# Strategic Adjustment in the New Bipolarity:
# How U.S. Allies Reshape Economic Interdependence

Advanced Method of Empirical Research (POL7140)

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## Introduction

As China rises economically and militarily, a growing body of scholarship argues that the polarity of the international system has transitioned from unipolarity to bipolarity (Lind 2024; Kupchan 2021; Tunsjø 2018; Maher 2018; Toft 2025). While some may argue that unipolarity persists (Brooks and Wohlforth 2023) or that the system is moving toward multipolarity (Mearsheimer 2025; Ashford and Cooper 2023; Muzaffar, Yaseen, and Rahim 2017). it is evident that the unipolar world once dominated by the United States has ended (Schweller and Pu 2011; Layne 2012). This study builds on Lind's (2024) systematic analysis and proceeds from the premise that the international system has shifted from unipolarity to bipolarity.

During the post-Cold War unipolar era, the world economy achieved unprecedented integration under U.S. liberal hegemony. Following China's accession to the WTO in 2001, the United States and China cooperated economically and accumulated enormous wealth from trade and offshoring to China. This was based on liberal belief: Trade and exchange are understood to be constituents of modern society, and the connections and gains that flow from deep engagement and integration foster peace and political advancement (Ikenberry 2018).

However, since the global financial crisis in 2007, U.S. foreign policy has shifted its stance toward China. As China began to articulate the "Chinese Dream" and pursue a more aggressive foreign policy, U.S. President Barack Obama declared a "pivot to Asia" in 2011, and President Trump's administration labeled China a "strategic competitor" rather than a "responsible stakeholder" in 2017. These policies have been largely consistent under President Joe Biden, who pursued reshoring, friendshoring, and nearshoring strategies and established new economic multilateral institutions such as the Indo-Pacific Economic Framework (IPEF). More recently, the second term of President Trump has taken a more aggressive stance—demanding enormous investments in the United States from its allies, thereby risking the credibility and foundations of

traditional alliances, while maintaining tariffs and sanctions against China, as in his first term. Furthermore, the U.S. government sets high tariffs on its allies.

Observing these phenomena, it becomes evident that U.S. grand strategy has changed, and that new structural forces are reshaping current economic sphere of international system. This raises a central question: how does the distribution of power in the new bipolar system reshape patterns of international economic interdependence? To address this question, this study explores trade dynamics of U.S. allies between the established and emerging poles. I argue that the transition to bipolarity is the fundamental structural cause of these strategic adjustments of economic interdependence. According to Gowa and Mansfield (1993), alliances do have a direct impact on bilateral trade flows and that relationship is stronger in bipolar, rather than in multipolar, systems. With extending their argument, I argue that as unipolarity transitions into bipolarity due to China's rise, the hegemon—the United States—seeks to maintain its dominant position by reducing its overspending on global public goods (Gilpin 1981) and by demanding greater contributions from its allies, effectively calling in "outstanding credits." At the same time, the U.S. aims to lessen its economic interdependence with China due to the growing vulnerability created by dependence on critical resources, seeking to substitute this by increasing with its allies. Thus, economic interdependence between the U.S. and its allies deepens in the U.S.-China bipolar system. From the allies' perspective, this study builds on Snyder's (1984) secondary alliance dilemma, arguing that both asymmetric dependence on U.S. security and converging threat perceptions toward China shape allies' responses. As a result, U.S. allies are incentivized to sustain cooperation by deepening economic interdependence with the United States.

To substantiate my argument, I construct a country-year panel dataset of trade flows (1991-2023. This study distinguishes polarity as unipolar (1991-2016) and bipolar (2017-2023) with the evidence of text analysis results that capture the distribution of knowledge about great power status. Furthermore, this study presents the historical evidence that the grand strategy of the United States and China has shifted toward competition in 2017, which is the moment of shift in polarity. This research employs a fixed effects (FE) panel gravity model to estimate the effect of polarity transition on the trade flow between the U.S. and its allies. However, the absolute level of trade itself has less significance because of rapidly changing trade conditions. Hence, this research analyzes whether the allies' trade share accounted for by the U.S. has changed in the era of bipolarity. Further, this research analyzes trade aspects with the rising pole, China, to systemically

compare U.S. allies' strategic adjustment of economic interdependence. Statistical findings illustrate that wealthy U.S. allies have increased economic interdependence under the bipolarity compared to non-allies. On the other hand, they decreased economic interdependence with China as bipolarity emerged. Robustness checks confirm the consistency of these results.

