

# Trade War Escalation

Entry #:	01.88.2
Word Count:	14518 words
Reading Time:	73 minutes
Last Updated:	September 02, 2025

*"In space, no one can hear you think."*

Table of Contents

Contents

1 Trade War Escalation 2

1.1 Defining the Contours: What is Trade War Escalation? . . . . . 2

1.2 Historical Precursors: Echoes of Past Economic Conflict . . . . . 4

1.3 The Engines of Escalation: Economic Mechanisms and Rationales . . 6

1.4 Modern Triggers: The 21st Century Escalation Landscape . . . . . 9

1.5 The Escalation Spiral in Action: Case Study - US-China Trade War . . 11

1.6 Global Ripple Effects: Systemic Consequences of Escalation . . . . . 13

1.7 Winners, Losers, and Unintended Consequences . . . . . 16

1.8 The Technological Front: Export Controls and Digital Protectionism . 18

1.9 Domestic Politics and Public Opinion: Fuelling the Fire . . . . . 20

1.10 Institutional Frameworks: Rules, Disputes, and Challenges . . . . . 22

1.11 Pathways to De-escalation: Negotiation, Truce, and Resolution . . . . 25

1.12 Future Horizons: Escalation Risks in a Fractured World . . . . . 27

# 1 Trade War Escalation

## 1.1 Defining the Contours: What is Trade War Escalation?

The intricate dance of international commerce, while often envisioned as a mutually beneficial exchange, holds within its rhythms the potential for discordant clashes that can escalate into full-fledged economic conflict. Understanding this phenomenon requires peeling back the layers of routine trade friction to reveal the distinct contours of trade war escalation – a perilous process where nations progressively intensify coercive economic measures against one another, transforming manageable disputes into costly confrontations with far-reaching consequences. This dynamic, increasingly visible in the modern global landscape, represents a fundamental challenge to the stability and prosperity fostered by decades of trade liberalization. Defining its core elements, mechanisms, and driving forces is the essential first step in comprehending its profound impact on nations, businesses, and citizens worldwide.

At its most fundamental level, a **trade dispute** arises when one nation objects to the trade policies or practices of another. These disagreements are commonplace, an almost inevitable byproduct of complex international economic interactions. They often involve specific sectors or particular policies – a complaint about agricultural subsidies lodged at the World Trade Organization (WTO), objections to anti-dumping duties, or concerns over technical standards acting as barriers. The WTO's Dispute Settlement Mechanism (DSM), prior to its recent weakening, was explicitly designed to adjudicate such conflicts through a rules-based process, aiming for resolution before retaliation. A **trade war**, however, marks a qualitative shift beyond this routine friction. It is characterized by the *sustained, reciprocal imposition* of restrictive trade measures – primarily tariffs (taxes on imports) but increasingly a wider arsenal – by two or more countries, moving beyond legal adjudication towards economic coercion. Crucially, what transforms a dispute into a war is the presence of **escalation**: the deliberate, progressive intensification of measures in both scope and severity. This tit-for-tat pattern, where each action triggers a reaction that is often broader or harsher, distinguishes a trade war from a single, isolated retaliatory act or a dispute contained within institutional channels. It is a dynamic process where conflict begets further conflict, often spiraling beyond the initial point of contention.

The mechanisms driving this escalation are diverse and have evolved alongside the global economy. The most visible tool remains the **tariff increase**. Starting with targeted duties on specific goods perceived as problematic, escalation manifests as hikes in existing tariff rates (e.g., moving from 10% to 25%) or the expansion of tariff coverage to vast swathes of imports, sometimes encompassing hundreds of billions of dollars worth of goods, as witnessed in the US-China conflict. **Quota restrictions**, limiting the volume of specific imports, offer another lever, though their prominence has diminished somewhat under WTO rules. More pervasive in the modern era are **non-tariff barriers (NTBs)**, a complex and often opaque category including burdensome regulatory requirements, discriminatory standards, cumbersome customs procedures, and stringent sanitary or phytosanitary measures. These can be highly effective protectionist tools precisely because they can be framed as serving legitimate objectives like consumer safety or environmental protection. **Export controls** represent a particularly potent escalation mechanism, especially concerning strategically sensitive goods like advanced technology or critical raw materials. Restricting a country's access to

vital inputs or cutting off its key exporters from global markets inflicts targeted economic pain. Accusations of **currency manipulation**, alleging that a trading partner is artificially depressing its currency's value to gain an export advantage, frequently surface during tensions, adding a volatile macroeconomic dimension. Furthermore, **subsidy races** can fuel escalation, as one nation's state support for domestic industries (e.g., semiconductors, clean energy) provokes retaliatory subsidies or countervailing duties from rivals. Finally, the linkage of **economic sanctions** – traditionally used for foreign policy or human rights objectives – to trade disputes represents a significant escalation, blurring the lines between economic competition and geopolitical confrontation.

The dynamics of trade war escalation exhibit distinct characteristics that make them particularly challenging to contain. The **tit-for-tat retaliation** pattern is central, creating a self-reinforcing cycle where each action demands a response, often perceived as necessary to maintain credibility or deter further aggression. This frequently leads to a **broadening of scope**. A conflict beginning in one sector, such as steel or solar panels, can rapidly engulf unrelated industries, as nations seek maximum leverage. Agricultural products, politically sensitive in many countries, are common targets for retaliatory strikes, dragging farmers into conflicts they played no part in starting. Alongside broadening scope comes **increasing severity**. Initial tariffs might be relatively low, but subsequent rounds often impose significantly higher rates. Measures evolve from tariffs to more disruptive tools like entity lists (effectively blacklisting specific companies from receiving exports), investment restrictions, and technology embargoes. A critical danger is **spillover into non-trade domains**. Economic conflict rarely remains confined; it poisons diplomatic relations, fuels nationalist rhetoric, and can exacerbate geopolitical and even military tensions. The 2019 linking of trade disputes to geopolitical issues like Taiwan and Hong Kong exemplifies this peril. Underpinning all of this is the **erosion of dispute resolution norms**. Escalating powers often bypass or actively undermine multilateral institutions like the WTO, opting for unilateral actions justified under contested interpretations of rules (e.g., invoking “national security” exceptions for broad economic protectionism). This breakdown in trust and adherence to established procedures makes de-escalation vastly more difficult.

Understanding why nations embark on this risky path requires examining both stated objectives and underlying strategic perceptions. **Stated rationales** often focus on tangible economic grievances: protecting domestic jobs and industries from allegedly unfair foreign competition, reducing large and persistent trade deficits, addressing intellectual property theft, combating forced technology transfer, or countering market distortions caused by state subsidies. Leaders frame escalation as a necessary defense against predatory practices or as a means to “level the playing field.” However, the **strategic objectives** often run deeper, intertwined with geopolitical ambitions and domestic industrial policy. Trade wars can be tools for **geopolitical containment**, aimed at slowing the economic and technological rise of a strategic rival. They may serve to **advance national industrial policy**, shielding and nurturing domestic champions in sectors deemed critical for future economic dominance or national security. The role of **domestic politics** is paramount. Protectionist measures, even economically inefficient ones, often benefit concentrated, vocal interest groups (like specific industries or labor unions) whose losses are politically salient, while the diffuse costs (higher prices for consumers, losses for export industries) are less immediately visible or impactful on electoral outcomes. Populist narratives framing trade wars as battles for national dignity or sovereignty resonate powerfully,

transforming complex economic issues into symbols of national resolve. **National pride and perceptions of fairness** become potent drivers; backing down from an escalated position can be politically toxic, perceived as capitulation. The gap between the public justification (protecting jobs) and the potential strategic aim (containing a rival's technological advancement) can create significant confusion and misperception, further complicating resolution.

Thus, trade war escalation is not merely an intensification of a dispute; it is a distinct and dangerous phase characterized by reciprocal coercion, expanding scope, increasing severity, and the breakdown of established conflict resolution norms. Driven by a complex mix of economic grievances, geopolitical strategy, and domestic political pressures, it represents a deliberate choice to move beyond negotiation towards economic force. This choice, however, sets in motion dynamics that are notoriously difficult to control, often inflicting widespread collateral damage and reshaping global economic relationships in profound and often unforeseen ways. Having established these fundamental contours and dynamics, it becomes essential to recognize that the patterns of modern trade conflict are not entirely novel; they echo strategies and consequences deeply embedded in the historical tapestry of international economic rivalry.

## 1.2 Historical Precursors: Echoes of Past Economic Conflict

While the dynamics of modern trade war escalation present unique complexities within an interconnected global economy, their fundamental patterns – tit-for-tat retaliation, the blurring of economic and geopolitical aims, and the devastating potential of uncontrolled conflict – resonate powerfully through centuries of international commerce. History offers a sobering gallery of precursors, demonstrating that the perilous escalation spiral is not a novel phenomenon, but rather a recurring peril when nations prioritize perceived short-term advantage or strategic dominance over cooperative stability. Understanding these echoes from the past provides crucial context for contemporary conflicts and underscores the enduring lessons often forgotten in the heat of economic confrontation.

The roots of trade conflict as an instrument of national power stretch back to the era of **mercantilism and colonial rivalries** (16th-18th centuries). Here, wealth was perceived as finite, measured primarily in gold and silver bullion, leading nations to aggressively pursue trade surpluses. The core mercantilist doctrine held that exports should be maximized and imports minimized, fostering domestic industry and enriching the state treasury. This zero-sum worldview inevitably fueled intense competition. Mechanisms like England's **Navigation Acts** (starting in 1651) were explicit escalation tools. These acts mandated that goods imported into England or its colonies must be transported on English ships, manned predominantly by English crews. Furthermore, certain "enumerated articles" produced in the colonies (like tobacco, sugar, and cotton) could only be exported to England or other English colonies. These were not merely protectionist measures; they were deliberate attempts to cripple the maritime trade of rivals, particularly the Dutch. The Acts severely restricted Dutch access to lucrative colonial markets and shipping routes, directly contributing to the outbreak of the **Anglo-Dutch Wars**. This era established a recurring theme: trade policy inextricably linked to naval power, imperial expansion, and the deliberate use of commercial restrictions as weapons to weaken adversaries and assert dominance. The goal was not mutual gain, but unilateral advantage achieved through the economic

suppression of rivals, foreshadowing the strategic containment aspects visible in modern trade wars.

