The Bellicose Duopoly: A Game Theoretic Analysis of the 2025 US-China Trade War

Section 1: The Strategic Landscape of Renewed Economic Conflict

The economic relationship between the United States and the People's Republic of China, once defined by deepening interdependence, has transformed into the 21st century's most significant strategic rivalry. The trade war, initiated in 2018, represents not merely a dispute over tariffs and trade balances but a fundamental clash of economic models, national interests, and geopolitical ambitions.[1] After a period of uneasy truce, the conflict reignited with unprecedented intensity in a hypothetical 2025 scenario, characterized by rapid, tit-for-tat escalations that pushed both nations to the brink of a full economic rupture before a volatile de-escalation was achieved.[3] To understand the strategic calculus of both powers and to model their future interactions, it is essential to first dissect the foundational objectives, strategic philosophies, and the specific dynamics of this renewed conflict. This section establishes the context for a formal game theoretic analysis by examining the stated and unstated goals of the US and China, and the nature of the 2025 escalation cycle that serves as the primary behavioral data for this study.

1.1 The American Position: A Multi-faceted Offensive

The United States' posture in the trade war is driven by a complex mix of publicly articulated economic grievances and a deeper, less explicit strategic imperative to manage the rise of a peer competitor. This dual motivation has shaped a multi-pronged offensive strategy that utilizes both traditional trade levers and novel non-tariff barriers.

The publicly stated objectives of the US administration center on rectifying what it perceives as longstanding unfair trade practices by China. These grievances, which date back to the first phase of the trade war in 2018 and were re-emphasized in 2025, include a massive bilateral trade deficit, systemic intellectual property (IP) theft, the forced transfer of technology as a condition for market access, and significant state subsidies that distort global markets.[1] The primary tool used to address these issues has been the unilateral imposition of tariffs on hundreds of billions of dollars of Chinese goods, with the explicit goal of pressuring Beijing to reform its economic system and encouraging the reshoring of critical manufacturing to enhance American industrial capacity and national security.[1]

However, the actions undertaken by the US, particularly in the technological domain, reveal a broader strategic imperative that extends far beyond balancing trade ledgers. The implementation of stringent export controls on "industrially significant technology" such as advanced semiconductors and artificial intelligence (AI) software, coupled with restrictions on Chinese investment in strategic US sectors, points to a deliberate strategy of containment.[3] The objective is not merely to level the economic playing field but to actively slow China's technological advancement and prevent it from achieving dominance in the foundational industries of the 21st-century economy.[7] This transforms the conflict from a mere trade dispute into a comprehensive technological and strategic rivalry, a shift that has gained bipartisan consensus in Washington.[8]

The 2025 escalation cycle introduced a novel and politically potent justification for US tariffs: curbing the flow of fentanyl and its chemical precursors from China.[3] This move strategically reframed the conflict, shifting it from the complex and often abstract domain of trade policy to a visceral public health and national security crisis. By linking tariffs to the tangible human cost of the opioid epidemic, the US administration was able to construct a powerful moral argument for its actions. This narrative shift had the potential to broaden domestic political support beyond traditional protectionist constituencies and to neutralize criticism regarding the negative impact of tariffs on American consumers. More importantly, it inherently raised the political stakes of de-escalation, as any concession on tariffs could be framed by political opponents as being "soft" on drug trafficking, not just on trade. This altered the domestic political payoff structure for US leaders, making aggressive trade actions more defensible and compromise more difficult.

1.2 The Chinese Position: Hedged Integration and Strategic Endurance

China's response to the US offensive has been a carefully calibrated strategy of public defense, reciprocal retaliation, and long-term economic reorientation. While publicly positioning itself as a defender of the global trading order, Beijing has simultaneously pursued a profound internal transformation designed to mitigate its vulnerabilities and enhance its strategic endurance.

In the public sphere, China has consistently framed its actions as a defense of the multilateral, rules-based trading system embodied by the World Trade Organization (WTO). It portrays the United States as a unilateral aggressor whose protectionist policies threaten global economic stability.[1] Consequently, China's retaliatory tariffs are presented not as acts of aggression but as necessary, symmetrical responses to US provocation, legally justified within the WTO's dispute settlement framework.[2] This narrative is designed to appeal to a global audience and to isolate the US diplomatically.

The centerpiece of China's long-term strategic response, however, is the "Dual Circulation" Strategy (DCS). This is not merely a defensive tactic but a fundamental re-writing of China's role in the global economy. The strategy aims to reorient China's economic model by strengthening domestic consumption as the primary engine of growth (the "internal circulation") while fostering technological self-sufficiency in critical sectors.[11] The goal is to create a more resilient economy, insulated from external shocks like US tariffs and technology restrictions—a form of "hedged integration".[14] The trade war starkly exposed China's vulnerability as an export-led economy dependent on access to the US market and its reliance on foreign technology.[12] DCS is the direct answer to this vulnerability. It is not an isolationist turn inward; rather, it is a proactive strategy to make China more indispensable to the global economy on its own terms, reducing the coercive leverage the US can exert through market access and technology denial.[12] By investing heavily in its domestic market and technological base, China is actively working to change its own utility function in future rounds of the conflict, aiming to become a player that is far less deterred by the threat of economic sanctions.

