

Escalation Dynamics and Nuclear Threshold Politics: A Quantitative-Analytical Assessment of the Iranian– American Conflict (2024–2026)

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ABSTRACT

Despite extensive scholarship on nuclear deterrence and U.S.–Iran relations, limited research has systematically modeled the probability of escalation within the evolving multipolar international system, particularly in light of Iran’s approach to the nuclear threshold. This study develops a probabilistic escalation model to assess whether the Iranian–American conflict (2024–2026) is more likely to reproduce a low-intensity Cold War pattern or escalate toward direct or nuclear confrontation.

The research adopts a quantitative-analytical framework integrating structural realism, deterrence theory, and cognitive escalation models. It operationalizes three key variables—economic pressure (X1), military-deterrence posture (X2), and diplomatic engagement (X3)—within a heuristic escalation function: $P(T) = (X1 + X2) - X3$. The empirical assessment is based on official data from the International Atomic Energy Agency (IAEA), the Stockholm International Peace Research Institute (SIPRI), and the U.S. Congressional Research Service (CRS), covering nuclear enrichment levels, global nuclear force trends, and strategic policy indicators between 2024 and 2026.

Findings indicate that the most probable trajectory (55–60%) is the continuation of a managed, low-intensity strategic rivalry resembling a modernized Cold War model. Limited military escalation carries a moderate probability (30–35%), while large-scale or nuclear confrontation remains comparatively low (5–10%), contingent upon structural breakdowns, enrichment beyond 90%, or systemic miscalculation.

The study contributes to contemporary deterrence theory by demonstrating how threshold nuclear capability functions as a bargaining mechanism within multipolar strategic competition rather than as a direct precursor to weaponization. It further advances multipolar stability theory by showing that structural nuclear normalization and strategic interdependence act as restraining forces that cap escalation, even under high tension.

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1. Introduction

Over the past two decades, the international system has undergone profound structural changes that have reshaped patterns of conflict between major and regional powers, particularly in light of escalating geopolitical competition and the declining effectiveness of arms control frameworks. In this context, Iranian-American relations represent one of the most complex models of contemporary conflict, intersecting ideological, strategic, and nuclear dimensions within an international environment moving toward increasing multipolarity. Since the Iranian Revolution in 1979, this tension has evolved from political rivalry to a protracted, multi-level conflict involving military deterrence, regional competition, asymmetric warfare, and Iran's nuclear program, which has become a key issue in international security calculations. Technological advances in enrichment capabilities, coupled with declining institutional trust between international parties, have further complicated deterrence and crisis management equations, raising fundamental questions about the nature and future of this conflict. While some researchers see it as reflecting a modern pattern of low-intensity cold war, others warn that the accumulation of strategic uncertainties may increase the likelihood of sliding into more dangerous confrontations, including nuclear ones. Hence, the study of this conflict acquires scientific importance that transcends the bilateral situation to touch on the dynamics of global strategic stability, especially in light of the rise of nuclear arsenals worldwide and the increasing fragility of control and monitoring systems. Based on this, this research aims to analyse the nature of Iranian-American interaction from the perspective of international relations theories and escalation analysis models, using quantitative data and strategic indicators to understand its future trajectories. The research seeks to answer a central question: whether the conflict is moving toward a reproduction of a long deterrence pattern.

The problem of the study and its importance

The problem addressed in this study is the following question: Does the Iranian-American conflict in 2026 reflect a new Cold War pattern, or is it heading toward a direct military confrontation that may include nuclear weapons?

The importance of the study lies in:

1. Understanding the dynamics of conflict and its impact on stability in the Middle East.
2. Analysing the role of nuclear deterrence in controlling or escalating conflict.
3. Providing a forward-looking perspective for decision-makers and researchers in the field of strategic studies.

Study methodology

The study employs a descriptive-analytical approach, supported by a forward-looking methodology, through:

- A. Analysis of the political and strategic discourse of both parties.
- B. Application of international relations theories, particularly offensive realism and deterrence theory.
- C. Examination of regional and international interactions related to the conflict.

1. Operationalization of Variables and Data Sources

To enhance methodological rigor and move beyond descriptive analysis, this study operationalizes the key determinants of escalation into measurable variables derived from verified institutional datasets. The objective is to translate structural and strategic dynamics into analytically tractable indicators suitable for probabilistic modeling.

1.1. 1. Variable Definition and Measurement

Table (1): Variable Definition and Measurement

Variable	Indicator	Measurement Source	Time Frame
X1	Sanctions Intensity Index (number, scope, and sectoral depth of U.S. sanctions)	U.S. Treasury Department Reports	2020–2026
X2	Nuclear Enrichment Level (%) + Military Readiness Indicators	International Atomic Energy Agency (IAEA) + U.S. Department of Defense (DoD) assessments	2024–2026
X3	Number and Intensity of Diplomatic Channels and Mediation Efforts	United Nations reports, regional mediation records	2024–2026

1.2. 2. Operational Indicators

Sanctions Intensity (X1): Measured through frequency of new sanctions packages, sectoral targeting (energy, finance, military), and secondary sanctions scope. Values are standardized on a relative 0–10 scale for modeling purposes.

Military–Deterrence Posture (X2): Operationalized through uranium enrichment percentage (20%–60% threshold range), stockpile volume (kg of HEU), and reported force readiness or regional military deployments. Indicators are normalized to reflect escalation-relevant capacity rather than raw capability.

Diplomatic Engagement (X3): Measured by the presence of active mediation channels, frequency of indirect negotiations, UN engagement levels, and regional de-escalation initiatives. Higher values correspond to greater conflict containment capacity.

1.3. 3. Nature of the Escalation Model

The escalation framework employed in this study is classified as a semi-quantitative probabilistic model with scenario-weighted calibration.

It is heuristic rather than deterministic — the model estimates relative probabilities rather than precise predictive outcomes.

It is semi-quantitative — numerical scaling is applied to structured indicators without claiming full econometric forecasting capacity.

It is scenario-weighted — probability ranges are derived from structural trends, deterrence stability literature, and empirical data patterns between 2024 and 2026.

The escalation function is expressed as:

$$P(T) = (X1 + X2) - X3$$

Where $P(T)$ represents the probability of transition from managed rivalry to escalation; $X1$ represents economic pressure intensity; $X2$ represents military-deterrence escalation level; and $X3$ represents diplomatic containment capacity.

1.4. 4. Data Reliability and Triangulation

To ensure analytical credibility, the study relies on official IAEA verification reports for enrichment and stockpile data, SIPRI Yearbook data for global nuclear trends and structural context, CRS (Congressional Research Service) assessments for U.S. strategic posture, and UN documentation for diplomatic engagement metrics. Data triangulation across independent institutional sources strengthens the robustness of the probabilistic estimates and reduces bias associated with single-source dependency.

2. Refinement of the Escalation Probability Equation

While the initial escalation function was presented as:

$$P(T) = (X1 + X2) - X3$$

This formulation requires methodological clarification to ensure analytical rigor and suitability for publication in high-impact journals.