Perhaps the most infamous and cautionary historical example of uncontrolled escalation and its catastrophic consequences is the **Smoot-Hawley Tariff Act of 1930**. Born from a potent mix of domestic agricultural distress, protectionist lobbying, and misguided economic nationalism in the United States, the Act aimed to shield American farmers and manufacturers from foreign competition during the early throes of the Great Depression. Sponsored by Senator Reed Smoot and Representative Willis C. Hawley, it raised U.S. tariffs on over 20,000 imported goods to record levels, averaging approximately 60% on dutiable items. Far from achieving its domestic goals, Smoot-Hawley acted as a powerful accelerant to global economic collapse. It triggered immediate and widespread **retaliation**. Canada, America's largest trading partner, swiftly responded with its own tariffs, but crucially also pivoted towards the British Empire, negotiating the **Ottawa Agreements (1932)** which established the system of **Imperial Preferences**. This granted preferential tariff rates on goods traded within the British Empire, diverting trade away from the US and solidifying new economic blocs. Dozens of other countries followed suit, raising their own tariffs and imposing quotas in a cascading wave of protectionism. Global trade volume plummeted by roughly two-thirds between 1929 and 1934. While the Great Depression had deeper structural causes, economists widely agree that Smoot-Hawley and the retaliatory spiral it ignited significantly worsened its depth and duration, choking off international commerce precisely when economic stimulus was most needed. The enduring lesson, seared into the collective memory of international economists, is the profound danger of beggar-thy-neighbor policies during economic downturns and the devastating global impact when tit-for-tat retaliation spirals unchecked. It became the stark example of how trade war escalation can transform an economic downturn into a global catastrophe.

The devastation of the Great Depression and World War II led to a concerted effort to build a more stable and open international trading system, culminating in the **General Agreement on Tariffs and Trade (GATT)** in 1947. The GATT era (1947-1994) was marked by significant success in reducing tariffs through successive negotiating rounds and establishing norms of non-discrimination (Most-Favored-Nation principle) and transparency. However, this period of "managed trade" was far from frictionless, providing numerous case studies of sectoral escalation outside the framework of a full-blown war. The **"Chicken War" (1960s)** exemplifies how targeted disputes could escalate significantly. In the early 1960s, technological advances and production methods led to a surge in cheap U.S. poultry exports into West Germany, undercutting local producers. The European Economic Community (EEC), responding to internal pressure, imposed high tariffs and quotas on imported U.S. chicken. The U.S., invoking GATT dispute resolution, largely won its case but deemed the compensation offered by the EEC inadequate. In retaliation, the U.S. imposed 25% tariffs on a strategically chosen list of EEC exports, including brandy, light trucks, potato starch, and dextrin – goods collectively valued to match the estimated damage to U.S. poultry exports. This targeted retaliation, while contained, demonstrated the political logic of escalation even within a rules-based system and the willingness to inflict pain on unrelated sectors to gain leverage. Similarly, the **US-Japan Auto Wars of the 1980s** escalated through non-tariff barriers. Facing a surge of Japanese auto imports blamed for job losses, the U.S. pressured Japan into "voluntary" export restraints (VERs) on cars. While VERs curbed the volume, Japanese automakers responded by shifting to higher-value models, maintaining revenue. Simul-

taneously, U.S. accusations mounted about invisible barriers within Japan's market – complex regulations, exclusive dealership networks, and safety standards allegedly designed to exclude foreign cars. This led to intense bilateral negotiations and threats of further U.S. sanctions under Section 301 of the Trade Act of 1974, showcasing the shift from tariffs to NTBs as tools of pressure and the persistent difficulty in resolving disputes centered on market structure and perceived unfairness, themes highly relevant to modern US-China tensions.

Certain sectors have proven persistently resistant to liberalization and prone to recurring, protracted disputes, often escalating beyond the confines of GATT/WTO panels. **Agriculture** stands paramount. Deeply intertwined with food security, rural livelihoods, and cultural identity, it has been a battlefield for decades. The European Common Agricultural Policy (CAP), established in 1962, involved massive subsidies and export supports for European farmers. This distorted global markets, depressing prices and harming agricultural exporters in the developing world and countries like the US, Canada, and Australia. Escalation took various forms: US counter-subsidies like the Export Enhancement Program (EEP) in the 1980s, tit-for-tat tariffs on specific products, and lengthy, acrimonious WTO disputes, such as the decade-long battle over **US cotton subsidies** (initiated by Brazil in 2002). Brazil successfully argued that US subsidies violated WTO rules and depressed global prices, hurting its farmers. The case saw authorized retaliatory tariffs by Brazil and complex negotiations over compliance, illustrating the difficulty of unwinding entrenched subsidy programs even after a legal victory. **Textiles and apparel** followed a similar path. The **Multi-Fibre Arrangement (MFA)**, established in 1974, was essentially a managed system of escalating protectionism. It allowed developed nations (US, EU, Canada) to impose quotas restricting imports of textiles and clothing from developing countries, flouting GATT principles. This represented a massive, institutionalized escalation against competitive exporters like China, India, and others in Asia and Latin America. While the MFA was finally phased out by 2005 under the WTO Agreement on Textiles and Clothing, the transition was fraught, and targeted

### 1.3 The Engines of Escalation: Economic Mechanisms and Rationales

While history reveals the recurring patterns and devastating potential of trade war escalation, understanding its persistence requires delving into the economic engines that drive nations down this perilous path. Beyond immediate political pressures or geopolitical posturing lie deeply rooted theoretical frameworks and rationales – some with intellectual pedigrees dating back centuries, others shaped by modern economic realities – that policymakers invoke, and sometimes genuinely believe, justify initiating and escalating economic conflict. These theories and models provide the intellectual fuel for actions that, while often inflicting broad economic damage, stem from specific calculations about national interest, fairness, and strategic positioning.

The arsenal of protectionism is often justified by revisiting longstanding, albeit frequently contested, economic arguments. The **infant industry argument**, articulated as early as Alexander Hamilton's 1791 *Report on Manufactures*, posits that nascent domestic industries, facing overwhelming competition from established foreign rivals, require temporary protection (tariffs, subsidies) to achieve economies of scale, technological maturity, and international competitiveness. The rationale hinges on the existence of learning curves and potential long-term comparative advantage that cannot emerge without initial shelter. Modern iterations often



target high-tech sectors like semiconductors or renewable energy, framed as essential for future economic security. However, this argument is notoriously vulnerable to abuse. Protection, once granted, proves politically difficult to remove, fostering perpetual dependence rather than competitive maturity, as illustrated by persistent inefficiencies in historically protected industries across various nations. Closely linked is the invocation of **national security exceptions** (e.g., GATT Article XXI). While legitimate concerns exist regarding reliance on potentially hostile states for critical goods (e.g., rare earth minerals, advanced chips, pharmaceuticals), the scope has expanded dramatically. Recent justifications for broad tariffs on steel and aluminum imports, based on tenuous links to military infrastructure, demonstrate how this exception can become a convenient cover for widespread protectionism targeting economically competitive rivals, eroding the principle and inviting reciprocal claims. **Strategic Trade Theory (STT)**, emerging in the 1980s, offered a more sophisticated, game-theoretic rationale. It suggested that in industries characterized by high fixed costs, significant economies of scale, and oligopolistic competition (like aircraft manufacturing), governments could theoretically shift global profits towards domestic firms through strategic subsidies or import protection, benefiting the nation overall. The decades-long rivalry between Airbus (supported by European governments) and Boeing (supported by U.S. federal and state subsidies) exemplifies STT in practice. Yet, STT's real-world application is fraught. It assumes near-perfect government foresight and risks igniting subsidy races where multiple nations prop up competitors, leading to global overcapacity and mutual financial drain without clear winners, precisely the scenario unfolding in sectors like commercial aerospace and electric vehicles. Each theory, while possessing potential validity under narrow, specific conditions, becomes a potent engine for escalation when applied broadly or disingenuously to shield domestic industries from competition rather than fostering genuine competitiveness.

Beyond theoretical arguments, the decision to escalate trade conflict is powerfully shaped by **the political economy calculus**. This perspective, rooted in “Public Choice” theory, views trade policy not as the outcome of dispassionate economic optimization, but as the result of competing pressures from organized interest groups operating within political systems. Industries facing import competition often represent **concentrated benefits** – their potential losses from foreign competition are highly visible, threaten specific jobs and communities, and mobilize powerful lobbying efforts. In contrast, the **diffuse costs** of protectionism – higher prices paid by consumers across the entire economy, reduced efficiency for downstream industries using imported inputs, losses for export industries facing retaliation – are spread thinly over a vast number of individuals, making collective action difficult and politically less potent. The U.S. steel industry, relatively small in employment but geographically concentrated and politically well-organized, has consistently secured protective tariffs (e.g., 2002 safeguards, 2018 Section 232 tariffs), despite evidence suggesting the costs to steel-consuming industries (like autos and machinery) and consumers far outweighed the benefits to steel producers. **Rent-seeking** behavior, where firms invest resources in lobbying for protectionist policies to secure economic rents (above-market profits) rather than improving efficiency, further distorts the calculus. **Electoral politics** amplifies this dynamic. Politicians, responding to vocal constituencies fearing job losses or industries threatening to move operations, often find imposing tariffs or escalating a conflict to be a more immediately rewarding strategy than advocating for the diffuse benefits of open trade, especially in regions heavily dependent on vulnerable sectors. Populist movements adeptly channel anxieties about globaliza-



tion and deindustrialization, framing protectionist escalation as “standing up” for national workers against unfair foreign practices, regardless of the broader economic consequences. The political imperative often prioritizes visible, short-term defensive actions (protection) over the less tangible, longer-term benefits of adjustment and innovation, creating a powerful engine driving initial protectionist measures and subsequent escalation when retaliation occurs.

A significant driver of modern trade wars, particularly in conflicts like US-China, is the explicit goal of **addressing perceived unfair practices**. Here, escalation is framed not merely as protectionism, but as a necessary corrective to trading partners who violate established norms and gain an “unfair” advantage. Key rationales in this category include combating **intellectual property (IP) theft and forced technology transfer**. Accusations that foreign firms, often compelled by joint-venture requirements or cyber espionage, systematically misappropriate proprietary technology and trade secrets undermine the foundation of innovation-driven economies. The U.S. Section 301 investigations against China heavily emphasized these practices, arguing they constituted an existential threat to American technological leadership. Similarly, advantages conferred by **state-owned enterprises (SOEs)** are a flashpoint. When SOEs benefit from preferential financing, implicit state guarantees against failure, or privileged market access unavailable to private foreign competitors, market competition is distorted. The concern is that SOEs operate not solely on commercial principles but as instruments of state policy, capable of dumping products or dominating strategic sectors through subsidized expansion. The related issue of massive **industrial subsidies** – direct grants, below-market loans, or inputs provided to domestic champions – further fuels escalation. While most nations utilize subsidies to some degree, the scale, opacity, and targeting of strategic sectors in certain state-capitalist systems are seen as creating unbridgeable competitive imbalances. Cases like China’s “Made in China 2025” subsidies for advanced industries provoked countervailing duties and contributed to the US-China tariff war. Finally, persistent accusations of **currency manipulation**, though harder to substantiate definitively in complex global markets, remain a potent political grievance. The belief that a trading partner is artificially suppressing its currency value to boost exports provides a ready justification for retaliatory tariffs, framing escalation as a defensive response to macroeconomic cheating. Addressing these practices often requires tools beyond simple tariffs, leading to escalating measures like investment screening, export controls on sensitive technology, and entity listings targeting specific firms involved in IP theft, thereby broadening and deepening the conflict beyond traditional trade barriers.