Beyond tariffs, China has demonstrated a willingness to deploy its own powerful, asymmetric levers of influence. The most significant of these is its dominant position in the mining and processing of rare earth minerals and other critical materials essential for high-tech manufacturing in the United States.[17] The implementation of export licensing requirements for seven types of rare earths in April 2025 was a clear signal of this leverage.[3] This non-tariff barrier represents a potent countermove that

directly targets a key US economic and national security vulnerability, disrupting supply chains for everything from electric vehicles to advanced defense systems.[3] The subsequent easing of these restrictions became a central component of the de-escalation deal, underscoring their strategic importance.[9]

1.3 The 2025 Escalation Cycle: A Case Study in Brinkmanship

The events of early 2025 provide a crucial case study in the strategic dynamics of the trade war. The period was marked by a rapid and seemingly uncontrolled escalation cycle, followed by an equally swift, albeit partial, de-escalation. This cycle of brinkmanship reveals the risk tolerance and ultimate constraints of both players.

Beginning in February 2025, the US initiated a series of escalating tariff hikes, citing the fentanyl issue and broader trade imbalances. Tariffs on Chinese goods rose from a baseline to 10%, then 20%, then 54% on "Liberation Day" (April 2), and ultimately to a prohibitive 125% by April 10.[3] China matched this escalation at every step, moving from initial retaliatory tariffs of 10-15% to 34%, then 84%, and finally to 125% on US imports.[3] This tit-for-tat dynamic, occurring over a matter of weeks, threatened to effectively end most bilateral trade and triggered significant alarm in global financial markets.[18]

The extreme escalation, however, proved unsustainable. The prospect of mutually assured economic damage prompted both sides to seek an off-ramp. High-level talks in Geneva in May led to a dramatic de-escalation agreement. Both countries agreed to a temporary reduction of their reciprocal tariffs, with the US rate on Chinese goods falling to 30% and the Chinese rate on US goods falling to 10%.[3] Subsequent talks in London further solidified this truce, focusing on non-tariff issues like China's rare earth export controls and US restrictions on student visas.[9] Later reports suggested the US tariff rate settled at 55%, a figure that included pre-existing levies and the fentanyl-related duties, while China's remained at 10%.[3]

This cycle is profoundly instructive. It demonstrates that both the US and China are willing to engage in high-stakes brinkmanship, absorbing significant economic costs to signal resolve and test the other's limits. However, it also shows that both sides recognize a threshold beyond which the economic pain becomes politically intolerable. The rapid retreat from 125% tariffs indicates that both players are ultimately constrained by the need to avoid a full-scale economic collapse. This

observed behavior—a willingness to risk catastrophe followed by a pragmatic pull-back to a new, more hostile, but manageable status quo—forms the empirical foundation for the game theoretic model developed in the following sections.

Section 2: Modeling the Trade War: A Dynamic Game of Incomplete Information

To systematically analyze the strategic interactions between the United States and China, a formal game theory model is required. Simple, static models such as a one-shot Prisoner's Dilemma are insufficient to capture the complexity of the trade war. The conflict's sequential, retaliatory nature, the profound uncertainty each player faces regarding the other's true intentions and pain thresholds, and the possibility of repeated interactions necessitate a more sophisticated framework. Therefore, the conflict is best modeled as a multi-stage, dynamic game of incomplete information. This structure allows for an analysis of how actions unfold over time and how players update their beliefs based on the observed behavior of their rival.

2.1 Players and Information Structure

The game is defined by two primary actors operating under conditions of significant uncertainty.

Players:

- **Player 1: United States (US):** This player represents the executive branch of the US government. Its decision-making is a function of balancing multiple, often competing, objectives: achieving long-term national security goals, maintaining domestic economic stability, and satisfying key political constituencies to ensure electoral viability.
- **Player 2: People's Republic of China (PRC):** This player represents the senior leadership of the Chinese Communist Party (CCP), primarily the Politburo Standing Committee. Its decisions are driven by the need to balance rapid economic development, preserve social stability and regime legitimacy, achieve

technological supremacy, and enhance China's geopolitical standing.

Information Structure:
The game is characterized by incomplete information. This means that neither player has perfect knowledge of the other's "type"—specifically, their true preferences, capabilities, and resolve. This uncertainty is a central feature of the conflict and a primary driver of miscalculation. Key areas of uncertainty include:

- **US Political Resolve:** China does not know with certainty the true level of economic pain—in the form of inflation, GDP loss, or sectoral disruption—that the US administration is willing to tolerate to achieve its long-term strategic goals. This tolerance is a variable influenced by the electoral calendar, public opinion, and the cohesiveness of the domestic political coalition supporting the trade war.[21]
- **China's Economic Breaking Point:** The US does not know the precise threshold of economic slowdown and social dislocation that the CCP can endure before it faces a significant crisis of legitimacy or widespread domestic unrest. While the CCP's control is formidable, its legitimacy is heavily dependent on delivering prosperity, making this a critical but opaque variable.[23]
- **Efficacy of Asymmetric Levers:** There is inherent uncertainty about the true impact of each side's unique non-tariff weapons. Neither the US nor China can be fully certain of the devastating effects of a full-scale US technology blockade or a complete Chinese embargo on rare earths until these actions are actually taken and their second- and third-order consequences ripple through complex global supply chains.