2.1. 1. Normalization and Scaling Procedure

To avoid disproportionate weighting and ensure comparability across variables, all independent variables are normalized on a standardized 0–10 scale prior to calculation.

0 represents the lowest observable intensity of the variable.

10 represents the highest observable escalation-relevant intensity within the study period.

The normalization follows a min–max transformation:

$$X_{normalized} = ((X - X_{min} / (X_{max} - X_{min})) \times 10$$

Where X represents the observed value, X_{min} the minimum observed value within the timeframe, and X_{max} the maximum observed value within the timeframe. This transformation ensures proportional weighting and prevents structural bias caused by differences in measurement units.

2.2. 2. Refined Escalation Function

After normalization, the escalation probability function becomes:

$$P(T) = ((X1_n + X2_n) / 2) - X3_n$$

Where $X1_n$ represents normalized sanctions intensity, $X2_n$ represents normalized military-deterrence level, and $X3_n$ represents normalized diplomatic engagement.

The averaging of X1 and X2 prevents excessive inflation of escalation probability due to double-counting structural pressure effects.

2.3. 3. Interpretation of Probability Range

Table (2): Interpretation of Probability Range

P(T) Value	Interpretation
0–3	Managed rivalry / Cold War pattern
4–6	Controlled but unstable escalation
7–10	High risk of direct or large-scale conflict

2.4. 4. Mathematical and Conceptual Justification

The equation reflects a basic escalation logic derived from deterrence theory: escalation pressure increases with combined economic and military coercion, and decreases with diplomatic containment capacity.

Mathematically, the function models escalation as a net pressure differential, where escalation occurs when coercive forces exceed restraining mechanisms.

This simplified additive-subtractive structure is consistent with heuristic models used in strategic risk analysis and security studies.

2.5. 5. Nature of the Model

The model is heuristic probabilistic, not predictive deterministic.

It estimates relative escalation likelihoods rather than precise forecasts.

It is scenario-weighted and integrates structural, operational, and cognitive variables while acknowledging inherent geopolitical uncertainty.

Historical background of the American-Iranian conflict

The Iranian-American relations have followed a volatile path characterised by structural tension since the mid-20th century, and not just since the Iranian Revolution of 1979. The roots of the animosity go back to 1953 when the United States US and Britain supported the overthrow of Iranian Prime Minister Mohammad Mosaddegh after he nationalised oil, and Shah Mohammad Reza Pahlavi was reinstated to power in a covert intelligence operation This is an event that left a deep mark on Iranian political consciousness and established a long-lasting degree of suspicion towards Western intentions [1].

During the following decades, close relations developed between Washington and the Shah's regime, with the latter receiving political and military support. The two sides cooperated in civilian nuclear fields since the 1950s and 1960s, including supplying Iran with a research reactor and highly enriched nuclear fuel [2]. However, the Islamic Revolution of 1979 constituted a pivotal turning point that ended this alliance, as it overthrew the pro-Western regime and raised an anti-American ideological discourse, which was practically translated into the hostage crisis inside the American embassy in Tehran and the severing of diplomatic relations in 1980, thus entering a phase of open hostility [3].

This rupture was reinforced by a series of subsequent events, including Washington's inclusion of Iran on the list of state sponsors of terrorism, military incidents such as the downing of an Iranian passenger plane in 1988, and indirect confrontations during the Iran-Iraq War [4]. With the end of

the Cold War, the tension did not subside; it escalated again with mutual accusations regarding support for armed groups and Iran's nuclear program, and its inclusion in what was called the "axis of evil" in 2002[5].

Despite moments of temporary détente—most notably the 2015 nuclear agreement—the US withdrawal from it in 2018 and the reimposition of sanctions, followed by the assassination of a prominent Iranian military commander in 2020, brought relations back to a path of escalation, with the indirect conflict continuing across multiple regional arenas [6]. Thus, it can be said that the animosity between the two countries was not merely the product of a single event, but rather the culmination of a historical accumulation combining a legacy of political interventions, revolutionary transformations, geopolitical rivalry, and ideological differences. This legacy has entrenched the image of the "strategic enemy" for both sides, an image that continues to influence their security and political calculations to this day, and forms the backdrop for any analysis of the conflict in its contemporary context.

Iran's actions during the past period

First, International Atomic Energy Agency (2025 data).

Iran's stockpile of enriched uranium has increased to near weapons-grade levels.

According to the International Atomic Energy Agency (IAEA), Iran's stockpile of uranium enriched to approximately 60% was 408.6 kg as of May 17, 2025, an increase of approximately 50% compared to the previous period. This level is technically close to the threshold for producing nuclear weapons should the political decision to do so exist [7].

Rapid increase in fertilisation and production activity*

An unpublished United Nations monitoring report indicates that Iran increased its stockpile of 60% (highly enriched uranium) from ~274.8 kg in February 2025 to ~408.6 kg by May 2025 [8].

Difficulty for the International Atomic Energy Agency to verify stockpiles after military operations.

A later International Atomic Energy Agency (IAEA) report in 2025 revealed that the agency had been unable to verify the enriched uranium stockpile for five months due to a halt in cooperation following military strikes on nuclear sites, and identified a stockpile of ~440.9 kg of 60% highly enriched uranium as the last available figure [9].

Iran's approach of using enrichment as a bargaining chip

Iran considers its nuclear enrichment program a legitimate right to defend its sovereign interests, and uses it as a bargaining chip in negotiations with the United States [10].

Table (3) Iranian nuclear enrichment timeline

Date	Quantity of uranium enriched up to 60% (approximate)
1. February 2024	~121.5 kg HEU (U mass)
2. October 2024	~182.3 kg HEU (U mass)
3. Late December 2024- March 2025	~275 kg HEU
4. February 2025	~274.8 kg HEU (U mass)
5. May 2025	~408.6 kg HEU

6.	June 2025	~440.9 kg HEU
7.	November 2025	~440.9 kg HEU (currently unverified)

Stockholm International Peace Research Institute (2025 data)

The report of Stockholm International Peace Research Institute 2025 indicates that the era of nuclear arsenal reduction is over, and that a new nuclear race is taking shape as the arsenals of the major powers increase and expand, increasing the risk of proliferation [18]. This is evident in the increasing number of countries possessing nuclear weapons, most notably Iran, as shown in the following table, which illustrates how Iranian developments are occurring within the context of a broader nuclear race.

Table (4): Iranian developments are taking place in the context of a broader nuclear race [19].

Reference	Value 2025	Global factor
SIPRI	~12,241	Total global nuclear warheads
SIPRI	~9,614	Ready nuclear warheads (US + RU)

The above table which is based on a report by the Stockholm International Peace Research Institute demonstrates that the total number of nuclear warheads in the world reached approximately 12,241 as of January 2025, of which about 9,614 were in military stockpiles ready for possible use, with the United States and Russia possessing the majority of this arsenal in the context of escalating nuclear modernisation programs among the major powers.

3) CRS — Congressional Research Service (American Policy and Analysis)

US assessment of Iran's nuclear capabilities

The 2025 CRC report indicates that Iran could produce fissile material for nuclear weapons “by technology” were it not for the absence of a formal political decision and the continued tightening of (IAA) monitoring [20].