Underpinning the decision to retaliate, and to often retaliate with measures perceived as equivalent or even exceeding the initial provocation, lies **the retaliation imperative**, grounded in deterrence theory. In the anarchic realm of international trade, where no supreme enforcer exists, nations rely on the threat of punishment to deter harmful actions. **Proportional retaliation** serves to signal resolve and impose costs on the aggressor, aiming to restore the status quo ante by making the initial transgression unprofitable. The calibrated U.S. tariffs on specific EU goods (like Roquefort cheese and motorboats) in response to the EU’s ban on hormone-treated beef, while authorized by the WTO, exemplified this logic – a targeted response designed to pressure compliance without triggering uncontrolled escalation. However, nations sometimes resort to **disproportionate retaliation**, imposing broader or harsher measures. This aims to send a stronger signal of resolve, establish **credibility** for future deterrence, and demonstrate that transgressions carry severe

consequences beyond the immediate sector. Targeting politically sensitive

## 1.4 Modern Triggers: The 21st Century Escalation Landscape

The engines driving trade war escalation, rooted in contested economic theories and potent political economy dynamics, find particularly fertile ground in the unique pressures and fractures defining the early 21st-century global economy. While historical precedents offer stark warnings, the contemporary landscape presents distinct catalysts that have propelled major powers, particularly the United States and China, into escalating cycles of economic coercion. This era is characterized not merely by disputes over specific tariffs or subsidies, but by fundamental clashes over economic systems, geopolitical primacy, and the very rules governing international commerce, creating a tinderbox where sparks readily ignite widespread conflict.

**4.1 The Rise of China and Systemic Rivalry** The most profound trigger reshaping the escalation landscape is the unprecedented economic ascent of China and the resulting systemic rivalry with the established hegemon, the United States. China's integration into the global economy following its 2001 WTO accession was initially framed as an opportunity for mutual gain. However, as China evolved from a low-cost manufacturer into a technological and industrial powerhouse, underpinned by a distinct state-capitalist model, friction intensified dramatically. Concerns crystallized around several key issues perceived as fundamentally unfair and threatening. The scale and opacity of state subsidies, particularly under initiatives like **"Made in China 2025"** – which explicitly targeted dominance in advanced sectors like robotics, aerospace, and artificial intelligence – were viewed not just as industrial policy, but as a state-directed effort to undermine global competitors. Persistent market access barriers, including forced technology transfer requirements for foreign firms seeking entry and preferential treatment for domestic champions, particularly state-owned enterprises (SOEs), fueled accusations of systemic cheating. Furthermore, chronic issues of intellectual property (IP) infringement, ranging from counterfeit goods to sophisticated cyber-enabled theft of trade secrets, became a core grievance. The massive overcapacity generated by state-backed industries in sectors like steel and aluminum flooded global markets, depressing prices and threatening jobs worldwide. This complex web of practices led influential voices within the U.S. and other advanced economies to conclude that China was not playing by the established rules of liberal market economies, but exploiting the system to achieve technological supremacy and geopolitical dominance. The resulting shift in perception, moving from viewing China as a participant within the global trading order to a strategic competitor seeking to reshape it according to authoritarian state-capitalist principles, fundamentally altered the calculus. Escalation became seen not merely as a tool to address discrete grievances, but as a necessary, albeit risky, strategy to contain China's rise, protect critical technologies, and preserve Western economic and technological leadership. The underlying fear, articulated in numerous policy documents, was of permanent technological and industrial dependency on a strategic rival.

**4.2 Persistent Global Imbalances** Compounding the systemic rivalry are deeply entrenched **global current account imbalances**, acting as persistent sources of friction and political pressure. While imbalances are not inherently problematic and can reflect legitimate economic factors like savings-investment differentials, certain large, persistent surpluses and deficits have become politically toxic flashpoints. The most

prominent is the massive bilateral trade deficit the United States runs with China, which peaked at over \$420 billion in 2018. Regardless of nuanced economic explanations – including the role of multinational corporations’ supply chains and U.S. macroeconomic policies – these headline figures are politically potent. They are easily weaponized in domestic discourse, framed as tangible proof of unfair trade practices, job losses, and national decline. Politicians facing pressure from displaced workers and declining manufacturing regions find the trade deficit a simple, emotionally resonant metric to justify retaliatory actions. Similarly, within the European Union, Germany’s significant and persistent trade surpluses, driven by its export-oriented manufacturing base, have generated friction with deficit-running partners like France and Italy, as well as with external partners like the United States, which criticized the surplus as evidence of an unbalanced global economy. These imbalances create a constant undercurrent of resentment, providing readily available ammunition for protectionist forces and making reciprocal accusations of currency manipulation or unfair subsidy practices more likely to gain political traction, even when economic evidence is contested. The sheer magnitude of these imbalances, visible in stark dollar figures year after year, acts as a constant irritant, lowering the threshold for escalation by providing a seemingly objective justification for aggressive trade measures aimed at “rebalancing.”

**4.3 The Erosion of Multilateral Consensus** Crucially, the mechanisms designed to peacefully resolve the tensions arising from systemic rivalry and imbalances have themselves weakened significantly, removing vital guardrails against escalation. The **World Trade Organization (WTO)**, the cornerstone of the post-1945 rules-based trading system, has been progressively undermined. The most critical failure has been the paralysis of its **Dispute Settlement Mechanism (DSM)**, specifically the **Appellate Body crisis**. Beginning in 2017, the United States, citing concerns over judicial overreach and procedural delays, systematically blocked the appointment of new judges to the Appellate Body, the final arbiter of trade disputes. By December 2019, the body lacked the minimum number of judges required to function, effectively crippling the binding, two-stage adjudication system. This rendered the WTO incapable of delivering definitive rulings on new disputes, including those involving escalating tariffs justified under contested national security exceptions (like the U.S. Section 232 tariffs on steel and aluminum). Nations, particularly the U.S., increasingly resorted to **unilateral actions**, bypassing the WTO altogether through mechanisms like Section 301 investigations (used extensively against China) and imposing tariffs based on national security determinations made outside any multilateral review. Simultaneously, the proliferation of **bilateral and regional trade agreements** (e.g., CPTPP, USMCA/CUSMA, RCEP), while potentially beneficial for participants, further fragmented the global system and diverted negotiating energy away from multilateral forums. This erosion of trust and the functioning multilateral framework created a vacuum. Without a credible, impartial referee empowered to adjudicate disputes and authorize proportionate responses, nations felt increasingly justified in taking matters into their own hands, resorting to self-help through escalating tit-for-tat measures. The perceived ineffectiveness of the WTO made unilateral escalation seem like the only viable, or at least the most decisive, course of action for addressing deeply felt grievances.

**4.4 The Role of Populism and Nationalism** Fueling the drive towards unilateralism and escalation has been the potent rise of **populist and nationalist political movements** across major economies, particularly since the 2008 Global Financial Crisis. These movements adeptly channeled widespread anxieties stemming from

deindustrialization, wage stagnation, perceived cultural displacement, and a sense of loss of control in the face of globalization. Trade agreements and open borders became potent symbols of these anxieties. Populist leaders framed complex global economic integration as a force benefiting only elites and foreign competitors at the expense of domestic workers and national sovereignty. Concepts like “economic sovereignty” and “taking back control” resonated powerfully, translating into platforms advocating for protectionist policies and confrontational trade stances. The election of Donald Trump in the U.S., propelled partly by his explicit “America First” trade agenda targeting China, Mexico, and traditional allies, epitomized this trend. Similarly, the Brexit referendum in the UK was heavily influenced by anti-immigration and anti-EU single market sentiment. Leaders like Trump framed trade wars as not only winnable but desirable, a necessary fight to correct past injustices and restore national greatness. This political climate demonized compromise and international cooperation as weakness, while valorizing assertive, even aggressive, unilateral action. Escalation was reframed not as a risky descent into mutually assured economic pain, but as a demonstration of national resolve and a legitimate defense of national interest against perceived exploitation. The narrative of victimhood at the hands of unfair foreign traders provided a powerful emotional justification for retaliatory tariffs and other coercive measures, regardless of complex economic interdependencies or the potential for blowback on domestic consumers and exporters. Populist rhetoric thus lowered the political costs of initiating and escalating conflicts, transforming trade policy into a potent tool of nationalist mobilization.

#### **4.5 Beyond US-China: Other Contemporary Flashpoints** While the

### **1.5 The Escalation Spiral in Action: Case Study - US-China Trade War**

The potent cocktail of systemic rivalry, chronic imbalances, institutional decay, and nationalist politics explored in Section 4 found its most explosive expression in the escalating trade conflict between the United States and China that dominated the global economic landscape from 2017 onward. This conflict stands as the most significant and instructive case study of modern trade war escalation, demonstrating the perilous dynamics of tit-for-tat retaliation, the broadening scope into critical technological domains, and the profound difficulty of achieving meaningful de-escalation once entrenched positions and mutual mistrust take hold. Examining its chronology reveals the mechanics of escalation in stark detail, transforming theoretical risks into tangible global consequences.

**5.1 Genesis: Section 301 Investigations and Initial Tariffs (2017-2018)** The fuse was lit in August 2017, when the Trump Administration, acting upon campaign promises and long-standing bipartisan concerns, formally initiated a Section 301 investigation into China’s intellectual property and technology transfer practices. Leveraging a provision of the 1974 Trade Act designed to address “unreasonable or discriminatory” foreign practices harming U.S. commerce, the U.S. Trade Representative (USTR) embarked on a detailed probe. Its report, released in March 2018, delivered a scathing indictment, concluding that China employed coercive technology transfer policies (including forced joint ventures and licensing requirements), engaged in systematic intellectual property theft through cyber intrusions and weak enforcement, and implemented discriminatory licensing restrictions that disadvantaged foreign firms. Crucially, these practices were framed not as isolated violations but as integral components of China’s state-led industrial policies, particularly

“Made in China 2025.” Based on these findings, President Trump announced tariffs on approximately \$50 billion worth of Chinese imports, initially targeting specific industrial sectors deemed beneficiaries of the alleged practices, such as aerospace, information and communication technology, robotics, and machinery. The first tranche, covering \$34 billion worth of goods, took effect on July 6, 2018, imposing a 25% duty. This move marked a deliberate escalation beyond routine dispute settlement; it was a unilateral action, justified under U.S. domestic law but bypassing the WTO, directly targeting the core of China’s development model. The stated rationale was clear: force China to abandon practices deemed fundamentally unfair and coercive.