2.2 The Game Tree: Stages and Actions

The conflict is modeled as a sequential game that unfolds over multiple stages, where each stage represents a key decision point. The game proceeds in a tit-for-tat fashion, reflecting the observed retaliatory dynamics.

- **Stage 1: US Initial Move.** The game begins with the US choosing an action from its available strategy set. This could be maintaining the status quo, de-escalating, or escalating.
- **Stage 2: China's Response.** After observing the US action, China chooses its response from its own strategy set.
- **Stage 3: US Counter-Response.** The US observes China's response and

chooses its next move, and the game continues.

A crucial element of this game is the **Negotiation Sub-Game**. At any stage, either player can signal a desire to negotiate. If the other player agrees, they enter a sub-game where the actions are focused on bargaining and settlement. A successful negotiation leads to a de-escalation outcome, resetting the main game to a new, lower level of hostility. The talks in Geneva and London in the 2025 scenario represent a clear activation of this sub-game, providing an essential "off-ramp" from mutually destructive escalation.[3]

2.3 The Strategy Set

To formalize the model, the abstract notions of "cooperation" and "defection" must be replaced with a menu of concrete, observable policy actions available to each player. These strategies are derived directly from the actions documented in the 2018-2025 period.

The choice of an *asymmetric* escalation strategy is particularly revealing. A symmetric, tit-for-tat tariff increase is a simple and easily understood signal of resolve.[3] In contrast, an asymmetric move, such as the US targeting advanced technology [3] or China restricting rare earth exports [3], is a more complex and deliberate strategic choice. A player opts for an asymmetric strategy when it believes it possesses a unique advantage in a specific domain that the opponent cannot easily counter. The US choice reveals a theory of victory based on technological containment and slowing China's rise. China's choice reveals a theory of victory based on supply chain coercion and exploiting US dependencies. The clash of these competing asymmetric strategies lies at the heart of the conflict's most dangerous and unpredictable dynamic.

Furthermore, the players are engaged in more than just the immediate game. They are simultaneously playing a "meta-game" where they invest resources today to change the rules and payoffs of future contests. China's "Dual Circulation" strategy is a prime example; it is a costly, long-term investment designed explicitly to reduce China's future economic vulnerability to US sanctions, thereby altering its own payoff from a future US "Escalate" move.[11] Similarly, US policies to reshore semiconductor manufacturing and secure alternative supply chains are designed to neutralize China's leverage over critical materials.[5] This meta-game means that any equilibrium is inherently unstable, as the underlying conditions of the game itself are constantly

being contested and reshaped by the players' strategic investments.

Table 1: Player Strategy Set

Strategy	United States (US)	People's Republic of China (PRC)
De-escalate (D)	Reduce or remove tariffs; ease technology and investment restrictions; offer substantive concessions in negotiations.	Reduce or remove retaliatory tariffs; ease non-tariff barriers (e.g., rare earth export licensing); offer substantive concessions in negotiations.
Maintain Status Quo (SQ)	Maintain current tariff levels and non-tariff restrictions; continue confrontational rhetoric without implementing new punitive actions.	Maintain current retaliatory measures and non-tariff barriers; continue confrontational rhetoric without implementing new punitive actions.
Escalate Symmetrically (ES)	Increase tariffs on a broad range of Chinese goods in direct, proportional response to Chinese actions (tit-for-tat).	Increase retaliatory tariffs on a broad range of US goods (e.g., agriculture, automobiles, energy) in direct, proportional response to US actions.
Escalate Asymmetrically (EA)	Impose or tighten non-tariff barriers: export controls on critical technologies (semiconductors, AI), expanded investment restrictions (CFIUS), visa restrictions for students and officials, sanctions on specific Chinese firms.	Impose or tighten non-tariff barriers: export controls on critical materials (rare earths, industrial magnets), customs delays and increased inspections, targeted regulatory hurdles for US firms, encouraging nationalist consumer boycotts.
Initiate Negotiations (N)	Propose high-level talks to seek a settlement or a temporary truce, potentially involving presidential-level engagement.	Propose high-level talks or agree to US proposals for talks to manage escalation and seek tactical concessions.

Section 3: The Payoff Matrix: Quantifying National Interest and

Political Will

To predict the behavior of the US and China within the game theoretic framework, it is necessary to move beyond a qualitative description of their goals and develop a quantitative method for evaluating the outcomes of their strategic interactions. This requires constructing a payoff matrix that reflects the value, or "utility," each player assigns to every possible end state of the game. A simple monetary calculation is inadequate, as leaders weigh a complex combination of economic, political, and strategic factors. This section develops a multi-attribute utility function for each player, with weights assigned to each component based on their stated priorities and observed behavior.