This study contributes to the literature by revisiting the structural effects of polarity – a key third-image component – and empirically demonstrating how the contemporary distribution of power under U.S.–China bipolarity reshapes patterns of economic interdependence among allies. First, it advances the ongoing discourse asserting that the current international system has shifted to bipolarity (Lind 2024; Tunsjø 2018; Maher 2018; Kupchan 2021; Toft 2025). By utilizing text analysis, I identify 2017 as the pivotal year of this structural transition. Second, this research extends the framework of Gowa and Mansfield (1993) to the context of the emerging U.S.–China bipolarity. Gowa and Mansfield (1993) posited that while the anarchic uncertainty of multipolarity fosters protectionist fragmentation, the U.S.–Soviet bipolarity resolved this uncertainty by consolidating the global economy into two distinct, ideologically separated poles. This study nuances this logic by examining the transition from a highly integrated unipolar order under U.S. liberal hegemony to the current bipolar structure. Unlike the "clean break" of the Cold War era, the contemporary U.S.–China bifurcation is constrained by the legacy of deep globalization, which limits abrupt economic decoupling. Consequently, the global economy is undergoing a gradual and partial bifurcation driven by structural forces. Although the U.S. trade policies of President Trump's second term may appear uniformly protectionist (Fajgelbaum et al. 2019; Ma and Ning 2024) – even toward U.S. allies – this study predicts that such policies will be transitory deviations. Third, my heterogeneity analysis reveals that wealthy, technologically advanced, and industrially embedded allies—such as South Korea, Japan, and Germany—are most likely to deepen their economic and security interdependence with the U.S. in response to bipolar shift. This shift is empirically grounded in the landmark developments of 2025, including South Korea's $350 billion and Japan's $550 billion investment plans in the U.S. industry. Moreover, long-term security commitments—exemplified by South Korea's $25 billion U.S. arms purchase deal through 2030 and NATO allies' decision to raise defense spending targets to 5% of GDP—create a "lock-in" effect. These massive, multi-year investments in both capital, technology and defense infrastructure ensure that the economic and security destinies of these wealthy allies remain inextricably linked to the U.S. pole, effectively counteracting any transitory protectionist rhetoric.

The paper proceeds as follows: Section II reviews previous studies arguing that the current international system is bipolar and discussions on how polarity impacts trade and economic interdependence. Section III employs the Hegemonic War theory (Gilpin 1981) and Alliance Dilemma framework (Snyder 1984) to propose the research hypothesis. Section IV explains how the moment of polarity transition is identified and presents the empirical strategy to identify the effect of polarity transition on the behavior of states. Section V presents the estimation strategy, empirical findings, and robustness checks. Finally, Section VI discusses the implications of this study.

## Literature Review

### Transition from Unipolarity to Bipolarity

Polarity is defined by the number of great powers within the international political system. A bipolar system is one in which there are two great powers, and a significant gap in national power exists between these two states and the third-ranking state (Lind 2024; Tunsjø 2018). Great powers are identified by the relative possession of material capabilities; in this regard, scholars point to population size, economic wealth, technological capacity, and military power (Lind 2024; Tunsjø 2018). Regarding non-material dimensions, factors such as organizational capacity, national cohesion, moral leadership, prestige, and soft power are suggested.

Unipolarity under the United States, in which there was a single great power within the system, emerged after the collapse of the Soviet Union in 1991. Structural realists argued that this unipolar moment would not last long and would eventually be balanced against due to the structural power dynamics of the international system. Kenneth Waltz (2000) posits that, following the collapse of the Soviet Union, the international political system became unipolar—yet from the standpoint of structural realism, this is the least durable configuration. The reasons are twofold. First, dominant powers tend to overextend by assuming excessive responsibilities beyond their own borders and providing global public goods, which ultimately weakens them in the long run. Second, other countries are more likely to engage in free riding within a unipolar system (Waltz 2000; Jervis 2009). Consequently, the uneven growth rates among states become prevalent (Gilpin 1981), and the unbalanced power of the hegemon creates an environment conducive to the emergence of new great powers, leading to the erosion of unipolarity (Layne 1993).

Following the 2007 Global Financial Crisis, numerous studies argued that the relative decline of the United States had begun and that the unipolar moment had ended (Schweller and Pu 2011; Layne 2012). Driven by its rapidly increasing economic and military capabilities and its ambition for a new world order, China has become the most formidable challenger to the U.S. hegemonic order, leading to heightened tensions between the two nations (Layne 1993; Waltz 2000; Mearsheimer 2010; Schweller and Pu 2011). Notably, scholars at Chinese think tanks began to assess that the power gap between China and the U.S. had narrowed, supporting the modification or abandonment of the "Hide and Bide" (*Tao Guang Yang Hui*) grand strategy (Doshi 2021). Furthermore, referencing the financial crisis, President Hu Jintao stated that there had been "significant changes in the international balance of power." In a 2009 speech, Hu foreshadowed a shift in grand strategy by modifying 'Hide and Bide' and advocating for 'Actively Accomplishing Something' (*Fen Fa You Wei*) (Doshi 2021).