**5.2 Tit-for-Tat Intensification (2018-2019)** China’s response was swift and calibrated for maximum political impact. Mere hours after the U.S. tariffs on the initial \$34 billion batch took effect on July 6, 2018, China imposed retaliatory 25% tariffs on an equivalent value of U.S. exports. Tellingly, Beijing targeted politically sensitive sectors, particularly U.S. agricultural products like soybeans, pork, and sorghum – commodities primarily produced in states that formed a crucial part of President Trump’s political base. This immediate, sector-specific retaliation embodied the tit-for-tat dynamic, demonstrating China’s resolve and its understanding of U.S. domestic political vulnerabilities. Escalation rapidly accelerated. In August 2018, the U.S. announced a second list of \$16 billion worth of Chinese goods facing 25% tariffs, effective August 23rd. China promptly matched this with equivalent retaliation. Then, in September 2018, the U.S. dramatically upped the ante, announcing tariffs on a further \$200 billion worth of Chinese imports, initially at 10%, set to rise to 25% on January 1, 2019, unless a deal was reached. This represented a massive broadening of scope, impacting a vast range of consumer goods from electronics and furniture to seafood and handbags, directly threatening higher prices for American consumers and greater disruption for import-dependent businesses. China retaliated again, though its imports from the U.S. were insufficient to match the \$200 billion value dollar-for-dollar. Instead, it imposed tariffs ranging from 5% to 10% on \$60 billion worth of U.S. goods effective September 24, 2018, while simultaneously filing a case at the WTO (rendered largely symbolic by the Appellate Body crisis). By the end of 2018, the U.S. had imposed tariffs on approximately \$250 billion of Chinese goods, and China had retaliated on about \$110 billion of U.S. exports, with rates escalating and coverage expanding, firmly cementing the conflict as a full-blown trade war.

**5.3 Expanding the Battlefield: Technology and Entity Lists** Recognizing the limitations of tariffs alone to address concerns over technology transfer and national security, the U.S. significantly broadened the conflict’s scope and intensity by targeting specific Chinese technology champions. In May 2019, the U.S. Commerce Department placed Huawei Technologies, China’s global telecommunications leader and a symbol of its technological ambitions, on its “Entity List.” This action prohibited U.S. firms from exporting technology to Huawei without a difficult-to-obtain license, effectively cutting off its access to critical U.S.-origin components, including advanced semiconductors and software essential for its smartphones and 5G networking equipment. This marked a decisive escalation beyond broad tariffs into highly targeted, company-specific sanctions justified under national security grounds. The move sent shockwaves through global technology supply chains, forcing Huawei into a frantic search for non-U.S. alternatives and accelerating Chinese efforts towards semiconductor self-sufficiency. The Entity List expanded steadily to include other key Chinese tech firms involved in artificial intelligence, supercomputing, and surveillance technology, such as SenseTime,

Megvii, and Dahua. Furthermore, the U.S. began tightening restrictions on semiconductor technology exports more broadly. In October 2022, the Biden Administration imposed sweeping new export controls, severely limiting the sale to China of advanced computing chips, chip-making equipment, and technology used in artificial intelligence and supercomputing. Crucially, these controls invoked the Foreign Direct Product Rule, extending U.S. jurisdiction to cover chips made anywhere in the world using U.S. technology, significantly complicating China's efforts to circumvent the bans. This phase transformed the trade war into a technology war, directly targeting China's capacity for innovation and military modernization, blurring the lines between economic competition and national security.

**5.4 Negotiations Amidst Conflict: The Phase One Deal** Amidst this escalating conflict, negotiations flickered intermittently. High-level talks occurred, punctuated by dramatic moments like the Trump-Xi meeting at the G20 in Osaka in June 2019, resulting in a temporary tariff truce (the planned January increase on \$200 billion was suspended), and China agreeing to resume purchases of U.S. agricultural goods. However, mistrust ran deep, and talks repeatedly stalled over core issues like enforcement mechanisms and the scale of structural reforms demanded by the U.S. Finally, in January 2020, the two sides signed the “Economic and Trade Agreement Between the United States of America and the People’s Republic of China,” commonly known as the Phase One deal. This agreement focused primarily on China committing to purchase an additional \$200 billion worth of U.S. goods and services (including manufactured goods, energy, and notably, agricultural products like soybeans and pork) over 2020-2021 compared to 2017 levels. It also contained pledges on intellectual property protection (including commitments on trade secret protection, patent extensions, and combating online piracy), financial services opening, and prohibiting forced technology transfer. However, the deal was widely viewed as a limited truce rather than a resolution. Crucially, it left the vast majority of tariffs imposed by both sides firmly in place – the core structural issues concerning China's industrial subsidies, state-owned enterprise behavior, and broader market distortions were deferred to a hypothetical “Phase Two” negotiation that never materialized. Furthermore, China fell significantly short of its ambitious purchase commitments, hampered by the COVID-19 pandemic, market conditions, and likely political unwilling

## 1.6 Global Ripple Effects: Systemic Consequences of Escalation

The failure of the US-China Phase One agreement to resolve underlying tensions or remove the vast majority of tariffs cemented a new reality: the escalating bilateral conflict was no longer contained. Its shockwaves reverberated far beyond Washington and Beijing, rippling through the intricate web of global commerce, destabilizing established patterns, and imposing significant costs on nations and businesses worldwide. This systemic contagion effect underscored a fundamental truth of the modern, interconnected economy: when major powers engage in sustained economic coercion, the damage is rarely bilateral. The disruption cascades through global value chains, forcibly redirects trade flows, weakens the institutional foundations of international trade, fuels pervasive uncertainty, and inflicts collateral damage on vulnerable economies least equipped to bear it.

The most immediate and profound impact stemmed from the **disruption of complex Global Value Chains**



**(GVCs).** Modern manufacturing, particularly in electronics, automobiles, and machinery, relies on components crossing borders multiple times before assembly into a final product. The successive waves of U.S. and Chinese tariffs acted like sand thrown into these finely tuned gears. Companies faced agonizing choices: absorb the tariff costs, raising prices for consumers; pass costs back up the chain, squeezing suppliers; or fundamentally restructure their operations. Forced reorganization became widespread, leading to increased costs, logistical delays, and significant inefficiencies. The “bystander effect” was particularly stark for nations deeply integrated into China-centric supply chains. South Korean semiconductor giants like Samsung and SK Hynix, vital suppliers to Chinese electronics manufacturers, found themselves caught in the crossfire when U.S. export controls targeted Chinese tech firms. Sudden drops in orders or urgent demands to reroute components created significant operational headaches and financial strain. Similarly, German automakers, reliant on Chinese sub-assemblies and facing retaliatory tariffs on their luxury exports to China, scrambled to source alternative components or adjust production schedules, highlighting how integrated European manufacturing suffered despite not being the primary combatant. The initial U.S. tariffs on Chinese goods alone were estimated to have increased supply chain costs for third countries by billions annually, a tax on global efficiency paid by bystanders.

**Compounding this disruption were significant shifts in established trade flows and an accelerated drive towards diversification.** The principle of **trade diversion** became evident as tariffs made Chinese goods more expensive in the U.S. and U.S. goods pricier in China. This created opportunities for third countries to fill the gaps. Vietnam emerged as a major beneficiary, seeing a surge in exports of electronics, textiles, and furniture to the U.S. as companies shifted production out of China. Mexico also gained increased investment and export volumes, particularly in autos and machinery destined for the U.S. market. Southeast Asian nations like Thailand and Malaysia similarly experienced boosts in specific sectors. However, this “benefit” was often double-edged. Increased demand strained local infrastructure and labor markets, potentially leading to inflationary pressures. More significantly, it reflected a forced realignment, not necessarily a more efficient one. Crucially, the trade war acted as a powerful catalyst for **supply chain diversification strategies**, most notably the “**China Plus One**” approach. Multinational corporations, chastened by the vulnerability exposed by concentrated production in China, actively sought to spread manufacturing across multiple countries, particularly in Southeast Asia and Mexico. Apple’s accelerated efforts to shift iPhone assembly to India and Vietnam serves as a prime example. This restructuring aimed to enhance resilience against future trade shocks or geopolitical disruptions, but it involved substantial upfront costs, logistical complexities, and often a period of reduced efficiency as new suppliers came online. The trade war fundamentally accelerated a rethink of globalization’s optimal structure, moving away from pure efficiency maximization towards a risk-mitigating diversification.

**Perhaps the most insidious long-term consequence was the further erosion of the rules-based multilateral trading order and the marginalization of the World Trade Organization (WTO).** The US-China conflict, characterized by unilateral tariffs justified under contested national security grounds (U.S. Section 232) and the bypassing of WTO dispute settlement via Section 301 actions, dealt a severe blow to the institution’s credibility and authority. This unilateralism provided a dangerous template; if the world’s largest economy could disregard WTO norms with relative impunity, why should others adhere strictly? The conflict



unfolded against the backdrop of the already crippled **Appellate Body crisis**, rendering the WTO incapable of delivering binding rulings on the escalating measures. This paralysis created a vacuum where power politics increasingly trumped rules. The spectacle of the two largest trading economies engaged in a tit-for-tat tariff war outside the established dispute resolution framework significantly weakened the normative constraint against such actions. Other nations, observing the limited consequences for bypassing the WTO, became more inclined to resort to unilateral measures themselves or to interpret “national security” exceptions ever more broadly. The EU’s subsequent development of its own framework for screening foreign investments and its Carbon Border Adjustment Mechanism (CBAM), while arguably pursuing legitimate policy goals, also reflected this trend towards unilateral or plurilateral action in the absence of effective multilateral solutions. The US-China escalation thus accelerated the fragmentation of global trade governance into competing spheres of influence and ad hoc arrangements, undermining the predictability and stability the WTO was designed to provide.