3.1 Defining the Utility Function

The payoff for each player (P) for any given outcome is calculated as a weighted sum of four key variables that represent their core national interests. The utility function is expressed as:

$Payoff(P) = w_1 \cdot E + w_2 \cdot D + w_3 \cdot T + w_4 \cdot S$
Where:

- E represents the **Economic Impact** of the outcome.
- D represents the **Domestic Political Impact**.
- T represents the effect on **Technological Dominance**.
- S represents the effect on **Supply Chain Security**.
- w_1, w_2, w_3, w_4 are the weights assigned to each component, reflecting the strategic priorities of each nation. These weights are non-negative and sum to 1.

3.2 Components and Weighting

The value of each component is scored on a scale from -10 (a catastrophic negative impact) to +10 (a major strategic victory). The weights are derived from an analysis of the policy statements, strategic documents, and behavioral patterns evident in the

source material.

The differential weighting within these utility functions reveals a fundamental asymmetry in the primary motivations of the two players. For the United States, the highest weight is assigned to **Domestic Political Impact** (0.35), reflecting the acute pressures of electoral cycles and the political imperative to project an image of strength toward China.[5] In contrast, the paramount concern for the People's Republic of China is

Economic Impact (0.40), a reflection of the Chinese Communist Party's core legitimacy bargain, which hinges on the consistent delivery of economic growth and social stability.[23] This divergence creates a potentially dangerous dynamic of miscalculation. US actions may be calibrated for short-term political optimality, operating under the assumption that economic pressure will compel China to concede. However, because China perceives significant economic disruption as a direct threat to regime survival, it may be willing to endure a level of economic pain that US models, based on political logic, fail to predict.

Furthermore, the **Technological Dominance** component creates a perilous positive-feedback loop for conflict. When the US escalates asymmetrically with technology controls, its 'T' score in the payoff function increases, incentivizing more of the same action. This directly threatens China's 'T' and 'S' scores, forcing Beijing to accelerate its "Dual Circulation" and self-sufficiency efforts to escape this technological containment.[16] This progress by China is then perceived in the US as a growing strategic threat, justifying even tighter controls. Unlike tariffs, which can be readily reversed in a negotiation, actions in the technology sphere create a self-reinforcing cycle of escalation. Each side's defensive move is interpreted as an offensive threat by the other, locking them into a long-term, structural competition that becomes exceedingly difficult to de-escalate.

Table 2: Payoff Utility Function Components and Weights

Component	Description & Measurement Proxy	US Weight (w)	US Justification	PRC Weight (w)	PRC Justification
E: Economic Impact	Change in real GDP growth forecast;	0.30	The economy is a significant concern,	0.40	This is the paramount variable. The CCP's

	inflation rate; impact on key sectors (e.g., agriculture, manufacturing). Measured on a scale of -10 (severe recession) to +10 (strong growth).		with studies and forecasts highlighting the costs of the trade war in terms of lost GDP, jobs, and investment.[19] However, the administration demonstrates a willingness to absorb these costs to achieve strategic and political objectives.[2]		legitimacy and social stability are fundamentally tied to delivering continued economic growth and prosperity. A faltering economy is viewed as a direct and existential threat to the regime's survival.[23]
D: Domestic Political Impact	Change in leadership approval ratings; support from key political constituencies (e.g., manufacturing base, farmers); media narrative. Measured on a scale of -10 (major unrest/loss of power) to +10 (rally-around-the-flag effect).	0.35	This is the highest priority for a US administration operating within a democratic system with regular electoral cycles. Actions are consistently framed for domestic political consumption, and appearing "tough on China" is a key political	0.30	The CCP is highly attuned to domestic sentiment, but its goal is different: ensuring social stability and preempting any form of organized dissent. It is less sensitive to public opinion polls but hyper-sensitive to signs of unrest that could challenge its

			goal that resonates with a significant portion of the electorate.[2]		authority, such as that stemming from youth unemployment or property market collapses.[23]
T: Technological Dominance	Perceived progress in slowing China's tech advancement vs. China's progress in achieving self-sufficiency. Measured on a scale of -10 (strategic setback) to +10 (major advantage gained).	**0.25**	A rapidly growing priority that is central to the long-term "peer competition" framework. Aggressive actions like semiconductor export controls and investment bans demonstrate a high willingness to prioritize this goal, even at a significant economic cost.[3]	**0.20**	A core pillar of national strategy, embodied in policies like "Made in China 2025" and "Dual Circulation." Achieving technological self-reliance is seen as the only way to break free from US strategic leverage and secure China's future as a global power.[10]
S: Supply Chain Security	Access to critical inputs (US: rare earths, batteries, medical supplies; PRC: advanced chips, design	**0.10**	Historically a lower-order concern, its importance has surged as the trade war exposed critical vulnerabilities. The	**0.10**	Similar to the US, the trade war has exposed China's critical dependence on foreign technology inputs.

	software). Measured on a scale of -10 (critical supply chain severed) to +10 (full security and access).		intense focus on securing rare earth mineral flows in the 2025 de-escalation deal highlights this newfound strategic salience.[9]		Securing access to these inputs, or developing domestic replacements, is a major driver of industrial policy and a key element of the "Dual Circulation" strategy.[3]

Section 4: Equilibrium Analysis and Scenario Projections

By applying the game tree, strategy sets, and weighted payoff functions defined in the preceding sections, it is possible to analyze the strategic dynamics of the US-China trade war and project its most likely trajectories. The equilibrium of the game is determined by tracing the rational choices of each player as they seek to maximize their utility at each stage. This analysis reveals three overarching macro-scenarios that represent the principal pathways the conflict could follow, each with a distinct payoff structure and level of stability.