While there is a consensus on the relative decline of the United States, there is no agreement on whether the post-2008 order will lead to multipolarity (Ashford and Cooper 2023; Mearsheimer 2025; Muzaffar, Yaseen, and Rahim 2017), bipolarity (Gaiser and Kovač 2012; Lind 2024; Kupchan 2021; Tunsjø 2018; Maher 2018), or the maintenance of unipolarity (Brooks and Wohlforth 2023). In this research, I posit that the unipolar moment has transitioned into a bipolar structure dominated by the United States and China, following Jennifer Lind's (2024) systemic analysis on measuring polarity. The world is now bipolar, and the material data provides compelling evidence. To measure power, Lind (2024) employs composite indicators (GDP × GDP per capita), military expenditure, and military personnel ratios to compare economic and military power—metrics that serve as reliable inductive proxies for distinguishing among systems of polarity (e.g., multipolarity in 1900–1945, bipolarity in 1945–1990). Lind's research highlights key findings. First, the historical analysis reveals significant imbalances in the global distribution of power, exemplified by the fact that the Soviet Union managed to compete with the United States for decades despite possessing only 44 percent of U.S. GDP at its peak. The Soviet military expenditure ratio stood at 35.4 percent of the U.S. level in 1988. This implies that a state can be regarded as an independent pole even when its capabilities are substantially below those of the leading power. Great powers need not achieve parity with the leader to challenge it effectively. Second, the contemporary international system has shifted toward bipolarity. China has become a superpower based on indicators demonstrating that its capabilities are as strong as—or stronger

than—those of typical great powers throughout history. In 2024, China's GDP ratio compared to that of the United States reached 81.5 percent (measured in constant 2015 U.S. dollars). In terms of Purchasing Power Parity (PPP), which reflects China's lower price levels, it reached 130.9% of the U.S., thereby surpassing it. For over a century, no U.S. adversary—or coalition of adversaries—has achieved 60 percent of U.S. GDP (Doshi 2021).

In addition, China holds an advantage over non-U.S. states in securing advanced military technologies, such as the rapid development of sixth-generation fighter jets in the air domain. As of 2022, China's R&D expenditure is 55% of that of the U.S., maintaining a 2.5-fold gap with third-place Japan. China also ranks second globally in AI-related academic publications, holding a significant lead over the third-ranked country. Moreover, in 2018, China accounted for 20.67% of global science and technology publications, surpassing the U.S. share of 16.54% (McCarthy 2019). Beyond this, China is strengthening economic cooperation and ties with numerous countries in Africa and Asia through the Asian Infrastructure Investment Bank (AIIB), the Shanghai Cooperation Organization (SCO), BRICS+ and the Belt and Road Initiative (BRI), while systematically executing a grand strategy to replace the U.S.-led international order and establish itself as a global leader since the 19th Chinese Communist Party Congress in 2017 (Doshi 2021). Given these factors, China has secured its status as a great power and an independent pole, and the current international system can be described as bipolar.

If the system has transitioned toward bipolarity, the next step is to identify the specific moment of transition. However, previous scholars who argue the return of bipolarityleave the time of this transition under-specified. Mearsheimer (2025, 7) identifies 1991-2017 as unipolar moment and argues that 'we are now in a multipolar world' with saying that China and Russia had developed sufficient economic and military capabilities by about 2017. He also argues that this new structure explains why the first Donald Trump administration (2017-2021) maintains from its start that "great power competition returned." While Mearsheimer identifies multipolarity, this study departs from his classification by excluding Russia, whose economic capabilities remain substantially below those of the United States and China because Russia was ranked 13th in terms of GDP and has only 12.8% of China's GDP in 2017.

I argue that 2017 was the pivotal moment of polarity because the grand strategy of the United States and China had changed in that year. Doshi (2021) identifies three displacement strategies in China's grand strategy: blunting through restraint (1989–2008), building via selective

engagement (2009–2016), and post-2017 global expansion articulated as "great changes unseen in a century." Specifically, the 19th Party Congress in 2017 marked the consolidation of Xi Jinping's power and the establishment of a grand strategy to replace the U.S.-led order (Doshi 2021). Simultaneously, the Trump administration's 2017 *National Security Strategy* (NSS) labeled China a "revisionist power," signaling a return to realist great power competition (The White House 2017). Consequently, this study identifies 2017 as the critical juncture where the international system transitioned from unipolarity to bipolarity.