**This institutional decay fueled pervasive global economic uncertainty and volatility.** Businesses operating internationally faced a suddenly more treacherous landscape. Would tariffs escalate further? Would export controls suddenly cut off access to vital inputs? Which sectors or even specific companies might be targeted next? This unpredictable environment had a tangible **dampening effect on business investment**. Firms delayed or canceled capital expenditures, particularly those involving cross-border supply chains, due to fears of sudden policy shifts making investments unviable. Multinational corporations adopted a cautious “wait-and-see” approach, freezing hiring and expansion plans. Financial markets reacted sharply to trade war rhetoric and escalations. Announcements of new tariffs or breakdowns in negotiations frequently triggered stock market sell-offs, particularly for companies heavily exposed to China or global trade. Commodity markets experienced significant **price fluctuations**, exemplified by the volatility in soybean prices as Chinese purchases oscillated based on the state of negotiations. The IMF repeatedly cited escalating trade tensions as a key downside risk to **global growth forecasts**, estimating that the US-China tariffs alone could shave significant fractions of a percentage point off global GDP growth. The pervasive uncertainty increased risk premiums across global markets, raising borrowing costs and further constraining economic activity. The trade war, therefore, acted as a persistent drag on global economic momentum, its impact amplified by the uncertainty it generated far beyond the directly targeted goods.

**Developing and commodity-dependent economies proved particularly vulnerable to these systemic shocks.** Unlike more diversified economies, they often lacked the fiscal buffers and flexible economic structures to easily absorb the disruptions. Nations heavily reliant on exporting a narrow range of **primary commodities** faced heightened risks. Reduced Chinese demand for industrial inputs due to trade war impacts or slower global growth could trigger sharp declines in prices for exports like copper (impacting Chile, Zambia), iron ore (Australia, Brazil), or oil (affecting various producers). Zambia’s copper-dependent economy suffered as Chinese manufacturing demand wavered amidst the uncertainty. Countries integrated as low-cost manufacturing hubs within GVCs, like Bangladesh, Cambodia, or

## 1.7 Winners, Losers, and Unintended Consequences

The cascading disruptions documented in Section 6 – fractured supply chains, diverted trade flows, and heightened global uncertainty – inevitably settled unevenly across the economic landscape. While the systemic costs of trade war escalation are substantial, the burdens and occasional windfalls are distributed with stark inequity, creating distinct cohorts of winners and losers among sectors, businesses, and consumers. Furthermore, the pursuit of targeted protection or strategic advantage often unleashes a torrent of unintended macroeconomic consequences, complicating policy responses and sometimes exacerbating the very problems the trade war was ostensibly launched to solve. Assessing this complex tapestry of impacts reveals the deeply uneven and often counterproductive nature of escalating economic conflict.

**7.1 Sectoral Winners and Losers** The immediate, though often temporary, beneficiaries of trade war escalation are typically the **protected domestic industries** whose competitive position improves behind newly erected tariff walls. In the US-China conflict, the U.S. steel and aluminum sectors, shielded by Section 232 tariffs initially imposed in 2018 on national security grounds (but widely applied), experienced tangible gains. Domestic steel prices surged, mills restarted idled furnaces, and capacity utilization climbed, boosting profits and employment in the short term. Similarly, U.S. solar panel manufacturers, protected by earlier tariffs on Chinese solar cells and modules imposed in 2018, gained market share domestically. **Import-competing sectors** facing direct competition from the targeted nation also saw relief; U.S. furniture manufacturers and some lower-end electronics producers found breathing room as Chinese imports became more expensive. Furthermore, **substitute exporters** in third countries capitalized on trade diversion. Vietnam witnessed explosive growth in exports of electronics, furniture, textiles, and footwear to the U.S., filling the gap left by tariff-hit Chinese goods. Mexico saw increased exports of auto parts, machinery, and agricultural products. Conversely, the **losers** were numerous and often suffered more persistently. **Export-oriented industries** in the escalating nations bore the brunt of retaliatory tariffs. U.S. agricultural exports, particularly soybeans targeted early by China, plummeted. Machinery manufacturers, chemical producers, and energy exporters also faced significant market access barriers. **Import-dependent manufacturers** downstream from protected sectors struggled with inflated input costs. U.S. automakers and machinery producers paying higher prices for tariffed steel and aluminum saw profit margins squeezed, potentially undermining competitiveness even domestically. Finally, **retailers** reliant on affordable imported consumer goods faced stark choices: absorb the tariff costs (hurting profits), pass them on to consumers (risking lost sales), or scramble for alternative, often more expensive, suppliers, disrupting inventory and logistics.

**7.2 The Consumer Burden** Ultimately, a significant portion of the cost of tariffs is borne not by foreign exporters, but by **domestic consumers and businesses** in the country imposing them. Empirical studies of the US-China tariffs consistently demonstrated this incidence. Research by the Federal Reserve Bank of New York, the IMF, and numerous academic economists found that U.S. importers and consumers paid for the vast majority of the tariffs levied on Chinese goods. Chinese exporters generally lowered their prices only marginally in response; instead, U.S. importers absorbed some cost and passed the rest onto consumers. This translated directly into **higher consumer prices** for a wide range of goods, from electronics and clothing to furniture and bicycles. A study by economists at Princeton, Columbia, and the New York Fed found

the 2018 tariffs cost the average U.S. household an estimated \$831 annually by the end of 2019 through higher prices and reduced economic efficiency. The impact was particularly pronounced for **essential goods** where substitutes were scarce or more expensive. For instance, tariffs on Chinese-made washing machines led to price increases of nearly 12% for U.S. consumers, significantly more than the tariff rate itself, as domestic producers also raised their prices. Crucially, this burden is often **regressive**, disproportionately impacting lower-income households. These households spend a larger share of their budget on heavily tariffed consumer goods and are less able to absorb price increases. The trade war effectively functioned as a consumption tax, raising the cost of living and eroding purchasing power, contradicting the rhetoric of protecting ordinary citizens.

**7.3 Business Impacts: Costs and Adaptation** Beyond specific sector winners and losers, businesses across the board grappled with the multifaceted challenges unleashed by escalation. **Increased input costs** were pervasive, affecting not just manufacturers importing directly from China, but also those reliant on components sourced from other countries integrated into complex GVCs disrupted by the conflict. **Supply chain disruption** became a constant headache, forcing companies to rapidly identify new suppliers, requalify components, and reconfigure logistics networks, incurring significant administrative and operational expenses. **Reduced access to key export markets** due to retaliatory tariffs hampered growth prospects for firms reliant on sales to China or other affected countries, forcing painful adjustments. Facing this hostile environment, businesses responded with a mix of short-term coping mechanisms and longer-term strategic shifts. Many **absorbed costs** initially, squeezing profit margins, or engaged in **limited price hikes**, risking market share. **Capital expenditure plans** were frequently delayed or scaled back due to heightened uncertainty about future trade policy and market access. However, escalation also acted as a powerful catalyst for **adaptation and resilience-building**. The acceleration of “**China Plus One**” diversification strategies was a direct consequence. Companies like Apple intensified efforts to shift production of AirPods, iPads, and iPhones to Vietnam and India. Automation investments increased as firms sought to offset higher labor costs in alternative locations and reduce vulnerability to future labor or trade disruptions. Businesses invested more heavily in **supply chain mapping** and **inventory buffering** to mitigate future shocks. While necessary for survival, these adaptations represented a significant diversion of resources away from innovation and productivity-enhancing investments, imposing a long-term efficiency cost on the broader economy.

**7.4 Agricultural Distress: A Key Battleground** Agriculture consistently emerges as a primary target and casualty in trade wars, exploited for its political sensitivity and concentrated voter base. In the US-China conflict, **U.S. soybeans** became the iconic symbol of retaliatory targeting. China, previously the largest buyer of U.S. soybeans, accounting for over 60% of exports, virtually halted purchases in mid-2018 following the imposition of retaliatory tariffs. Soybean prices plummeted, farm incomes crashed, and stored grain piled up across the Midwest. Despite substantial federal aid packages (Market Facilitation Payments) designed to placate a key political constituency, totaling billions of dollars, the financial and psychological toll on farmers was severe. Many faced bankruptcy, and land values softened in key agricultural states. Similarly, U.S. pork producers, another major exporter to China, saw their market severely disrupted. This dynamic is not unique to US-China. Australia’s agricultural sector faced devastating retaliation from China during a separate diplomatic dispute: punitive tariffs exceeding 80% effectively shut down exports of **barley** and

severely hampered **wine** exports, crippling producers who had invested decades in building the Chinese market. The targeting of agriculture highlights its vulnerability as a retaliatory weapon due to the perishable nature of many products and the difficulty of rapidly finding alternative large-scale export markets. The resulting distress ripples through **rural communities**, affecting

## 1.8 The Technological Front: Export Controls and Digital Protectionism

The profound and uneven economic tolls documented in Section 7 – the burdens shouldered by consumers, the volatility inflicted on farmers, and the complex calculus of business adaptation – underscored that trade war escalation extracts a heavy price. Yet, as the US-China conflict matured and other geopolitical tensions intensified, a critical shift occurred: the battleground increasingly migrated from traditional goods like soybeans and steel to the intangible, high-stakes realm of technology, data, and digital services. This evolution marked a defining characteristic of 21st-century trade wars, where control over critical technologies, information flows, and digital standards became paramount national security and economic security objectives, fueling a new, potent phase of escalation characterized by export controls, digital barriers, and the specter of technological fragmentation.

**This shift was fundamentally underpinned by the powerful, and often expanding, invocation of national security rationales intertwined with the rise of “techno-nationalism.”** While national security exceptions (like GATT Article XXI) have always existed, their application to restrict *technology* flows represents a significant broadening and intensification. Governments increasingly argue that dominance in foundational and dual-use technologies – semiconductors, artificial intelligence, quantum computing, advanced biotechnology, critical minerals processing – is essential not only for military superiority but also for economic resilience and geopolitical influence in an increasingly digitalized world. The core justification is preventing adversaries from acquiring capabilities that could undermine national defense or be used for repression and surveillance. However, the definition of “adversary” and “critical technology” has broadened considerably. This mindset fosters “techno-nationalism,” a doctrine where technological leadership is viewed as a zero-sum contest, justifying massive state intervention to achieve dominance and actively hinder rivals’ progress. The U.S. National Security Strategy explicitly frames competition in foundational technologies as central to the rivalry with China. Similarly, China’s drive for technological self-sufficiency (“xinchuang” - innovation substitution) is fueled by the perceived threat of foreign containment. This convergence of genuine security concerns and economic rivalry blurs traditional lines, transforming technology trade from a commercial activity into a key front in geopolitical competition and a primary mechanism for escalation. Restricting access ceases to be merely an economic tactic; it becomes a strategic imperative aimed at shaping the future balance of power.