4.1 Scenario A: Mutually Assured Economic Destruction (Full Escalation)

- **Path:** This scenario unfolds if both players repeatedly choose their most aggressive strategies, "Escalate Symmetrically" (ES) and "Escalate Asymmetrically" (EA), without resorting to the negotiation off-ramp. In this pathway, the US imposes prohibitive tariffs exceeding 100% on all Chinese goods and enacts a full-scale blockade on technology exports. In response, China imposes its own prohibitive tariffs and brings its most powerful asymmetric weapon to bear: a complete halt to the export of rare earth minerals, processed

critical materials, and other essential industrial inputs.

- **Analysis:** This path leads to the worst possible outcome for both players, particularly in the **Economic Impact (E)** component of their utility functions. The International Monetary Fund (IMF) and World Bank have consistently warned that such high-tariff scenarios would trigger a sharp contraction in global trade, leading to significantly slower national GDP growth, higher inflation, and widespread supply chain disruptions.[19] While leaders might experience a brief "rally-around-the-flag" effect that boosts their
Domestic Political (D) score, the catastrophic economic fallout would quickly overwhelm this, leading to widespread business failures, job losses, and consumer hardship, ultimately turning the political score sharply negative. This is a classic "lose-lose" outcome. The 2025 escalation to 125% tariffs brought the players to the very brink of this scenario, and their subsequent rapid retreat demonstrates a clear, shared understanding of its mutually destructive nature.[3] Therefore, this scenario represents a dominated strategy for both players and is highly unstable; it is a state they will actively seek to avoid.

4.2 Scenario B: The Unstable Détente (Cyclical Escalation & De-escalation)

- **Path:** This scenario most closely reflects the observed behavior of 2025. It is a dynamic cycle where periods of intense escalation are followed by negotiated de-escalations to a less damaging, but still fundamentally hostile, status quo. In this path, one player escalates to inflict pain and signal resolve. As the costs mount, both players agree to enter the **Negotiation (N)** sub-game, resulting in a temporary truce or a limited deal. However, the underlying sources of conflict remain unresolved, and deep mistrust persists. The truce is therefore fragile, with one or both sides eventually finding a new pretext to escalate again, restarting the cycle. President Trump's accusation that China had "TOTALLY VIOLATED ITS AGREEMENT" shortly after the Geneva deal exemplifies the inherent instability of these arrangements.[3]
- **Analysis:** This pathway represents a likely equilibrium in a repeated game where players have learned from past interactions. They have learned that full escalation (Scenario A) is too costly, but a comprehensive, trust-based settlement (Scenario C) is politically unachievable. They therefore settle into a cyclical pattern of conflict and truce. A key feature of this scenario is that the "uncertainty tax" on the economy becomes a permanent condition.[20] Businesses are unable to make long-term investment and sourcing decisions with confidence, which acts as a

persistent drag on economic growth. This scenario yields mediocre, but non-catastrophic, payoffs for both players across all categories. They avoid total disaster but fail to achieve any stable victory, locking themselves into a state of perpetual, managed hostility.

4.3 Scenario C: The Grand Bargain (Comprehensive Settlement)

- **Path:** This scenario occurs if both players make a strategic decision to **De-escalate (D)** and successfully negotiate a comprehensive, long-term, and verifiable agreement that addresses the core structural issues of the conflict.
- **Analysis:** A "Grand Bargain" would require far more than the limited agreements seen thus far. It would necessitate the US fully removing its punitive tariffs in exchange for credible and enforceable commitments from China on the very issues that the 2020 "Phase One" deal largely failed to resolve: comprehensive protection for intellectual property, a verifiable end to forced technology transfer practices, and significant reductions in state subsidies for targeted industries and state-owned enterprises.[1] This outcome would undoubtedly yield the highest possible payoff in the
Economic (E) category for both nations, unlocking growth and reducing inflation. However, it is extremely costly in the **Domestic Political (D)** category. A US leader agreeing to such a deal would face accusations of being "soft on China" and abandoning the core tenets of the trade war. A Chinese leader would face internal criticism for caving to foreign pressure and compromising national economic sovereignty. Given the intense domestic nationalism and deep strategic mistrust on both sides, this outcome, while economically optimal, is politically infeasible in the short-to-medium term.

Table 3: Summary of Scenario Outcomes and Payoffs (Illustrative)

Scenario	US Payoff Score	PRC Payoff Score	Key Characteristics
A: Full Escalation	-7.5	-8.0	Economic collapse, severe supply chain severance, high political risk of backlash from economic pain. A

			mutually destructive and dominated strategy.
B: Unstable Détente	+1.5	+1.0	High uncertainty, moderate but persistent economic damage, sustained political tension, partial and temporary strategic gains for both sides. Volatile but avoids catastrophe.
C: Grand Bargain	+4.0	+5.5	High economic benefit and reduced global tension, but entails extremely high domestic political costs for both leaderships, making it an unlikely path despite its economic appeal.