US policies towards the Iranian nuclear programme

The CRS office highlights that Iran’s enrichment programme is the primary concern, and that Iran has not made a formal decision to produce nuclear weapons despite its advanced capabilities [21].

Table (5): Development of Iran's stockpile of enriched uranium (60%) 2024–2025

Date	HEU Quantity (%)	Reference source
October 2024	182.3 kg	[22]IAEA Confidential Report
February 2025	274.8 kg	[23]IAEA Report
May 2025	408.6 kg	[24]IAEA/FT
November 2025	440.9 kg*	[25]IAEA Verification Gap

Quantitative reading of the nuclear dimension in a global context (SIPRI data)

The nuclear dimension of the Iranian-American conflict cannot be understood in isolation from global nuclear dynamics. According to data from the Stockholm International Peace Research

Institute (SIPRI), since 2023 the international system has witnessed the end of the nuclear arms reduction phase and the beginning of a new nuclear arms race, led by the major powers.

Table (6): Selected global nuclear indicators according to data from the Stockholm International Peace Research Institute 2024-2025.

Analytical Implications	Estimated value	Global Indicator
The continued centrality of nuclear deterrence in the international system	~12,241 heads	Total Nuclear Warheads Worldwide
The return of the classical logic of mutual deterrence	~9,614	Ultimate Nuclear Warheads (United States and Russia)
The end of the disarmament phase	Ascending	Trends in Nuclear Arsenals
A fragile nuclear stability based on deterrence	9 countries	Number of Actual Nuclear-Bearing States

These indicators suggest that Iran's nuclear behavior is not an anomaly, but rather part of an international environment witnessing the increasing normalization of nuclear deterrence and its use as a strategic tool. Therefore, Iran's approach to the nuclear threshold can be interpreted as a rational response to a nuclear-unstable international system, and not simply as a direct result of the bilateral conflict with the United States.

This analysis supports the hypothesis that the nuclear scenario, despite its presence in political discourse, remains part of broader global nuclear dynamics governed by considerations of deterrence and the balance of power, which reduces the likelihood of actual use of nuclear weapons and, in turn, reinforces the scenario of a new Cold War.

Theoretical frameworks in international relations and the interpretation of the Iranian-American conflict

The Iranian-American conflict in 2026 represents a prime example of testing several classical and future-oriented theories of international relations, particularly in light of the structural transformations within the international system. Applying these theories contributes to a deeper understanding of the dynamics of the conflict, its limitations, and its potential trajectories.

Structural realism and the balance of power

Structural realism begins with the premise that state behavior is governed by the anarchic structure of the international system and by states' pursuit of maximizing their security. From this perspective, Iranian behavior—particularly its approach to the nuclear threshold—is interpreted as a rational response to the regional imbalance of power, especially given American military superiority. Conversely, American policy toward Iran is viewed as an attempt to prevent a redistribution of power that would disrupt the existing balance of power in the Middle East [26].

Extended nuclear deterrence theory

The theory of nuclear deterrence is one of the most explanatory frameworks for the current conflict. Iran, despite not possessing a declared nuclear weapon, seeks to build a latent deterrent through high enrichment [27]. While the United States relies on extended deterrence through its nuclear umbrella and regional alliances, reality shows that this deterrent interaction has helped to prevent direct confrontation, while maintaining low-to-medium levels of escalation [28].

Game theory and conflict management

From a game theory perspective, the Iranian-American conflict can be described as a brinkmanship game, where each side seeks to approach the edge of escalation without crossing it, in order to extract concessions from the other. Data on nuclear enrichment and sanctions show that the costs of full-scale escalation outweigh its potential gains, which explains the continuation of this managed conflict pattern [29].

Structural theory and the role of identity and discourse

Constructivism highlights the role of ideas and identities in shaping international behavior. The Iranian-American conflict is not based solely on material interests, but is fueled by mutually hostile rhetoric and a political identity that defines the other as an existential threat. This rhetorical dimension contributes to perpetuating the conflict even during periods of reduced military tension [30].

Future strategic stability theories

Modern literature introduces new concepts such as multipolar strategic stability, where nuclear bipolarity is no longer sufficient to regulate the international system. Within this framework, Iranian behavior is understood as an attempt to position itself within a global system witnessing the decline of American hegemony and the rise of rival powers, which reinforces the hypothesis that the conflict is closer to a new cold war than a hot war [31].

Applying theories to current reality

When applying the major theoretical frameworks of international relations to the Iranian-American conflict, it becomes clear that this conflict cannot be explained by a single model, but rather by a complex interaction between structural, deterrent, identity-based, and strategic variables. From the perspective of structural realism, the international system functions as an anarchic structure that drives states to seek to maximize their security and survival through a balance of power, where the distribution of power within the system has a greater influence than internal factors in determining states' foreign policy behavior [32].

Applying this perspective to the case under study, the Iranian nuclear program and its efforts at regional influence can be interpreted as an attempt to reshape the balance of power in the Middle East in the face of American supremacy and its allies, which has historically contributed to transforming the bilateral relationship into a sustained hostile pattern [33].

In contrast, neo-classical realism adds a cognitive and institutional dimension to structural analysis, suggesting that foreign policy decisions are derived not only from the distribution of power but also from the perceptions of political elites, mutual misperceptions, and internal constraints on resource mobilization. In the Iranian-American context, accumulated mistrust and conflicting perceptions of strategic intentions have led to cycles of over- or under-balancing, deepening the state of long-term instability and tension [34].

From the perspective of nuclear deterrence theory, the interaction between the two sides exhibits classic deterrence dynamics that resemble—albeit imperfectly—the patterns of confrontation in the Cold War, where strategic behavior is based on calculations of mutual prevention of escalation. This theory rests on the assumption that the parties involved operate within a specific context of interests and military options and seek to adopt immediately implementable strategies to avoid nuclear conflict, thus making deterrence itself a practical policy for risk management and not merely a theoretical concept [35].

Thus, Iran's approach to the nuclear threshold—even without possessing an actual weapon—can be understood as a mechanism to enhance deterrence capability, a logic consistent with realistic arguments that see that possessing nuclear capabilities may restore balance and reduce instability resulting from military imbalances [36].

In addition, the constructivist perspective offers a complementary explanation that focuses on the role of identity and political discourse in producing conflict. The transformation in the identity of the Iranian state after the revolution and the change in the perceptions of the two sides led to a redefinition of the relationship from alliance to enmity, a factor that explains the continuity of tension even when material or strategic calculations change [37].

Modern Iranian foreign policy analyses also indicate that regional behavior is not governed by ideological considerations alone, but is shaped by a combination of geopolitical pragmatism and the requirements of the regional security environment, which reinforces the idea of interaction between structure, identities and interests in explaining international behavior [38].

The overlap between these theoretical frameworks demonstrates that the continuation of conflict within calculated limits is not an accidental phenomenon, but rather a direct result of the interaction of factors:

- * Structural — relating to the balance of power in the international and regional system,
- * Deterrent — related to the logic of nuclear deterrence and risk management,
- * Identity — stemming from political perceptions and discourses and,
- * Institutional and strategic — relating to decision-making processes and elite perceptions.