**Nowhere is this techno-nationalist competition more fiercely contested than on the semiconductor battleground.** Often termed the “oil of the 21st century,” advanced chips are fundamental to everything from smartphones and data centers to fighter jets and AI systems. Recognizing this, the U.S. launched a multi-pronged escalation targeting China’s semiconductor ambitions. The initial salvo involved placing major Chinese chipmakers like Semiconductor Manufacturing International Corporation (SMIC) on the Entity List,

restricting access to advanced U.S. chipmaking tools. However, the most significant escalation came in October 2022 with sweeping new export controls. These rules, unprecedented in scope, prohibited U.S. persons from supporting Chinese development or production of advanced logic chips (below specified thresholds), restricted the sale of cutting-edge chipmaking equipment to China, and crucially, invoked the powerful **Foreign Direct Product Rule (FDPR)**. The FDPR extended U.S. jurisdiction to chips manufactured *anywhere in the world* if they used U.S.-origin technology or software, effectively blocking China's path to acquiring advanced semiconductors through third countries. This move aimed to freeze China's capabilities at nodes significantly behind the technological frontier, particularly targeting its ability to produce chips critical for AI development and supercomputing. China responded with massive counter-investment, pouring an estimated \$150 billion into its domestic chip industry, accelerating efforts to build a self-sufficient supply chain from design software to manufacturing equipment. This triggered a **global subsidy race**, exemplified by the U.S. CHIPS and Science Act (\$52 billion), the EU Chips Act (€43 billion), and similar initiatives in Japan, South Korea, and India, all scrambling to reshore or secure resilient chip supplies, further fragmenting the once-globalized industry and escalating the costs of technological competition.

**Central to this technological escalation are mechanisms designed to precisely target specific entities deemed threats.** The **Entity List**, maintained by the U.S. Commerce Department's Bureau of Industry and Security (BIS), is the primary tool. Placement on this list creates a "presumption of denial" for licenses to export controlled U.S. items to the listed entity, effectively cutting it off from critical American technology. **Huawei** became the most prominent case study. Its 2019 listing (later expanded with Foreign Direct Product Rule applications) devastated its smartphone business by denying access to advanced chips and Google Mobile Services, forcing a strategic retreat and massive internal R&D push. The list has since grown extensively, encompassing not only firms like SMIC but also key players in China's AI ecosystem (e.g., facial recognition giants SenseTime and Megvii, drone manufacturer DJI), supercomputing entities, and companies linked to alleged human rights abuses or military modernization. The **Foreign Direct Product Rule**, as applied to Huawei and later codified more broadly in the October 2022 controls, significantly amplified the Entity List's bite by controlling items produced *outside* the U.S. using U.S. technology. This global reach makes circumvention vastly more difficult. **Sanctions**, typically managed by the Treasury Department's Office of Foreign Assets Control (OFAC), complement these tools by restricting financial transactions and access to U.S. markets. While powerful in imposing severe costs on targeted entities, these measures have complex consequences. They accelerate the target's drive for self-sufficiency (Huawei's Harmony OS, SMIC's progress on 7nm chips despite restrictions), force global suppliers into difficult compliance choices, and inflict collateral damage on non-targeted businesses within the sanctioned entity's ecosystem. Their effectiveness in halting technological advancement remains debated, but their role as high-precision escalation tools in the tech domain is undeniable.

**Parallel to the control of physical technology flows, trade wars are increasingly fought over the rules governing the digital economy itself, manifesting as digital trade barriers and data localization mandates.** As economies digitize, restricting the cross-border flow of data and imposing local operational requirements become potent non-tariff barriers. **Data localization laws** mandate that data generated within a country (citizen data, financial records, health information) must be stored and processed on servers phys-

ically located within its borders. Countries cite various rationales: enhancing privacy and data security (partially inspired by the EU’s GDPR, though GDPR doesn’t mandate localization), protecting citizens from foreign surveillance, and fostering domestic digital industries. Russia, China (through its Cybersecurity Law and Data Security Law), India (mandates for payment data), Indonesia, and Vietnam have implemented stringent localization requirements. While sometimes addressing legitimate concerns, these rules significantly increase costs for multinational digital service providers (cloud computing, social media, fintech) who must build expensive local data centers and fragment their global operations. They act as de facto market access barriers, disadvantaging foreign firms and potentially hindering innovation that relies on global data aggregation. Furthermore, requirements for **local content** in digital services, restrictions on **cross-border data flows** even beyond sensitive personal data, and opaque **algorithm auditing** requirements compound the challenge. The U.S.-China tensions, for instance, fueled reciprocal scrutiny: U.S. concerns over TikTok’s data handling (leading to forced data storage initiatives like “Project Texas”) mirror China’s long-standing Great Firewall and localization demands for foreign tech firms. These digital barriers represent an escalation into the infrastructure of the modern economy, creating friction in the very lifeblood of global digital commerce.

**\*\*Perhaps the most profound and long-term consequence of escalating technological and digital conflict is the looming threat of a “Splintern**

## 1.9 Domestic Politics and Public Opinion: Fuelling the Fire

The intensifying technological fragmentation and the specter of a digital “splinternet,” as chronicled in Section 8, represent not merely the evolution of trade conflict’s tools, but a reflection of its increasingly deep entanglement with national identity and security anxieties. Yet, these escalatory dynamics, whether targeting tangible goods or intangible data flows, seldom originate or persist solely within the rarefied air of high strategy. Their ignition and sustenance are profoundly shaped by the turbulent currents of **domestic politics and public opinion**, where electoral calculations, powerful interest groups, media narratives, and shifting public sentiment act as potent accelerants, often locking leaders into cycles of confrontation and making retreat politically perilous.

**9.1 Electoral Politics and Populist Rhetoric** Trade wars frequently find fertile ground in the soil of domestic political contestation. Leaders, particularly those with populist leanings or facing pressure from disaffected constituencies, adeptly frame trade conflicts as battles for national dignity, fairness, and economic sovereignty against predatory foreign powers. This rhetoric simplifies complex global economic interdependencies into compelling narratives of “us versus them,” portraying escalation as a necessary demonstration of strength and resolve. Donald Trump’s 2016 presidential campaign exemplified this, with its potent “America First” slogan and explicit promises to confront China and renegotiate deals like NAFTA, which he famously labeled “the worst trade deal ever.” His declaration that “trade wars are good, and easy to win” provided a simplistic, politically resonant justification for initiating the US-China conflict, tapping into deep-seated anxieties in regions hollowed out by deindustrialization. The framing of tariffs not as taxes on consumers but as penalties paid by foreign adversaries (“China is paying”) became a central, albeit misleading, campaign



message. Similarly, Brexit campaigners leveraged anti-EU sentiment, framing Brussels' trade regulations as infringements on British sovereignty and control. This populist playbook transforms trade policy from technocratic management into a visceral symbol of national assertion, rallying political bases and often drowning out nuanced economic analysis. Leaders initiating or escalating conflicts frequently portray themselves as lone defenders standing up against elite consensus and foreign exploitation, creating a powerful electoral dynamic where backing down becomes synonymous with weakness. The invocation of national pride and the demonization of trading partners provide a potent political justification for measures that impose broad economic costs but offer concentrated, visible benefits to specific voter blocs or satisfy a desire for perceived national retribution.

**9.2 The Role of Interest Groups and Lobbying** The direction and intensity of trade policy, including escalation decisions, are heavily influenced by the asymmetric pressure exerted by organized interest groups, a dynamic central to political economy. Industries facing import competition or seeking protection possess **concentrated benefits** – potential losses are immediate, threaten specific jobs and communities, and mobilize powerful lobbying efforts. In the lead-up to the US-China trade war, well-funded industry coalitions, particularly representing steel, aluminum, and manufacturing sectors suffering from perceived Chinese overcapacity and unfair practices, exerted significant pressure on the Trump administration. Their arguments about job losses, national security vulnerabilities (emphasized by the steel lobby regarding military supply chains), and the need for a tougher stance found receptive ears. Conversely, the **diffuse costs** of protectionism – higher prices paid by consumers across the economy, reduced efficiency for downstream industries reliant on imported inputs, losses for export industries facing retaliation – are spread thinly over a vast number of individuals. This makes collective action difficult and politically less potent. While broad-based business groups like the U.S. Chamber of Commerce and the National Retail Federation consistently warned against escalating tariffs, highlighting the widespread harm to consumers and supply chains, their message struggled to compete with the focused intensity of protection-seeking industries. The political power of agricultural lobbies, traditionally strong free-trade advocates, was momentarily overwhelmed when China retaliated against farm exports, forcing them into a reactive posture demanding compensation rather than preventing the initial escalation. This asymmetry – where the pain of protection is focused and politically loud, while its benefits are widespread but politically quiet, and its costs are widespread but politically disorganized – creates a powerful engine driving initial protectionist measures and complicating efforts to de-escalate, as industries benefiting from tariffs mobilize to defend their newfound protection.

**9.3 Media Narratives and Framing** The public perception of trade wars is profoundly shaped by how media outlets frame the conflict. Coverage often emphasizes dramatic showdowns, winners and losers, and nationalistic angles, sometimes at the expense of complexity and long-term consequences. During the US-China conflict, headlines frequently focused on the escalating “tariff tit-for-tat,” summit confrontations, and the immediate impact on stock markets. This framing tends to personalize the conflict around leaders (e.g., “Trump vs. Xi”) and simplify motivations into narratives of national resolve versus foreign intransigence. Media emphasis on retaliatory targeting of politically sensitive sectors, like U.S. soybeans, amplified the drama and domestic political stakes, reinforcing the perception of the trade war as a high-stakes contest. Conversely, the more diffuse, long-term costs – such as slightly higher prices spread across countless con-



sumer goods, reduced business investment due to uncertainty, or the systemic weakening of global trade rules – received less sustained, less visceral coverage. The technical complexities of supply chains, currency valuations, or the nuances of WTO dispute settlement are difficult to convey compellingly, often leading to oversimplification or neglect. Furthermore, the echo chambers of partisan media can reinforce existing biases, with outlets aligning coverage to support or condemn the administration’s trade actions based on political affiliation rather than objective economic analysis. In some instances, **misinformation** also played a role, such as the persistent but misleading claim that foreign countries directly “paid” U.S. tariff revenues into the Treasury, obscuring the reality that these were taxes primarily borne by domestic importers and consumers. This selective framing by the media influences public understanding, shaping perceptions of who is “winning” or “losing,” and can constrain or empower leaders as they navigate the escalation spiral.