Section 5: The Predicted Outcome: Navigating Toward an Unstable Détente

The synthesis of the game theoretic model, the payoff structure, and the analysis of strategic alternatives points toward a clear and robust prediction: the most probable outcome of the US-China trade war is the **Unstable Détente** (Scenario B). This outcome does not represent an optimal state for either player, nor does it signify a resolution to the conflict. Instead, it is the most strategically stable path—an equilibrium born not of cooperation, but of the mutual recognition that the alternatives are catastrophically worse.

5.1 Why the Unstable Détente Prevails

The Unstable Détente emerges as the most likely equilibrium primarily through the domination of its alternatives. Scenario A, Full Escalation, is economically suicidal. The rapid retreat from the 125% tariff brink in May 2025 serves as a powerful real-world experiment confirming that both sides view this path as unacceptably destructive.[3] The economic pain would quickly translate into severe political instability, making it a dominated strategy for any rational leader. At the other extreme, Scenario C, the Grand Bargain, is politically impossible in the current climate. The deep-seated strategic mistrust, coupled with the intense domestic political pressures in both countries that reward confrontation, makes a comprehensive, trust-based settlement untenable.[8] The political cost of being seen as "caving" to the other side is simply too high for either leadership to bear.

By this process of elimination, the cyclical path of the Unstable Détente remains the only viable strategic option. It allows leaders on both sides to navigate between the Scylla of economic collapse and the Charybdis of political capitulation. The model suggests that this is not a temporary phase but a durable feature of the relationship. In a repeated game, players learn and adapt. The 2025 escalation cycle was an expensive but effective lesson. It taught both sides the limits of escalation and the utility of the negotiation off-ramp. They learned that they can engage in aggressive posturing to inflict pain—thereby satisfying domestic hardliners and signaling resolve—and then pull back to a negotiated truce that provides relief to economic stakeholders. This achieves a politically viable, if economically suboptimal, outcome. The pattern of frequent announcements of vague "agreements" or "frameworks," often with few concrete details and subject to immediate contestation, is the hallmark of this dynamic.[18]

The concept of a stable "equilibrium" in the classic sense can be misleading here. The Unstable Détente is better conceptualized as a "limit cycle" in dynamic systems theory. The relationship does not settle at a fixed point of rest. Instead, it oscillates perpetually within a bounded range of hostility. The system follows a predictable pattern: escalate -> inflict mutual pain -> approach the brink -> negotiate -> de-escalate to a tense truce -> allow mistrust to build -> find a new pretext -> escalate again. This reframing is critical for policymakers. It implies that a return to the pre-war "normal" is not a realistic goal. The objective should not be to find a permanent solution, but to manage the perpetual volatility of this cycle. The "uncertainty tax" that this dynamic imposes on the global economy is not a temporary problem to be solved, but a permanent feature of the new geoeconomic normal.[20]

5.2 The Role of Wildcard Factors

While the Unstable Détente represents the endogenous equilibrium of the game, the system is vulnerable to exogenous shocks, or "wildcards," that could dramatically alter the strategic landscape and push the players onto a different path.

- **Taiwan Conflict:** The most significant wildcard is a military crisis in the Taiwan Strait. An armed conflict, or even a major non-military confrontation like a Chinese quarantine of the island, would be a massive systemic shock. It would likely trigger an immediate and severe economic decoupling, forcing the players into a version of Scenario A that is driven by national security imperatives rather than purely economic logic. The logic of the trade war would be subsumed by the logic of war itself.[8]
- **Domestic Political Upheaval:** The model assumes relatively stable leadership in both countries. However, a major, unexpected domestic crisis could alter a player's resolve. A severe economic crisis in China, for example, could weaken the CCP's position and make it more amenable to a settlement to ensure its survival. Conversely, a change in the US administration could usher in a different strategic approach, although the strong bipartisan consensus on confronting China makes a radical pivot toward accommodation unlikely.[8]
- **Technological Breakthrough:** A disruptive technological breakthrough could destabilize the current dynamic. For instance, if China were to achieve independent mastery of cutting-edge semiconductor manufacturing, it would neutralize one of the US's most powerful asymmetric levers. Similarly, if the US were to develop commercially viable alternatives to rare earth-dependent technologies, it would diminish China's supply chain leverage. Such a shift would dramatically alter the payoff matrix for asymmetric escalation and could tempt one side to press its new advantage.

Paradoxically, the very nature of the Unstable Détente equilibrium increases the system's vulnerability to these wildcards. This state is characterized by high levels of tension, pervasive mistrust, and a lack of reliable, high-level communication channels.[8] In such a brittle environment, a minor incident—a naval collision in the South China Sea, a cyber-attack, a misinterpretation of a military exercise—is more likely to be perceived as a deliberate, hostile act of escalation. Because there is no underlying foundation of trust or a stable, comprehensive agreement, the system lacks the "cushion" needed to absorb such shocks. Therefore, the stability of the cycle breeds

fragility in the face of external events, meaning the players' rational management of the trade conflict could be upended by an accident or miscalculation that tips them into an unintended and catastrophic confrontation.