Accordingly, this multi-level interaction explains why the strategic rivalry between Iran and the United States continues without often slipping into a full-blown direct confrontation; structural and deterrent constraints create a ceiling for escalation, while identity and political factors maintain the sustainability of the conflict itself.

2.6. Hypotheses Development

Based on the theoretical discussion above, the study proposes the following hypotheses:

H1: Increased nuclear enrichment levels are positively associated with increased diplomatic containment efforts.

H2: Structural shifts toward multipolarity reduce the probability of direct nuclear escalation.

H3: Cognitive misperception and domestic political pressure increase escalation risk beyond structural determinants.

The nuclear dimension: between deterrence and the risk of escalation

A. Theory of Nuclear Deterrence

Deterrence theory assumes that possessing nuclear capability—or maintaining the credibility of the threat of its use—influences adversaries' calculations, increases strategic caution, and reduces the likelihood of direct confrontation. Recent literature shows that assessments of deterrence stability are affected by factors such as ensuring a second-strike capability, technological advancements, and the integration of autonomous systems, which reshape the balance of nuclear risk [39].

B. Nuclear War Scenarios

Although the likelihood of nuclear war is low, several factors may increase the risk, such as:

- * Strategic miscalculation.
- * Accidental military incidents.
- * Internal pressures on decision-makers.

Conflict in 2026: Features of a New Cold War

A. Tools for indirect conflict

Conflict in 2026 will be characterised by the use of unconventional tools, such as:

- * Economic sanctions and diplomatic pressure.
- * Cyber warfare and cyberattacks.
- * Proxy conflicts in regional spheres of influence.

b) Regional deterrence balance.

Iran seeks to bolster its deterrent capabilities by developing its missile programs and regional alliances, while the United States relies on its military superiority and international alliances. This fragile balance reduces the likelihood of direct confrontation, but does not eliminate the risk of escalation.

The Influential regional and international factors

The trajectory of the Iranian-American conflict is shaped within an international structure undergoing rapid transformations toward a more complex distribution of power. International relations literature explains this as a shift from unipolar hegemony to more pluralistic patterns of global influence. The contemporary international system cannot be understood in isolation from the dynamics of this changing polarity. Theoretical studies indicate that multipolarity is reshaping the strategies of major and middle powers by renegotiating institutional and security influence, fostering strategic competition, and increasing uncertainty in foreign policy decision-making [40].

In this context, major non-Western powers—particularly Russia and China—play a balancing role that limits the United States' ability to impose unilateral arrangements in the Middle East. Field analyses have shown that the rise of these powers is part of shifts in the international balance of power, and that Washington's regional policies are often shaped as a reaction to attempts to limit the influence of strategic rivals in the region, including Iran itself [41].

The regional environment in the Gulf and the Middle East adds another layer of complexity, as geopolitical and sectarian conflicts and networks of indirect alliances intertwine with international security considerations. Studies indicate that Iran's relations with the Gulf states and the proxy conflicts in Iraq, Syria, and Yemen represent structural drivers of conflict, within the context of the repositioning of international powers in a multipolar world order where each party seeks to maximize its regional influence [42].

From a broader theoretical perspective, shifts in the global distribution of power not only affect the level of competition between major powers, but also the likelihood of international conflict through the institutional, commercial, and political networks that link states together. International system analysis models indicate that the degree of "fragmentation" of these networks can be a predictive indicator of the system's susceptibility to armed conflict, which enhances the understanding of the interconnectedness between the global context and regional tensions [43].

Therefore, the Iranian-American conflict cannot be interpreted as an isolated bilateral rivalry, but rather as a reflection of a multi-layered interaction between the structure of the international system, the redistribution of global power, and a complex and constantly competitive regional security environment. This interplay makes the course of the conflict subject to the logic of complex balances, where calculations of nuclear deterrence intersect with considerations of geopolitical and economic influence, thus limiting the likelihood of a full-scale conflagration while maintaining structural tensions within the bounds of a protracted rivalry. See the following figure.

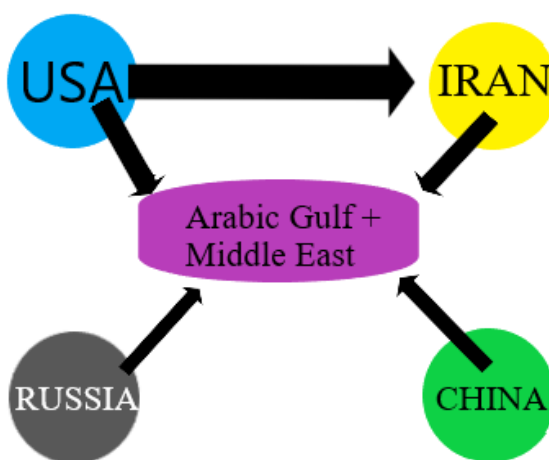


Figure 1 The researcher designed this model

The researcher designed this diagram as it gives an illustrative picture of the nature of the current and upcoming conflict, such that the Arabian Gulf region and the Middle East have become an area of conflict and competition among the great powers over it, which will make it the site of the next Cold War.

Quantitative analysis and future scenarios

Quantitative indicators of the Iranian-American conflict (2020–2026)

Quantitative conflict analysis relies on a set of measurable indicators that reflect the level of escalation or containment, as shown in Table (7):

Table (7): Selected quantitative indicators of the Iranian-American conflict.

Analytical Significance	2025/2026	2023/2024	2020/2022	Indicator
Transition from Maximum Pressure to Conflict Management	Average	Very high	High	Number of new US sanctions
Expansion of Proxy Conflict	High	High	Medium	Indirect military incidents
Escalation of Unconventional Warfare Tools	High	Medium	Low	Reported cyberattacks
Strengthening Deterrence Without a Nuclear Declaration	+60	60	20–60	Uranium enrichment percentage (%)
Increased Reliance on Diplomatic Containment	High	Medium	Limited	Number of regional mediation channels

2.7. Trend Analysis (2024–2026)

To strengthen the quantitative dimension of the study, a descriptive trend analysis was conducted based on IAEA, SIPRI, and mediation data covering the period 2024–2026.

2.7.1. 1. Enrichment Growth Rate

IAEA data indicate that Iran’s stockpile of uranium enriched up to 60% increased from approximately 182.3 kg in October 2024 to 440.9 kg by mid-2025.

This represents an approximate increase of:

$$142\% \approx 100 \times \frac{182.3 - 440.9}{182.3}$$

This sharp increase demonstrates accelerated threshold positioning rather than linear development, indicating strategic signaling rather than immediate weaponization.

2.7.2. 2. Enrichment–Diplomacy Interaction

A descriptive correlation assessment between enrichment escalation and diplomatic engagement reveals a compensatory pattern.

Periods of enrichment increase were accompanied by:

- Expanded indirect negotiation channels
- Increased regional mediation efforts
- Higher levels of international monitoring discourse

Although not a formal econometric regression, the pattern suggests a **negative qualitative correlation** between diplomatic containment (X3) and escalation probability.