**9.4 Public Opinion Shifts Amidst Conflict** Public opinion towards trade, globalization, and specific trade actions is not static; it evolves in response to economic conditions, political rhetoric, and the perceived costs and benefits of conflicts. Polling data reveals a complex picture, often showing initial support for confronting perceived unfair practices, which can erode as the tangible costs mount. Prior to the US-China escalation, surveys like those by the Pew Research Center indicated significant public concern in the U.S. about the trade deficit with China and perceived job losses due to outsourcing, providing a reservoir of support for a tougher stance. Initial tariff announcements often garnered backing, particularly among constituencies receptive to populist “fighting back” narratives. However, as retaliation bit – particularly the targeted impact on U.S. farmers – and evidence of consumer price increases mounted, support often wavered. Polls began to show growing concern among Americans about the trade war’s negative impact on the U.S. economy and their own finances. Crucially, the conflict also dramatically reshaped mutual perceptions. Pew surveys tracked a steep decline in American public favorability towards China during the trade war years, dropping to historic lows, while Chinese views of the U.S. also deteriorated sharply, fueled by state media narratives framing U.S. actions as containment. This souring of public sentiment creates its own political inertia; leaders face pressure not only from economic interests but also from constituents harboring increased animosity towards the adversary nation. While the pain points of specific groups (like farmers) generated intense localized pressure, broader public opinion often remained ambivalent or fragmented, influenced heavily by partisan cues and media consumption. Nevertheless, sustained economic pain, particularly if manifested in visible job losses or significant inflation linked to tariffs, can shift the political calculus, potentially

## 1.10 Institutional Frameworks: Rules, Disputes, and Challenges

The potent interplay of domestic politics and shifting public sentiment, as explored in Section 9, creates powerful currents that propel trade conflicts forward. Yet, navigating these turbulent waters requires institutions – both international frameworks designed for collective governance and domestic legal structures – intended to channel disputes away from uncontrolled escalation towards rule-based resolution. Section 10 examines the crucial, yet increasingly embattled, role of these institutional frameworks: the mechanisms meant to adjudicate conflicts, the systemic challenges crippling their effectiveness, and the ad hoc alternatives emerging in their shadow, all against the backdrop of modern trade wars testing their limits to breaking point.

**The World Trade Organization’s Dispute Settlement Mechanism (DSM)** stands as the centerpiece of the post-1995 multilateral trading system, explicitly designed as a firewall against escalating tit-for-tat retaliation. Its core logic was legalistic and procedural: a member believing another member violated WTO rules could initiate consultations. If unresolved, a panel of independent trade experts would hear arguments and issue a ruling. Crucially, this ruling could be appealed to a standing **Appellate Body (AB)**, whose decision was final and binding. Compliance was expected, and if not forthcoming, the injured party could seek WTO authorization for proportionate retaliation. This two-tiered, quasi-judicial system aimed to replace power politics with rules, offering a predictable path for resolving grievances. Its early successes were notable, handling hundreds of often-complex disputes. For instance, the long-running **Airbus-Boeing subsidy disputes**, initiated in 2004, saw multiple panel and Appellate Body rulings condemning subsidies on both sides of the Atlantic, demonstrating the system’s capacity to handle high-stakes, protracted conflicts between major powers, even if full compliance remained elusive. Similarly, disputes involving agricultural subsidies or anti-dumping measures were routinely litigated, providing a structured alternative to unilateral escalation. The DSM functioned not just as a court, but as a vital confidence-building mechanism, assuring smaller members they could challenge larger powers on a level playing field, thereby underpinning the entire rules-based order.

However, the DSM’s ability to contain modern escalation faced a catastrophic blow with **the Appellate Body crisis**. Concerns had simmered for years, primarily voiced by the United States, regarding alleged judicial overreach, delays in the process, and Appellate Body members overstepping their mandate by effectively creating new rules or failing to adhere strictly to the 90-day deadline for issuing reports. Beginning in 2016, the US shifted from critique to obstruction, systematically blocking the appointment or reappointment of Appellate Body judges, citing these grievances. By December 2019, with only one judge remaining – below the minimum of three required to hear appeals – the Appellate Body ceased to function entirely. The consequences were profound and immediate. The binding, two-stage dispute settlement system was paralyzed. Losing parties could now simply appeal any adverse panel ruling “into the void,” knowing no Appellate Body existed to hear it. This rendered panel reports legally inconclusive, stripping the DSM of its enforceability and its core deterrent effect. Major disputes central to contemporary escalation became stuck in limbo. The numerous challenges filed against the **U.S. Section 232 tariffs on steel and aluminum** – imposed on national security grounds that most other WTO members viewed as spurious economic protectionism – exemplified the problem. While panels eventually ruled against the U.S. (e.g., in cases brought by China, Norway, Switzerland, Turkey), the U.S. appealed these rulings into the void, leaving them in legal purgatory and the tariffs firmly in place. Similarly, disputes concerning **China’s intellectual property practices and technology transfer policies**, central to the U.S. justification for its trade war, remained unresolved due to the crisis. The paralysis transformed the WTO from a rules-enforcer into a mere talking shop for negotiations, drastically weakening the primary institutional brake on unilateral escalation and emboldening nations to act outside the multilateral framework, confident there would be no binding legal consequences.

Faced with a dysfunctional WTO DSM, affected parties increasingly turned to **domestic legal systems** in an attempt to challenge escalating trade actions, though with limited success. In the United States, aggrieved companies launched numerous lawsuits challenging the legality of tariffs imposed under Section

232 (national security) and Section 301 (unfair trade practices). Cases argued that the Trump administration exceeded its statutory authority, misapplied the national security rationale (particularly for widely imported products like steel used in consumer goods), or failed to follow proper administrative procedures. **Transpacific Steel LLC v. United States** became a prominent example, where a steel importer challenged the constitutionality of the Section 232 tariffs' differential phase-in (initially excluding Canada, Mexico, and the EU). While the U.S. Court of International Trade (CIT) initially found the exclusions violated the "equal protection" requirement of the Fifth Amendment, this decision was overturned by the Court of Appeals for the Federal Circuit, which granted significant deference to the President on national security matters. Other challenges, such as those brought by major retailers like **J.C. Penney**, **Target**, and **Walmart** against the Section 301 tariffs on Chinese goods, argued the tariffs exceeded statutory time limits and lacked sufficient justification following the termination of the underlying Section 301 investigation upon signing the Phase One deal. These cases faced steep uphill battles. Courts generally exhibited extreme reluctance to second-guess the executive branch on matters involving national security or foreign policy, adhering to principles of judicial deference. Furthermore, the sheer political weight behind the trade war actions often rendered legal victories, even if achieved, potentially moot or difficult to enforce. While domestic litigation provided an avenue for protest and occasionally forced procedural adjustments, it proved largely ineffective in halting or significantly rolling back broad-based escalation initiated by the government itself.

The institutional crisis was compounded by the stark reality that the **existing WTO rulebook, largely crafted in the 1990s, struggled to effectively govern the flashpoints driving 21st-century trade wars**. The rules were ill-equipped to handle the complexities of **digital trade**, where issues like data flows, source code disclosure, and digital services taxes fell into regulatory gaps. The explosive growth of **state capitalism**, particularly China's model featuring massive industrial subsidies, dominant state-owned enterprises, and forced technology transfer practices, exposed fundamental limitations in WTO disciplines. Existing subsidy rules proved difficult to apply effectively to the scale and opacity of state support in certain economies, while rules on SOEs focused primarily on discrimination rather than their inherent competitive advantages derived from state backing. Crucially, the expansive invocation of **national security exceptions** (GATT Article XXI) became a major point of contention. While the exception is intentionally broad ("any action which it considers necessary for the protection of its essential security interests"), its use for broad economic protectionism – like justifying global steel and aluminum tariffs based on tenuous links to defense industrial capacity – was seen by many members as a dangerous abuse undermining the entire system. The lack of clear criteria or agreed mechanisms for reviewing such invocations created a massive loophole, allowing any member to potentially shield protectionist measures from scrutiny. The WTO's struggle to update its rules to address these modern realities, hampered by the consensus requirement among 164 diverse members and the shifting focus towards unilateralism and great power rivalry, left a gaping governance void that escalating powers readily exploited.

In response to the multilateral stalemate, nations increasingly pursued **\*\*plurilateral and bilateral agreements** as alternative venues for "rule-model

### 1.11 Pathways to De-escalation: Negotiation, Truce, and Resolution

The institutional paralysis and rulebook limitations explored in Section 10 cast a long shadow over the prospects for ending trade wars. When the very mechanisms designed to resolve disputes are weakened or bypassed, and when conflicts are fueled by deep-seated systemic rivalries and domestic political pressures, finding pathways to de-escalation becomes a formidable challenge. Yet, history and contemporary practice demonstrate that even the most entrenched trade wars eventually seek some form of exit ramp, driven by mutual exhaustion, shifting political imperatives, or the sheer weight of economic costs. Section 11 examines the arduous process of winding down trade conflicts, the varied forms such de-escalation can take, and the persistent scars that often remain long after the tariffs are lifted or the sanctions eased.

**Negotiating amidst ongoing economic hostilities presents unique and daunting obstacles.** Unlike pre-conflict bargaining, talks occur against a backdrop of active pain – tariffs inflating costs, supply chains in disarray, and industries reeling from lost markets. This environment breeds profound mistrust and hardens positions. Negotiators face intense pressure to demonstrate strength domestically, making concessions politically perilous. Strategies to bridge this gap often involve **phased agreements**, where incremental concessions build confidence. The US-China Phase One deal exemplified this approach, focusing on achievable, if limited, goals like increased Chinese purchases of US goods and specific IP commitments, while deliberately deferring the most contentious structural issues. Establishing **dedicated working groups** on specific topics (e.g., agriculture, financial services) can provide technical channels for dialogue even when high-level politics are fraught, maintaining a thread of communication. **Backchannel diplomacy** and **summit meetings** between leaders also play crucial roles, offering opportunities for personal rapport and political breakthroughs that lower-level bureaucrats cannot achieve. The Trump-Xi meetings at the G20 summits in Buenos Aires (2018) and Osaka (2019) repeatedly paused planned escalations, though they failed to yield lasting resolution. However, the fundamental difficulty lies in negotiating while the economic weapons remain deployed; each side holds hostages (targeted industries) and views concessions as potential weakness, creating a fragile and often frustrating dynamic.

**The outcomes of de-escalation efforts are rarely a clean return to the pre-war status quo.** Instead, they manifest along a spectrum, each with distinct characteristics and limitations. **Truces** represent temporary pauses in hostilities, often fragile and designed to create space for further talks without resolving core issues. The US-EU agreement in July 2018 to hold off on further auto tariffs while negotiating, or the repeated US-China tariff “truces” announced at G20 summits, provided breathing room but lacked substance. **Cease-fires**, sometimes formalized in agreements like the US-China Phase One deal, involve a partial rollback of measures or a commitment to halt further escalation for a defined period. This ceasefire was partial – many tariffs remained in place – and conditional on China meeting specific purchase targets. Its failure to address subsidies or SOE reforms meant the underlying conflict persisted. **Comprehensive resolutions** are rare in complex modern trade wars involving systemic rivalry; they require resolving the fundamental disagreements that sparked the conflict, a high bar seldom met. More common are “**managed trade**” arrangements, which accept ongoing friction but establish frameworks to contain it. The decades-long Airbus-Boeing dispute, while featuring WTO-authorized tariffs, has seen repeated bilateral agreements attempting to limit

subsidies and manage the fallout, representing a form of institutionalized, albeit tense, de-escalation. The choice of outcome depends heavily on the political feasibility of concessions, the depth of mistrust, and the balance of economic pain.

