapon states that impose nuclear restraints on other countries, has lead India to promote only global disarmament measures. It has resisted numerous bilateral and regional arms control measures that might jeopardize its own nuclear option<sup>283</sup>. The inability of NPT to include India from a constructivist viewpoint may therefore be seen as a lack of willingness from India’s part to escape the security dilemma and continued acting on the practice of China and Pakistan as rivals. Pakistan’s quest for a nuclear deterrent has been motivated largely by fears of domination by India, whose population, economic and military resources, dwarfs its own<sup>284</sup>. The two neighbours have since their independence in 1947, been tangled up in major conflicts and continue to identify each other as rivals. This has been an effective restraint on possible cooperation and the establishment of a security community. Bureaucratic political thinking as well as domestic issues and dispositions of individual decision-makers, explain little in the case of India and Pakistan. These two countries have followed more or less the same kind of policies under different right wing or left wing governments<sup>285</sup>.

According to Wendt<sup>286</sup>, 500 British nuclear weapons are less threatening to the U.S. than five North Korean nuclear weapons, because the British are friends of the United States, and the North Koreans are not. It implies that amity or enmity is a function of shared understanding. The relationship between the U.S. and North Korea has been hostile since the end of the Korean War in 1953. The strong presence of U.S. military troops in South Korea has most likely strained the relationship between the two. Even if North Korea has been a member of NPT since 1992, they have shown little adherents to the nuclear non-

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<sup>282</sup> Alexander Wendt. 1992. p 422

<sup>283</sup> Mitchell Reiss. 1995. p 193

<sup>284</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 240

<sup>285</sup> T.V. Paul. 2000. p 140

<sup>286</sup> Alexander Wendt. 1995. p 73

proliferation norm. The regime has on several occasions refused IAEA inspections and not reassured the international society regarding its nuclear intentions. However, the 1994 Agreed Framework seemed to ease the hostility between the U.S. and North Korea through diplomatic agreement. The United States had in 2005 no formal diplomatic relations with North Korea. American policy towards the reclusive state has altered since 2001 from one of open engagement to outright confrontation, with a transition after the inauguration of the Bush administration<sup>287</sup>. The inability of the U.S. and North Korea to escape the security dilemma may be seen as lack of actions as well as rhetoric by both sides. The agreements in the Six Party talks, has created a new possibility for North Korea to change its identity by showing adherents to the established agreement and dismantle its nuclear weapons, and stop its uranium enrichment program, in return for a better relationship with the United States, Japan, and South Korea.

The Iranian leadership has never announced a motives or any ambition for building a nuclear weapons program; rather, it has denied its existence<sup>288</sup>. On the other hand Iran's uranium enrichment program may be seen as an aspiration to again become the region's major power, commensurate with its history, geography, and resources<sup>289</sup>. While Iran under the Shah was as a pro-West ruled country, the establishment of the Islamic republic in 1979 drastically changed the Iranian identity. Close and amiable relations with the United States were exchanged by mutual hostility and suspicion<sup>290</sup>. After the growing suspicions by the outside world against Iran's uranium enrichment program in 2002, the country has tried to persuade the international society that its nuclear program is only intended for peaceful purpose in legal accordance with the NPT. Unfortunately, the Iranian government has (like North Korea) not fully cooperated with the IAEA and showed mistrust towards the agency and the international society. A problem with the Iranian uranium enrichment program has been to establish a common understanding shared by others, what a proper conduct is in the circumscribed situation. Iran has seen it as its legal right according to NPT to produce enriched uranium. Other states have seen it as a potential danger to the international society, which may be based on Iran's identity. This identity has Iran given itself through support of terrorism and provocative rhetoric against the state of Israel. The same reason has been cited

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<sup>287</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 281.

<sup>288</sup> Anthony H. Cordesman and Khalid R. Al-Rodhan. 2006. p 14

<sup>289</sup> Joseph Cirincione, Jon B. Wolfsthal, and Miriam Rajkumar. 2005. p 296

<sup>290</sup> Gawdat Bahgat. 2006. p 318

for the strong international pressure on Iran to give up its uranium enrichment program, even if they have legal rights to do so according to the NPT.