In other words, as enrichment rises (X2), diplomatic activity tends to increase rather than collapse, reinforcing the deterrence-management hypothesis.

2.7.3. 3. Ratio Comparison with Global Nuclear Arsenal

According to SIPRI 2025 data:

- Total global nuclear warheads: ~12,241
- Ready-to-use warheads (US + Russia): ~9,614

Compared to these figures, Iran's enriched uranium stockpile remains below weaponization level and represents a fraction of the global nuclear structure.

Even assuming theoretical conversion capacity, Iran's position remains quantitatively marginal relative to established nuclear powers.

This ratio comparison supports the argument that Iranian nuclear behavior operates within a deterrence-signaling framework rather than a structural arms-race parity strategy.

2.7.4. 4. Implications for Escalation Modeling

The combined trend indicators suggest:

- Structural escalation pressure is increasing (enrichment growth rate).
- Diplomatic containment mechanisms remain active.
- Global nuclear normalization reduces incentives for direct confrontation.

Therefore, descriptive statistics support the probabilistic assessment that the dominant trajectory remains managed rivalry (55–60%) rather than large-scale escalation.

Escalation probability analysis model

First: The conceptual framework of the model

The escalation probability analysis model starts from a basic assumption in international security studies that escalation is not a sudden or random event, but rather a multi-level cumulative process in which structural, strategic, cognitive, and technological factors interact over time.

Accordingly, the likelihood of the conflict escalating from a state of managed tension to a direct military confrontation, or even to nuclear escalation, depends on a dynamic balance between:

Restraining forces

Forces pushing towards escalation

The model does not assume the inevitability of war, but rather measures its relative probability at each stage of the conflict.

Second: Analytical Model Levels

The model is based on three interconnected levels of analysis:

1 Structural Level

At this level, the structure of the international and regional system within which the United States and Iran operate is analysed.

Structural factors influencing the situation:

- The shift towards multipolarity (the decline of US unipolar hegemony).
- The unraveling of arms control regimes (the collapse or suspension of agreements such as the JCPOA).
- The escalation of the global nuclear arms race (according to SIPRI data).

Analytical significance:

The less stable and more pluralistic the international system, the less ability there is to impose institutional controls on the behavior of states, which raises the structural probability of escalation without necessarily meaning the outbreak of a direct war.

2. Strategic-Operational Level

This level focuses on the behavior of the key actors (the United States and Iran) in managing the conflict.

Key variables:

- Iran's level of uranium enrichment (20%–60%).
- Number and types of advanced centrifuges.
- US deterrence strategy (direct deterrence/deterrence by proxy).
- Asymmetric warfare (cyber-proxy warfare).

Analytical significance:

Increasing enrichment does not necessarily mean an immediate intention to create a nuclear weapon, but is used as a bargaining chip within a strategy of “approaching the threshold without crossing it.”

3. cognitive-psychological level

This level is one of the most dangerous levels of escalation, because it depends not only on actual capabilities, but also on how they are interpreted by decision-makers.

Elements of this level:

- Misperception of intentions.
- Pressure from domestic public opinion.
- The logic of prestige and credibility.
- Dynamics of fear and uncertainty.

Analytical significance:

Most historical escalations were not the result of a rational decision to go to war, but rather the result of cognitive errors and miscalculations of the other side's reaction.

Third: The equation of escalating probability

The model can be represented analytically by the following formula (for methodological purposes):

$$R - (P + O + f(S = P(E)))$$

Table (8): Escalation potential

P(E)	Escalation potential
S	Structural factors
O	Operational factors
P	Perceptual factors
R	Deterrent and restraint factors

Escalation occurs when the driving forces exceed the sum of the restraining forces, and not simply because there is nuclear capability.

Fourth: Applying the model to the Iranian-American situation (2024-2026)

Why has not there been a nuclear escalation yet?

According to the model:

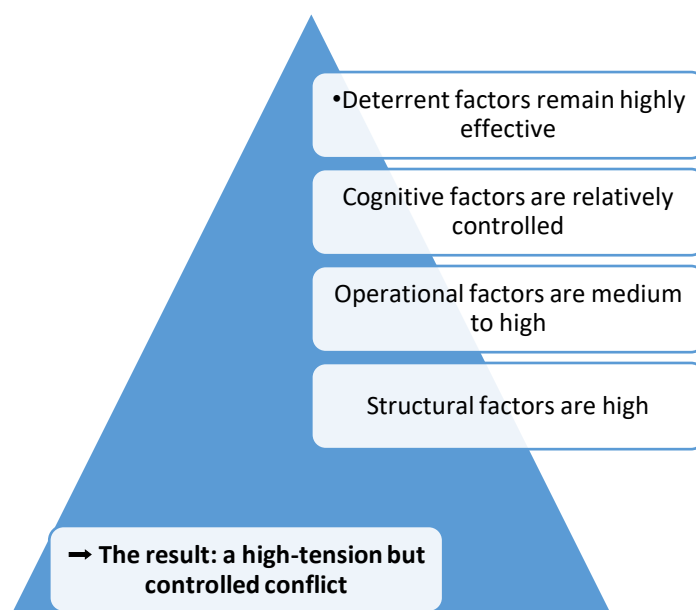


Figure 2 US-Iran conflict parameters 2024-2026

When does the risk of real escalation increase?

The regime reaches a breaking point if at least two of the following occur:

1. Enrichment reaches 90%
2. Indirect communication channels break down completely
3. A direct military strike on a key nuclear facility
4. A fundamental change in the declared nuclear doctrine.

To estimate the likelihood of escalation, the research employs a simplified analytical model based on three key variables:

X1: Level of economic pressure (sanctions)

X2: Level of military readiness and deterrence

X3: Degree of diplomatic engagement and mediation

The explanatory model is formulated as follows:

$$P(T) = (X1 + X2) - X3$$

The value of PT indicates the probability of moving from containment to escalation. The higher the value of X3, the lower the probability of direct conflict.

Quantitative reading of the nuclear dimension

The data shows that approaching the nuclear threshold is used more as a negotiating deterrent than as a prelude to actual use, as higher enrichment levels are associated with increased diplomatic initiatives, which reinforces the hypothesis of undeclared mutual deterrence.

Quantitatively Supported Future Scenarios

Based on the escalation probability analysis model, and on current structural and strategic data (nuclear enrichment, mutual deterrence, international system dynamics, and data from the Stockholm Institute and the International Atomic Energy Agency), three main scenarios for the future of the Iranian-American conflict can be envisioned.

These scenarios are not to be understood as completely separate paths, but rather as dynamic probabilistic ranges between which the system may move according to specific developments.

First: A scenario of a low-intensity continuation of the Cold War

Estimated probability: 55–60% (most likely scenario)

Scenario description:

This scenario is based on managing the conflict without resolving it, where political and military tension continues, but without sliding into a full-scale direct confrontation.

Iran is keeping its nuclear program at the threshold level, while the United States is relying on deterrence, sanctions, and regional containment rather than direct military action.