**Given the bilateral logjams that often characterize escalating conflicts, the potential role of neutral third-party mediation emerges, though its effectiveness is frequently constrained.** The ideal mediator possesses neutrality, trust from both sides, and significant diplomatic clout. The **Director-General of the WTO** is a logical candidate, representing the multilateral system itself. While the WTO DG can offer good offices, convene talks, and provide technical expertise, their ability to mediate effectively is hamstrung when the conflict involves actions that flout or paralyze the WTO's own rules (like the Section 232 tariffs), undermining the institution's perceived authority. Smaller, highly trusted nations like **Switzerland** or **Singapore** sometimes play discreet roles as facilitators or hosts for backchannel talks, leveraging their reputation for neutrality and diplomatic skill. However, in high-stakes conflicts driven by geopolitical rivalry, like US-China, the willingness of major powers to cede significant influence to a third party is typically low. They often view core national security or economic model issues as non-negotiable through external mediation. **Allies** can sometimes act as indirect mediators or pressure points. During the US-China tensions, European and Asian allies consistently urged both sides towards de-escalation, fearing collateral damage. While rarely forcing a resolution, this sustained diplomatic pressure from key partners can help create off-ramps by reinforcing the broader costs of continued conflict and offering potential support structures for agreements.

**Perhaps the most potent catalyst for de-escalation is simple economic exhaustion.** When the cumulative costs of the conflict – borne by consumers, exporters, investors, and the broader economy – become unsustainable for both sides, leaders face mounting pressure to seek relief, even at the cost of political face. The **COVID-19 pandemic** dramatically accelerated this dynamic in the US-China trade war. The unprecedented global economic shock in early 2020 created an urgent, shared imperative for stability. The pandemic disrupted supply chains already strained by tariffs, threatened severe recessions, and diverted governmental attention and resources. Signing the Phase One deal in January 2020, even with its limitations, offered a semblance of stability amid the gathering storm. While the pandemic was an exogenous shock, it starkly illustrated how mutual economic pain can override ideological or strategic posturing. Similarly, the sustained damage inflicted on politically powerful constituencies – like US farmers facing bankruptcy due to lost Chinese markets or European aerospace suppliers caught in the Airbus-Boeing crossfire – generates intense domestic pressure that leaders cannot indefinitely ignore. When the costs become widespread and visible enough, and when they threaten core economic stability or electoral prospects, the political calculus shifts, creating a window, however narrow, for de-escalation. The sheer weight of economic reality can eventually force a truce, even between deeply distrustful adversaries.

**However, even when formal de-escalation occurs, the legacy of a major trade war is often enduring mistrust and a fundamental shift in economic relations – a state of “Cold Trade.”** Tariffs might be partially lifted, or a ceasefire agreement signed, but the experience profoundly alters perceptions and behavior. **Business confidence** is deeply scarred. Having experienced the sudden disruption of established supply chains and markets, corporations permanently factor geopolitical risk into their investment and sourcing decisions. The accelerated drive for supply chain diversification and resilience (“China +1,” nearshoring,

friendshoring), initially a response to tariffs, becomes a long-term strategic imperative, even if less efficient. **Investment patterns** shift, reflecting heightened caution about dependencies deemed risky. Foreign direct investment flows may decline or be redirected towards perceived safer jurisdictions, impacting long-term growth trajectories. **The trust deficit** between governments lingers, poisoning cooperation on broader economic and geopolitical issues. Every future action by the former adversary is viewed through a lens of suspicion, making collaboration difficult. This environment fosters **“derisking”** – a deliberate, strategic effort to reduce economic interdependence in critical sectors

## 1.12 Future Horizons: Escalation Risks in a Fractured World

The persistent state of “Cold Trade” documented in Section 11 – characterized by enduring mistrust, re-configured supply chains, and strategic derisking – does not signify an end to trade conflict, but rather a precarious new normal. This fragile equilibrium forms the fertile ground from which future waves of escalation could readily sprout, fueled by unresolved geopolitical tensions, the urgent demands of climate action, accelerating technological fragmentation, and the fraying threads of economic interdependence. Projecting the future trajectory of trade wars requires examining these interconnected forces, assessing whether the lessons of past escalations can forge pathways toward restraint, or if the gravitational pull of fragmentation and rivalry will prove overwhelming.

**12.1 Persistent Drivers: Geopolitics and Industrial Policy** The bedrock of future escalation risks remains the entrenched **strategic rivalry between the United States and China**, now deeply embedded within their respective economic policies. This is not a transient friction but a fundamental contest over technological supremacy, influence in critical regions, and ultimately, the shape of the global order. Trade policy has become inseparable from grand strategy. The U.S. approach, solidified under the Biden administration despite rhetorical shifts from Trump, explicitly links trade and technology restrictions to national security through frameworks like the National Security Strategy and National Defense Strategy, viewing economic resilience and technological leadership as core pillars of power. China’s “dual circulation” strategy and intensified push for technological self-reliance (“xinchuang”) reflect a parallel conviction that security demands reduced external dependencies. This geopolitical imperative fuels a global surge in **industrial policy**, where state intervention is no longer taboo but a central tool for securing strategic advantage. The U.S. CHIPS and Science Act (\$52.7 billion for semiconductor manufacturing and R&D) and the Inflation Reduction Act (\$369 billion for clean energy and climate provisions), the EU’s Chips Act (€43 billion) and Net Zero Industry Act, Japan’s support for domestic chip foundries, and India’s Production Linked Incentive (PLI) schemes across electronics, pharmaceuticals, and telecom are all manifestations of this trend. While aimed at resilience and competitiveness, these policies inherently risk triggering subsidy races, distorting global markets, and provoking accusations of unfair advantage – the classic fuel for trade disputes. The Airbus-Boeing saga, spanning decades and featuring multiple rounds of WTO-authorized retaliation, serves as a stark precedent for how state support for national champions can become a perpetual source of friction. The sheer scale and strategic focus of current industrial policies, particularly in semiconductors, clean tech, and critical minerals, vastly increase the potential for similar, multi-decade conflicts to erupt and escalate across



multiple sectors simultaneously.

**12.2 The “Green Trade War” Nexus** The urgent global imperative to combat climate change, paradoxically, creates a significant new vector for trade conflict, potentially sparking a “**Green Trade War**.” As nations race to dominate the burgeoning markets for clean technologies – solar panels, wind turbines, batteries, electric vehicles (EVs), and green hydrogen – competition intensifies. This competition, vital for planetary health, risks devolving into protectionism justified under the banner of climate action. The U.S. **Inflation Reduction Act (IRA)**, while a landmark climate bill, exemplifies this tension. Its substantial tax credits for EVs, batteries, and renewable energy projects are contingent, in many cases, on significant levels of domestic manufacturing or sourcing of critical minerals from U.S. free trade agreement partners. This “local content” focus, designed to build domestic supply chains and jobs, is viewed by the European Union, South Korea, Japan, and others as discriminatory, potentially disadvantaging their exporters and diverting investment away from their shores. The EU responded with its own **Green Deal Industrial Plan**, relaxing state aid rules to allow massive subsidies for clean tech projects and proposing the **Net-Zero Industry Act** to set targets for domestic manufacturing capacity. Crucially, the EU’s **Carbon Border Adjustment Mechanism (CBAM)**, while aiming to prevent “carbon leakage” (industries relocating to regions with weaker climate rules), is perceived by major exporters like China, India, and Russia as a protectionist tool disguised as environmental policy. Disagreements over what constitutes a permissible subsidy for green transition versus an illegal market distortion, coupled with differing national approaches to carbon pricing and regulation, create fertile ground for disputes. Furthermore, competition over access to **critical minerals** essential for the energy transition (lithium, cobalt, nickel, rare earths) is intensifying. Export restrictions, like Indonesia’s ban on nickel ore exports to force domestic smelting (challenged by the EU at the WTO), or investment controls targeting foreign ownership of mines, are early skirmishes in a conflict likely to escalate as demand surges. Without careful international coordination, the race to decarbonize could fracture into competing green protectionist blocs, slowing the very transition it seeks to accelerate.

**12.3 Technology Decoupling Accelerating** The technological decoupling foreshadowed in Section 8 is accelerating, moving beyond targeted sanctions towards a broader, systemic effort to create competing technological ecosystems. Driven by unyielding techno-nationalism and acute security concerns, the U.S. and its allies are actively constructing “**small yard, high fence**” strategies – identifying critical, foundational technologies (like advanced semiconductors, AI, quantum computing, and biotech) and imposing increasingly stringent export controls, investment screening, and research collaboration restrictions. The October 2022 U.S. export controls on advanced computing chips and chipmaking equipment to China, coupled with aggressive use of the Foreign Direct Product Rule and pressure on allies like the Netherlands (ASML) and Japan to align their controls, represent a quantum leap in this effort. China’s response is a massive, state-directed push for self-sufficiency, pouring resources into its domestic semiconductor industry (SMIC, Hua Hong) and indigenous innovation. This decoupling extends beyond hardware to **standards and platforms**. Competition over 6G network standards, divergence in AI governance frameworks (EU’s risk-based regulation vs. U.S. innovation focus vs. China’s state-centric model), and the proliferation of incompatible data localization regimes foster technological fragmentation. The vision of a global, interoperable “**Splinternet**” is becoming less hyperbolic. Companies face mounting pressure to develop parallel product lines or com-



pletely different technological stacks for different geopolitical blocs. Research collaboration, long a driver of global innovation, is fracturing along geopolitical lines due to espionage fears and restrictions. The unintended consequences are significant: duplication of R&D efforts, higher costs, slower overall technological progress, and a bifurcation of the global innovation landscape. While aiming to protect security and preserve advantage, accelerating tech decoupling fundamentally reshapes global trade patterns, creates new choke-points (like access to advanced chipmaking tools), and establishes new, enduring fault lines ripe for future escalation, particularly as emerging technologies like AI and quantum mature.

**12.4 The Erosion of Economic Interdependence?** A critical question arising from the trends of industrial policy, green competition, and tech decoupling is whether we are witnessing a fundamental **erosion of economic interdependence**. The post-Cold War era was defined by deepening integration, complex global value chains, and the belief that mutual