The greater the degree of conflict in a system, the more the states will fear each other and defend egotistic identities by engaging in relative gains thinking and resisting the factors that might eliminate such thinking (according to Wendt). This has clearly blocked full participation of NPT in the case of North Korea and Iran, and the missing signatures from India and Pakistan. All these nations find themselves in what can be categorised as a region with a high degree of conflict. Potential conflicts have created difficulties for the establishment of a security community. But as Wendt<sup>291</sup> points out, security dilemmas are not acts of God: they are effects of practise. This does not mean that once created they can necessarily be escaped from. They are, after all, dilemmas.

As previously mentioned, intersubjective systemic structures consist of the shared understandings, expectations, and social knowledge embedded in international institutions and threat complexes. Thus, these are terms of which states define their identities and interests. From a constructivist viewpoint, the Cold War was a structure of shared knowledge that governed great power relations for forty years, but once they stopped acting on this basis, it was the beginning of a structure downfall<sup>292</sup>. This explains why the nuclear disarmament has been more successful after the Cold War when the rational for the nuclear arms race dissolved, and instead established a new and better relationship between America and Russia. According to Wendt, when actors become socialised to norms, they form part of their identity, which in turn creates a collective interest in norms and ends in themselves. The result is internalized self-restraint: actors follow norms, not because of self-interests but because it is the right thing to do in their society<sup>293</sup>. Based on this argument, the disarmament that has taken place in Great Britain, France, and China may be explained by expectations put on them by the international society to conduct disarmament according to Article VI of NPT. Contrary to the global reduction in nuclear stockpiles, the nuclear weapons states still possess relatively large quantities of nuclear weapons. Great Britain, and others, who are not directly threatened by anyone, still seems to place important values

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<sup>291</sup> Alexander Wendt. 1995. p 77

<sup>292</sup> Alexander Wendt. 1995. p 74

<sup>293</sup> Alexander Wendt. 2001. p 1025



on their nuclear weapons<sup>294</sup>. Unfortunately, it still looks like the possession of nuclear weapons is in the self-interest of the nuclear weapons states and that these weapons still maintain an important part of their identity. On the scene of world politics, many decisions still seemed to be based on rationality instead of what should be more appropriate according to common norms.

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<sup>294</sup> Dagbladet: <http://www.dagbladet.no/kultur/2007/05/11/500321.html>

## Chapter 6: Concluding Remarks

This thesis has aimed to examine two questions:

- (1) To what degree has the Non-proliferation Treaty been able to achieved its goals?**
- (2) How can the degree of success or failure connected to goal achievement be explained according to different regime theories?**

When it comes to the first research question I have come to the conclusion based on the empirical material presented that the NPT has achieved a substantial degree of goal achievement after the Cold War, meaning that the NPT has achieved an important but still imperfect degree of goal achievement. Today, 190 states have signed the treaty that has become the most widely accepted international arms control agreement. The number of nuclear weapons in the world has been cut in half over the past 15 years. The NPT have been able to bestow membership on every nation of the world except for Israel, India, and Pakistan. After 1990 South Africa became the firsts country ever to fully dismantle its nuclear weapons and became a member of the NPT. This was an excellent example of nuclear weapons disarmament, showing that it is possible to perform a nuclear weapons-rollback. Argentina and Brazil has avoided a nuclear arms race through bilateral agreements. Both have joined the NPT and several other non-proliferation agreements. Egypt, despite its effort during the 1960s, have deferred the nuclear weapons program, and been able to prosper through bilateral agreements with the U.S.