Section 6: The Ethical Ledger: Civilian Costs and Global Systemic Risk

A complete analysis of the US-China trade war cannot be confined to the abstract, state-centric model of game theory. The strategic choices made by leaders in Washington and Beijing have profound and tangible consequences for the welfare of their citizens, the stability of the global system, and the ethical responsibilities of great powers. An examination of these ethical dimensions reveals a complex landscape of competing moral frameworks, where the "right" course of action is fiercely contested and all paths involve significant trade-offs. The ethical debate can be understood through the lens of three conflicting perspectives identified in scholarly analysis: the liberal internationalist, the realist/values-based, and the transactional/nationalist critiques.[29]

6.1 Framework 1: The Liberal Internationalist Critique (The Cost of Conflict)

This framework, rooted in the belief that economic interdependence, global cooperation, and multilateral institutions are essential for peace and prosperity, views the trade war as an ethically indefensible endeavor. It prioritizes the welfare costs of the conflict and the damage done to the global order.

- **Civilian Impact in the US:** From this perspective, the tariffs are a self-inflicted wound. They function as a regressive tax, disproportionately harming lower- and middle-income households by increasing the prices of consumer goods.[22] The conflict has directly led to job losses in import-dependent sectors, bankruptcies among farmers targeted by Chinese retaliation, and a freeze in business investment due to pervasive uncertainty.[22] Studies have estimated the cost to the US economy in the hundreds of thousands of jobs and hundreds of billions of dollars in lost GDP and stock market value.[22] Public opinion polling reflects this pain, with a growing number of Americans believing the tariffs are personally

harmful.[21]

- **Civilian Impact in China:** The trade war compounds existing economic challenges within China. It acts as a significant headwind against growth, exacerbating problems like high youth unemployment, growing pessimism among the college-educated who face a lack of desirable jobs, and a collapsing property sector that threatens the life savings of millions of households.[23] Furthermore, the conflict provides a rationale for the Chinese government to prioritize state-led industrial stimulus over consumer-focused services and social safety nets, which could lead to a long-term decline in quality of life and an increase in inequality.[25]
- **Global Responsibility:** The liberal internationalist framework holds that as the world's two largest economies, the US and China have a special responsibility to act as stewards of the global system. Their conflict creates massive negative externalities for the rest of the world. It directly reduces global growth forecasts, as confirmed by institutions like the IMF and World Bank.[19] It disrupts global supply chains, increasing costs and reducing efficiency for all nations.[27] Crucially, the unilateral nature of the conflict undermines the very international institutions, like the WTO, that were created to prevent such destructive economic nationalism, eroding the rules-based order that has underpinned global prosperity for decades.[10]

6.2 Framework 2: The Realist/Values-Based Critique (The Cost of Engagement)

This framework presents a powerful counterargument, asserting that the previous era of deep economic engagement with China was itself ethically compromised. It argues that this engagement empowered an authoritarian regime that violates human rights at home and challenges the democratic international order abroad.[29] From this perspective, the economic pain of the trade war and decoupling is a necessary and justifiable price to pay for a more ethical long-term outcome.

- **Moral Trade-offs:** This view explicitly accepts the civilian costs identified by the liberal critique—higher consumer prices, sectoral job losses—as a difficult but necessary trade-off. The argument is that it is ethically untenable for the US to continue a trading relationship that provides the resources for the Chinese government to carry out mass oppression of its own people, for instance in Xinjiang and Hong Kong, and to pursue an increasingly assertive and coercive foreign policy.[5] President Trump's candid admission that he was "riding a fine line" between securing trade deals and addressing human rights in China perfectly

encapsulates this moral tension.[22] Proponents of this view argue that decoupling, despite its costs, is the only way to remove tacit American support for these practices.

- **Global Responsibility:** Here, global responsibility is defined not as upholding the current system, but as defending a future system based on liberal and democratic values. The argument is that it is globally irresponsible to allow a powerful, illiberal actor like China to leverage its economic might to reshape the world in its authoritarian image.[7] The trade war, therefore, is seen as a defensive action to protect the long-term health of the global democratic community, even if it damages the global economy in the short term.

6.3 Framework 3: The Transactional/Nationalist Critique (Who Benefits?)

This third framework eschews the grand principles of the other two and instead asks a more direct, pragmatic question: does the policy help or hurt *our* citizens? The ethical assessment is not based on universal values but on a nationalist calculation of costs and benefits, and the answer is deeply contested.[29]

- **Winners and Losers:** The trade war does not affect all citizens equally; it creates clear sets of winners and losers. In the US, manufacturing sectors that directly compete with Chinese imports may see a temporary surge in employment and protection, which is viewed as an ethical good from this perspective.[35] However, sectors that rely on Chinese inputs (like electronics) or export to the Chinese market (like agriculture and services) are devastated.[22] The ethical calculus becomes a highly politicized debate over which domestic groups are more deserving of government support. Globally, the conflict has created a class of "bystander" nations, such as Vietnam, Mexico, and Thailand, that have emerged as major economic winners by capturing trade and investment diverted from China.[36] From a purely transactional viewpoint, the trade war's ethics are in the eye of the beholder, depending entirely on whether one's own group or nation is benefiting or losing from the disruption.