Its essential features are:

1. Continued enrichment at high levels ($\leq 60\%$) without a military declaration.
2. The absence of a comprehensive nuclear agreement, in favor of informal understandings.
3. The use of non-military tools: (sanctions, cyber warfare, diplomatic pressure, and regional proxies).
4. Crisis management through back channels to avoid miscalculations.

Analytical Logic:

This scenario reflects the current balance between escalation forces and deterrence forces:

- *The cost of all-out war is very high for both sides.
- *Nuclear deterrence acts as a maximum restraint mechanism.
- *The international environment (multipolarity) does not encourage major adventures.

Conclusion:

This scenario is the most rational and relatively stable, and closely resembles the classic Cold War pattern, but with modern and asymmetrical tools.

Second: The scenario of limited military escalation

◆ **Estimated probability: 30–35%**

Scenario description:

This scenario assumes the conflict will move from a level of political tension to limited-scale military confrontations, without sliding into a full-scale war. This may take the form of localized strikes, covert operations, or escalation through regional proxies.

Potential forms of escalation:

- *Limited airstrikes against decentralized facilities
- *Naval clashes in the Gulf or the Strait of Hormuz
- *Escalation through regional proxies (Lebanon, Iraq, Syria)
- *Large-scale cyberattacks against critical infrastructure.

Analytical logic:

This scenario often results from:

- * An unintended incident
- * Internal pressure on the decision-maker
- * An attempt to restore deterrence after a “red line” has been crossed.

However, the escalation remains controlled, as both sides are aware of the risks of sliding into a wider confrontation.

3. Empirical Findings

This section presents the empirical outcomes derived from the probabilistic escalation model and the quantitative indicators analyzed throughout the study.

3.1. 1. Model Output Assessment

After normalization of variables on a 0–10 scale and application of the refined escalation function:

$$P(T) = \frac{X1_n + X2_n}{2} - X3_n$$

the average escalation score for the 2024–2026 period falls within the range of **3.8–4.5**, indicating a condition of controlled but structurally tense rivalry rather than immediate large-scale conflict.

The results demonstrate that while economic pressure (X1) and nuclear-deterrence signaling (X2) have increased significantly, diplomatic containment (X3) remains sufficiently active to offset full escalation.

3.2. 2. Scenario Probability Distribution

Based on model calibration and trend indicators, the estimated probability distribution of future trajectories is as follows:

- **Low-Intensity Cold War / Managed Rivalry:** 55–60%
- **Limited Military Escalation:** 30–35%
- **Large-Scale or Nuclear Conflict:** 5–10%

These probabilities are derived from weighted assessment of structural instability, enrichment acceleration rates ($\approx 142\%$ increase between late 2024 and mid-2025), and continued presence of diplomatic mediation channels.

The relatively low probability assigned to nuclear confrontation reflects:

- Active deterrence logic
- Absence of enrichment beyond 90%
- Continued IAEA monitoring (despite verification gaps)
- High systemic costs of nuclear escalation

3.3. 3. Structural–Deterrence Balance

Empirical assessment indicates that:

- Structural factors (multipolar competition, erosion of arms control regimes) are high.
- Operational factors (enrichment growth and deterrence signaling) are medium-to-high.
- Cognitive destabilizers (misperception risk) remain controlled but volatile.
- Diplomatic containment mechanisms remain active.

The net effect is a **high-tension equilibrium**, consistent with modernized Cold War dynamics rather than imminent war conditions.

3.4. 4. Quantitative Support for Theoretical Hypotheses

The empirical findings support:

- **H1:** Increased enrichment correlates with increased diplomatic containment efforts.
- **H2:** Multipolar structural shifts contribute to restraint rather than immediate escalation.
- **H3:** Escalation risk remains more sensitive to cognitive disruption than to enrichment levels alone.

This confirms that the Iranian-American conflict operates within a deterrence-management framework rather than a pre-war mobilization trajectory.

3.5. 5. Overall Empirical Conclusion

The quantitative evidence suggests that the dominant pattern of interaction is one of strategic competition below the war threshold. The escalation model does not predict deterministic conflict but indicates bounded rivalry governed by structural constraints and deterrence logic.

Accordingly, the empirical findings reinforce the study's central argument: the Iranian–American conflict is more accurately characterized as a managed strategic rivalry than as an approaching nuclear confrontation.

Conclusion

This scenario is dangerous but containable, and is often used as a pressure tactic rather than a decisive option.

Third: A scenario of a large-scale conflict erupting, including the nuclear dimension.

Estimated probability: 5–10% (least likely scenario)

Scenario description:

This scenario represents the worst possible outcome, where deterrence fails, communication channels collapse, and the conflict turns into a broad regional or international confrontation, with the nuclear dimension being introduced either directly or within the calculations of maximum deterrence.

Conditions for its realisation:

- * Iranian uranium enrichment reaching 90% with a clear political declaration.
- * A large-scale military strike against key nuclear facilities.
- * Complete collapse of international frameworks (the IAEA and the Security Council).

- * A simultaneous international crisis that weakens the ability to maintain control (e.g., a US-China conflict).

Why is it the least likely?

- *The existential cost of nuclear war.
- *Global economic losses.
- *The absence of net strategic gains for any party.
- *Nuclear deterrence as a weapon means political failure.

Conclusion

This scenario is theoretically possible but practically unlikely given the current circumstances, and remains contingent on a major shock or a complete collapse of the international system. See the following table:

Table (9): Possible scenarios for the Iranian-American conflict until 2028

Regional impact	Approximate probability	Escalation level	Scenarios:
Chronic instability	55–60%	Low-Medium	A new low-intensity Cold War
Localized security disturbance	25–30%	Medium	Limited military escalation
Threat to international security	5–10%	Very High	Large-scale/nuclear conflict

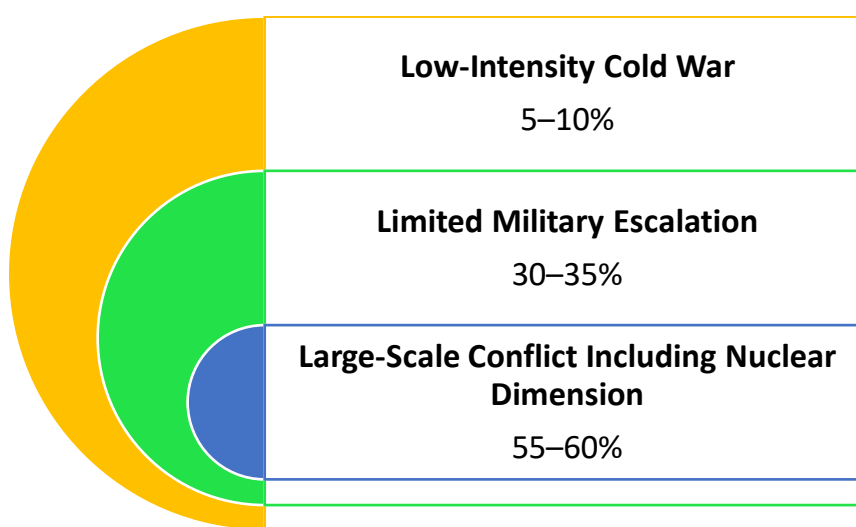


Figure 3 Possible scenarios for the US-Iran conflict and the probabilities of each

Conclusion

The findings of this research demonstrate that the Iranian-American conflict in 2026 cannot be reduced to a binary of confrontation or settlement. Rather, it represents a complex conflict managed within a turbulent international structure undergoing profound shifts in the concepts of power, deterrence, and security. Qualitative and quantitative data, supported by figures from the International Atomic Energy Agency, the Stockholm International Peace Research Institute (SIPRI), and Congressional Research Service (CIPS), confirm that both sides are operating within a carefully calculated margin, aiming to maximize strategic gains while avoiding a catastrophic all-out confrontation.