The treaty has received a sufficient but not a high degree of goal achievement meaning an important and perfect degree. This view is based on several reasons. The first is the development of nuclear weapons in India, Pakistan, and North Korea. Neither of them was a signatory state of the treaty and consequently has not violated it. However the mild penalties inflicted as a response to the nuclear weapons procurement in India and Pakistan, especially from the United States, signals to other states that the consequence of developing nuclear weapons does not necessarily has to be severe. The danger is that other states therefore may find an opportunity to follow suit. Even though the Six-Party Talks was able to constrain North Korea's ambitions, the process is still going on. It needs to be seen if North Korea will continue to keep their side of the bargain. A second reason is the delicate problem of the uranium enrichment program in Iran that continues to be a thorn in the side of the NPT. Unless it is able to find a solution, it might provoke other states in the region to go nuclear.

A third reason is the stagnation in the arms reduction in the five NWS. The five NWS nations have since 1990 carried out large reductions of their nuclear stockpiles. Despite these fact the NWS still seem to regard nuclear weapons as an important part of their security, it must be concluded that little or no progress in arms reduction have taken place after 2001. In addition the U.S. aggressive pursuit of a missile defence has come on the expense of other important treaties and bilateral agreements like the ABM treaty and START II and might contribute to the erosion of the NPT. I would also like to remark that where the NPT have proven to be less able to achieve its goals regarding proliferation seems to be in states that have at one point seen nuclear weapons as essential to their security, and continued to put a high value on their nuclear weapons.

This study has looked at different theories of international regimes based on three theories of international relations and how these can explain the degree of goal achievement. Regimes consist of principles, norms, rules, and decision-making procedures that regulate state behaviour in specific issue areas of international relations. Neorealism provides only in relatively few cases, reasonable arguments for goal achievement based on the hegemonic stability theory and lack an explanatory factor in the majority of cases presented in this thesis. Pressure and sanctions imposed by the U.S. has not moved the interest of states in the direction of forgoing nuclear weapons or weapons programs. An argument based on the sole existence of a hegemonic power, cannot explain why the treaty has been able to reach a substantial degree of goal achievement. Therefore, it may seem that the paradigm of international regimes have a more independent effect than neorealism gives them credit for.

The theory of deterrence has provided a sound argument concerning states' decision to acquire nuclear weapons based on a security perspective, and ditto explanation why NPT has been unable to achieve a high degree of success. However, it lacks a reasonable explanation for the decision of states to renounce nuclear weapons when they operate within an anarchic structure where their security and well-being ultimately rests on their ability to mobilize their own resources against external threats. This argument does not provide a rational for why South Africa should be less concerned about possessing nuclear weapons than states like France and Great Britain. The deterrent theory, however, has been best adapted to explain why the five NWS have been willing to reduce their nuclear stockpiles, and why the reduction has stagnated after 2001.

From the research conducted it can be assumed, that neoliberalism has provided an acceptable explanation for the degree of goal achievement in NPT. Neoliberalism explains why mutual cooperation is possible when states have a common interest as long as one of the three following conditions are met: liability, information, and transaction costs. Inspections performed by the IAEA even if sometimes not perfect, has contributed to reduce uncertainty and allowed states to worry about absolute rather than relative gain. The theory of neoliberalism answers to a large extent why states continue to cooperate with the NPT as long as it is in their interest. It does not give a thorough explanation about what leads to changes in states' preferences and their decision to join the NPT long after its establishment, instead Keohane refers to constructivism and learning.

Constructivism has produced reasonable arguments for the degree of goal achievement and has shown that through repeated acts of reciprocal cooperation, states have been able to form mutual expectations and continue cooperation. Despite some states (e.g. Argentina, Brazil and South Africa) have shown that a change in their identity has also led to a change in their decision not to pursue nuclear weapons, the argument would have been stronger if it had been proven that democracies are less prone to develop or acquire nuclear weapons than totalitarian or military regimes. The run of time has sadly shown otherwise. A normative argument may explain why some states have decided to abstain from nuclear weapons, and why NPT has been able to include a large number of signatory states. However it seems that states in certain situations are more likely to behave out of egotistic self-interests rather than out of a normative behaviour when it comes to acquire or forgo nuclear weapons. It also seems that the establishment of a security community is relatively difficult in regions where states possess nuclear weapons, compared to nuclear free zones.

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