This analysis reveals a critical dynamic: the trade war has created a form of "moral hazard" for these bystander nations. The clear economic benefits they derive from trade diversion give them a vested interest in the continuation of US-China tensions.[36] This complicates global diplomacy, as these countries may be reluctant to apply strong pressure for a resolution or to vigorously defend international trade norms at

the WTO if the conflict is proving profitable. The negative consequences of the conflict—higher prices, systemic risk—are borne primarily by US and Chinese civilians and the global system at large, while the benefits are concentrated in third countries, reducing their incentive to act as responsible stakeholders in resolving the dispute.

Ultimately, the conflict is driving a global reconfiguration of supply chains away from pure economic efficiency and toward political resilience and alignment—a trend often referred to as "de-risking" or "friend-shoring".[7] While this may satisfy the ethical criteria of the realist or nationalist frameworks by reducing dependence on an authoritarian rival, it imposes a permanent efficiency tax on the global economy. The new, fragmented system will be inherently less efficient, leading to structurally higher prices and lower potential growth for the entire world.[27] The ethical choice to de-risk from China carries a direct, long-term, and negative economic consequence for global welfare.

Section 7: Strategic Implications and Concluding Remarks

The synthesis of the game theoretic model and the ethical analysis provides a series of high-level, actionable insights for policymakers navigating the treacherous landscape of the US-China relationship. The central conclusion is that the trade war is not a temporary crisis to be "won" or "lost," but the manifestation of an enduring strategic rivalry. The most likely outcome, the Unstable Détente, is not a resolution but a new, volatile normal. Success, therefore, must be redefined: it is not about achieving a decisive victory, but about managing chronic instability and mitigating its most dangerous consequences.

7.1 Managing the Unstable Détente

The primary strategic challenge for policymakers in both Washington and Beijing is to manage the inherent volatility of the Unstable Détente. This requires a fundamental shift in mindset, away from seeking a final settlement and toward a strategy of managing a perpetual, low-grade conflict. The key objective is to prevent the predictable cycle of escalation and de-escalation from spiraling out of control due to

accident or miscalculation. The most critical step in this regard is the establishment and maintenance of reliable, multi-level crisis communication channels, particularly between the two militaries.[8] In an environment of deep mistrust, these channels are essential to de-conflict operations and to prevent a minor incident from being misinterpreted as a major provocation, which could trigger an unstoppable escalatory spiral. Diplomatic efforts should focus less on achieving a grand bargain and more on establishing clear "guardrails" or rules of the road for the competition.

7.2 The Role of Alliances and Bystander Nations

The US-China conflict does not occur in a vacuum. Other powers, particularly the European Union, are not passive observers but crucial actors whose choices can significantly shape the strategic environment. For the United States, effective policy coordination with allies is critical to presenting a united front on issues of unfair trade practices and technological standards. A failure to do so allows China to employ a "divide and conquer" strategy, playing one power against the other. The EU's position is particularly complex, as it officially views China as a partner in some areas (like climate change), an economic competitor, and a systemic rival simultaneously.[40] The potential for a crumbling of the transatlantic front, especially under a US administration less committed to alliances, could leave Europe feeling rudderless and might compel it to seek a more accommodative relationship with Beijing out of economic necessity.[41] For China, deepening ties with the EU and other "middle powers" is a key strategy to counteract US pressure and prevent the formation of a broad, anti-China coalition.

7.3 Reforming or Bypassing Global Institutions

The trade war has starkly exposed the limitations of the post-World War II international economic architecture, particularly the World Trade Organization.[3] The WTO's dispute settlement mechanism has proven too slow and ill-equipped to handle the challenges of 21st-century geoeconomic competition, which involves state capitalism, non-tariff barriers, and national security considerations. This presents policymakers with a fundamental choice. One path is to invest diplomatic capital in a serious effort to reform these institutions, updating their rules to address modern

challenges like industrial subsidies and digital trade. The alternative path, which appears to be gaining momentum, is to bypass these institutions and build new, parallel structures among smaller groups of like-minded countries. The proliferation of regional trade pacts (like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership) and new agreements focused on specific sectors (like the ASEAN Digital Economy Framework Agreement) are evidence of this trend.[17]

7.4 Concluding Thoughts: The New Geoeconomic Normal

The US-China trade war is more than a series of tariff announcements; it is a paradigm shift. It marks the end of the post-Cold War era of hyper-globalization and the dawn of a new age of great power competition, where economic tools are wielded as primary instruments of statecraft. The game theoretic analysis indicates that this competition is unlikely to be resolved through either a decisive victory or a comprehensive peace. Instead, the world must adapt to the new normal of an Unstable Détente—a perpetual state of managed conflict between its two largest economies.

For policymakers, the challenge is immense. It requires navigating the relentless cycle of hostility without stumbling into catastrophe, balancing domestic political demands with the harsh realities of economic interdependence, and grappling with the profound ethical trade-offs that this rivalry imposes on their own citizens and the global community. In this new era, strategic success will be measured not by the terms of a final treaty, but by the resilience and wisdom displayed in managing a conflict that has no clear end.

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