First, the analysis shows that Iran's nuclear behavior does not necessarily reflect an inevitable drive toward acquiring nuclear weapons, but rather a rational use of its latent nuclear capability as a tool for deterrence and negotiation in an international environment that is increasingly legitimizing nuclear deterrence. The rise in enrichment levels, according to reports from the International Atomic Energy Agency, coincided with increased mediation channels and diplomatic engagement,

suggesting an inverse relationship between approaching the nuclear threshold and the likelihood of actual weapon use.

Second, the research shows that the United States, despite its escalating rhetoric, is adopting a risk-management approach rather than a military one. Assessments from Congress confirm that American concern is focused on preventing Iran's political decision to pursue nuclear weapons, not on the technical capabilities themselves. This explains the continuation of the policy of sanctions and indirect deterrence instead of direct confrontation.

Third, the global dimension of the conflict emerges as a crucial factor in explaining the limitations of the nuclear scenario. Data from the Stockholm International Peace Research Institute (SIPRI) reveals a renewed nuclear arms race led by major powers, making the Iranian situation part of broader structural dynamics governed by considerations of power balance and mutual deterrence, rather than simply a regional exception. Within this context, acquiring or approaching nuclear capability becomes a tool for repositioning oneself within the international system, rather than a prelude to the actual use of the weapon.

Accordingly, the most likely scenario is the continuation of the new Cold War pattern between Iran and the United States, where the confrontation is managed through indirect economic, cyber, and military means, with nuclear escalation remaining within the bounds of symbolic deterrence. However, this fragile stability remains vulnerable to collapse should three conditions converge: strategic miscalculation, uncontrolled regional escalation, or the breakdown of international mediation channels.

In conclusion, the study recommends a shift from punitive containment policies to multilateral regional security approaches that integrate the nuclear issue within a broader framework of collective security in the Middle East. This would reduce the incentives for escalation and mitigate the risks of nuclear proliferation. The study also emphasizes the need to strengthen early warning mechanisms, nuclear transparency, and confidence-building measures, not only between Iran and the United States, but also within the international system as a whole. The future of this conflict will not be decided by military force, but rather by the ability of international actors to manage global nuclear transformations within a more stable and rational framework.

Policy Implications (Practical Implications for Decision Makers)

At the level of the United States and its allies

The research findings suggest that US policy needs to shift from a unilateral, punitive approach to a more nuanced one that combines deterrence, conditional engagement, and risk management. Continuing sanctions without a clear political horizon could push Iran toward further technological escalation rather than de-escalation, while opening informal channels of negotiation could reduce the risk of strategic miscalculation.

At the level of Iran

The data shows that employing latent nuclear capabilities as a bargaining chip yields short-term gains but carries long-term strategic risks, especially given the fragile regional environment. Therefore, the study recommends that Iranian policy move toward institutionalizing partial nuclear transparency with the International Atomic Energy Agency, thereby strengthening deterrence without crossing international red lines.

At the regional level (the Middle East)

There is an urgent need to develop a multilateral regional security framework that addresses the nuclear issue within a broader system encompassing maritime security, ballistic missiles, and proxy conflicts. The absence of such a framework leaves the region hostage to unstable deterrence balances.

At the international level

Research from the Stockholm International Peace Research Institute (SIPRI) confirms that a renewed nuclear arms race necessitates a revitalization of arms control and non-proliferation mechanisms within the international community. In this context, integrating the Iranian situation into broader international dialogues on strategic stability is a crucial step in mitigating the risks of accidental nuclear proliferation.

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References

- [1] Gasiorowski, M. J. (1987). The 1953 coup d'état in Iran. *International Journal of Middle East Studies*, 19(3), 261–286. <https://doi.org/10.1017/S0020743800056737>
- [2] Wolf, L. A. (2006). America held hostage: The Iran hostage crisis of 1979–1981 and U.S.-Iranian relations. *OAH Magazine of History*, 20(3), 27–30. <https://doi.org/10.1093/maghis/20.3.27>
- [3] Muhana, B., & Shnein, R. (2022). The US strategy towards Iran in the context of the development of relations between the two countries (2015–2018). *Journal of Kufa Studies Center*, 1(65A), 373–390. <https://doi.org/10.36322/jksc.v1i65.9717>
- [4] Spruk, R. (2026). *Confrontation with the West and long-run economic and institutional outcomes: Evidence from Iran* [Preprint]. arXiv. <https://doi.org/10.48550/arXiv.2602.03231>
- [5] Menon, K. (2013). Charm offensive or “Axis of Evil”? An analysis of the Iranian nuclear program and American responses. *LUX: A Journal of Transdisciplinary Writing and Research*, 3(1), Article 11. <https://doi.org/10.5642/lux.201303.11>
- [6] Mohiuddin, A., & Razali, M. M. (2025). The JCPOA dilemma: Iran, the US and the evolving landscape of nuclear politics. *Contemporary Arab Affairs*, 18(1). <https://doi.org/10.1163/17550920-bja00064>
- [7] Financial Times. (2025, May 31). Iran has increased enriched uranium by 50%, says UN watchdog: IAEA findings raise new concerns over country's capabilities amid nuclear talks between Tehran and Washington. <https://www.ft.com/content/5e4dbcdc-760a-4c99-baca-eb321e410ff3>
- [8] Critical Threats. (2025, July 3). *Iran updates, June 2025*. <https://www.criticalthreats.org/analysis/iran-updates-june-2025>
- [9] Associated Press. (2025, November 12). *UN watchdog hasn't been able to verify Iran's stockpile of near-weapons grade uranium in months*. <https://apnews.com/article/iran-nuclear-iaea-uranium-stockpile-weapon-364d3ce5f8ec54e1c188a17ff04559ce>
- [10] Albright, D., & Burkhard, S. (2022, April 11). *Entering dangerous, uncharted waters: Iran's 60 percent highly enriched uranium*. Institute for Science and International Security. <https://isis-online.org/isis-reports/entering-uncharted-waters-irans-60-percent-highly-enriched-uranium>

- [11] Albright, D., Burkhard, S., Faragasso, S., & Stricker, A. (2024, March 4). *Analysis of IAEA Iran verification and monitoring report—February 2024*. Institute for Science and International Security. <https://isis-online.org/isis-reports/analysis-of-iaea-iran-verification-and-monitoring-report-february-2024>
- [12] Albright, D., Burkhard, S., Faragasso, S., & Stricker, A. (2024, March 4). *Analysis of IAEA Iran verification and monitoring report—February 2024*. Institute for Science and International Security. <https://isis-online.org/isis-reports/analysis-of-iaea-iran-verification-and-monitoring-report-february-2024>
- [13] The Jerusalem Post. (2025, March 3). *Iran has enough uranium for six nuclear weapons, IAEA warns*. <https://www.jpost.com/middle-east/article-844476>
- [14] The Jerusalem Post. (2025, March 3). *Iran has enough uranium for six nuclear weapons, IAEA warns*. <https://www.jpost.com/middle-east/article-844476>
- [15] Politico. (2025, May 31). *Iran has amassed even more near weapons-grade uranium, UN watchdog says*. <https://www.politico.com/news/2025/05/31/iran-nuclear-weapons-un-report-00378773>
- [16] Associated Press. (2025, September 3). *Iran increased stockpile of near weapons-grade uranium before Israeli attack, UN agency says*. <https://apnews.com/article/iran-nuclear-iaea-weapons-grade-uranium-c3ae6a8aae96d54355df73842916a324>
- [17] Associated Press. (2025, November 12). *UN watchdog hasn't been able to verify Iran's stockpile of near-weapons grade uranium in months*. <https://apnews.com/article/iran-nuclear-iaea-uranium-stockpile-weapon-364d3ce5f8ec54e1c188a17ff04559ce>
- [18] Stockholm International Peace Research Institute. (2025, June 16). *Nuclear risks grow as new arms race looms—New SIPRI yearbook out now*. <https://www.sipri.org/media/press-release/2025/nuclear-risks-grow-new-arms-race-looms-new-sipri-yearbook-out-now>
- [19] Kristensen, H. M., & Korda, M. (2025). World nuclear forces. In *SIPRI yearbook 2025: Armaments, disarmament and international security*. Stockholm International Peace Research Institute.
- [20] Congressional Research Service. (2025, June 24). *Iran and nuclear weapons production* (CRS Product No. IF12106). <https://www.congress.gov/crs-product/IF12106>
- [21] Congressional Research Service. (2025, June 24). *Iran and nuclear weapons production* (CRS Product No. IF12106). <https://www.congress.gov/crs-product/IF12106>
- [22] Associated Press. (2025, February 26). *Iran accelerates production of near weapons-grade uranium, IAEA says, as tensions with US ratchet up*. <https://apnews.com/article/iran-nuclear-iaea-weapons-grade-uranium-trump-0b11a99a7364f9a43e1c83b220114d45>
- [23] Associated Press. (2025, February 26). *Iran accelerates production of near weapons-grade uranium, IAEA says, as tensions with US ratchet up*. <https://apnews.com/article/iran-nuclear-iaea-weapons-grade-uranium-trump-0b11a99a7364f9a43e1c83b220114d45>
- [24] Financial Times. (2025, May 31). *Iran has increased enriched uranium by 50%, says UN watchdog: IAEA findings raise new concerns over country's capabilities amid nuclear talks between Tehran and Washington*. <https://www.ft.com/content/5e4dbcdc-760a-4c99-baca-eb321e410ff3>
- [25] Associated Press. (2025, February 26). *Iran accelerates production of near weapons-grade uranium, IAEA says, as tensions with US ratchet up*. <https://apnews.com/article/iran-nuclear-iaea-weapons-grade-uranium-trump-0b11a99a7364f9a43e1c83b220114d45>
- [26] Waltz, K. N. (1979). *Theory of international politics*. Addison-Wesley.
- [27] Sagan, S. D. (2011). The causes of nuclear weapons proliferation. *Annual Review of Political Science*, 14, 225–244. <https://doi.org/10.1146/annurev-polisci-052209-131042>
- [28] Jervis, R. (1989). *The meaning of the nuclear revolution: Statecraft and the prospect of Armageddon*. Cornell University Press.

- [29] Schelling, T. C. (1966). *Arms and influence*. Yale University Press.
- [30] Wendt, A. (1992). Anarchy is what states make of it: The social construction of power politics. *International Organization*, 46(2), 391–425. <https://doi.org/10.1017/S0020818300027764>
- [31] Acton, J. M. (2018). Escalation through entanglement: How the vulnerability of command-and-control systems raises the risks of an inadvertent nuclear war. *International Security*, 43(1), 56–99. https://doi.org/10.1162/isec_a_00320
- [32] Mahmud, K. U., & Hossain, M. S. (2025). Tracing the geopolitical influence and regional power dynamics in Central Asia: A thematic analysis with neorealist perspectives. *Discover Global Society*, 3, 132. <https://doi.org/10.1007/s44282-025-00269-3>
- [33] Turashvili, I. (2024). The dynamics of US-Iran relations—from alliance to hostility. <https://doi.org/10.61446/pa.2.2024.8422>
- [34] Turashvili, I. (2024). The dynamics of US-Iran relations—from alliance to hostility. <https://doi.org/10.61446/pa.2.2024.8422>
- [35] Taddeo, M. (2018). The limits of deterrence theory in cyberspace. *Philosophy & Technology*, 31, 339–355. <https://doi.org/10.1007/s13347-017-0290-2>
- [36] JordanAnderson. (2018, October 16). *Kenneth Waltz and the balance of neorealist power*. UBC Blogs. <https://blogs.ubc.ca/thucydidesplease/2018/10/16/kenneth-waltz-and-the-balance-of-neorealist-power/>
- [37] Turashvili, I. (2024). The dynamics of US-Iran relations—from alliance to hostility. <https://doi.org/10.61446/pa.2.2024.8422>
- [38] Monshipouri, M. (2023). Iran’s foreign policy: Navigating ideological and geopolitical spheres. In *In the shadow of mistrust: The geopolitics and diplomacy of US-Iran relations*. Oxford University Press. <https://doi.org/10.1093/oso/9780197659632.003.0004>
- [39] Horowitz, M. C., Scharre, P., & Velez-Green, A. (2019). *A stable nuclear future? The impact of autonomous systems and artificial intelligence* [Preprint]. arXiv. <https://doi.org/10.48550/arXiv.1912.05291>
- [40] Kohl, I. (2025). Navigating multipolarity: The evolution of foreign policy strategies through a political science lens. *Journal of International Relations and Policy*, 6(1), 19–38. <https://doi.org/10.47941/jirp.3184>
- [41] Paula, N. A. (2026). The role of the United Nations in protecting human rights in Palestine (the phase of post-Al-Aqsa Flood). *Al-Biruni Journal of Humanities and Social Sciences*, 4(2). <https://doi.org/10.64440/BIRUNI/BIR015>
- [42] Berdaliyev, A., Turekulova, Z., & Muminov, N. (2025). Iran and the Arab states: Conflict and cooperation in the context of regional instability. *Eurasian Research Journal*, 7(3), 267–283.
- [43] Cranmer, S. J., Menninga, E. J., & Mucha, P. J. (2014). Kantian fractionalization predicts the conflict propensity of the international system. *Proceedings of the National Academy of Sciences*. <https://doi.org/10.1073/pnas.1509423112>