This study complements the realist concept of polarity by emphasizing the social institution of great power status and employing text analysis to substantiate 2017 as the pivotal year of transition. According to Waltz (1979, 79), the international system is composed of a structure and interacting units. In this traditional framework, polarity refers to the international political structure, while the units are sovereign states. For a system to change, the components of the structure must shift; thus, the distribution of material capabilities is the sole variable distinguishing polarity by counting the number of great powers. However, to count the number of great powers, the intersubjective perception of states is required. In this regard, constructivist critiques have long argued that polarity is as much social as it is material (Finnemore 2009; Koslowski and Kratochwil 1994). As Bull (1977) and Buzan (2004) suggest, great powers are not merely concentrations of material capabilities but also a socially recognized status—powers recognized by themselves and by others. This research redefines polarity based on Alexander Wendt's (1992, 395-397) systemic constructivism. For the distribution of power to exert a causal effect on state behavior, it must depend on intersubjective understandings—the "distribution of knowledge." In this view, polarity is defined by both the distribution of power and the distribution of knowledge as necessary conditions.

Therefore, to empirically capture this perceptual shift in the distribution of knowledge, this study analyzes global media discourse using a dataset of over 11,000 articles from six major global newspapers, collected via lexis+. By employing frequency analysis and Latent Dirichlet Allocation (LDA) topic modeling, I identify the critical juncture when the perception of U.S.-China bipolarity became salient. The specific methodology and results are detailed in the research design section.

**Strategic Adjustment of Economic Interdependence**

Economic interdependence is a key concept in the theory of international politics. Interdependence refers to mutual dependence and is characterized by reciprocal effects among countries resulting from international transactions—flows of money, goods, people, and messages (Keohane and Nye Jr 1973, 7). Economic interdependence is a sub-dimension of interdependence. It refers to some measure of the value of economic transactions between two countries, or between a country and the rest of the world, scaled to total national output or to some measure of total financial assets (Cooper 1985, 1197). Traditionally, economic interdependence has been considered and operationalized primarily by trade flows (Oneal and Russet 1997; Copeland 1996).

The puzzle of economic interdependence lies in the fact that it provides not only absolute gains to each party but also raises issues concerning the distribution of gains, which implies that advantages in relative gain are linked to external costs (security externalities) that may be invested in military spending. This constitutes a seed for future conflict and security concerns. Previous literature has mainly focused on the causal effects of economic interdependence on future conflict. Realists argue that the interdependence of states is subject to common vulnerability, which increases risk and fear due to the anarchic structure of the international system (Waltz 1979). Moreover, considerations of relative gains and concerns about cheating dominate the realist world, thereby hindering cooperation and increasing the likelihood of conflict (Mearsheimer 1995). On the other hand, liberals maintain that economic interdependence lowers the likelihood of war by increasing the value of trading relative to the alternative of aggression (Copeland 1996). Even when conflicts arise between states, they are more likely to be resolved through negotiation and compromise—facilitated by institutions and international regimes—since complex interdependence involves multiple actors and issues beyond clear hierarchical control, making military force an ineffective means of resolution (Keohane & Nye, 1977). Based on these opposing views regarding the effects of economic interdependence, the literature has focused primarily on the causal effect of economic interdependence on conflict and war, treating it as an independent variable (Copeland 1996, 2014; Reed 2003; Gartzke et al. 2001; Barbieri 1996).

However, there is limited research examining the strategies of states that adjust their economic interdependence with other countries when facing structural change in the international system. Maher (2018) is among the few researchers to examine how China's rise and the emergence of bipolarity affect alliance relations and economic interdependence. This perspective is important because it regards economic interdependence as a dependent variable, rather than an

independent one. Maher explains the challenges regarding alliance relations and economic interdependence for the United States and its allies during the period of bipolarity. Maher (2018) argues that managing the political and strategic implications of economic interdependence will become increasingly complex and important during the transition to bipolarity, as U.S.–China bipolarity differs fundamentally from the U.S.–Soviet case—the two superpowers were never as economically interdependent as the United States and China are today. Furthermore, it predicts that bipolarity will lead China and the United States to limit trade to those countries with which they have friendly political relations, ultimately splitting the global economy into several competing blocs (Maher 2018).

In this context, this research proposes the empirically testable hypothesis that bipolarity will increase economic interdependence between the United States and its allies. I refer to this behavior of U.S. allies as the "*strategic adjustment of economic interdependence.*"

**Polarity Transition and Economic Interdependence**

This study argues that the polarity transition affects the patterns of economic interdependence between the hegemon and its allies. Economic interdependence is conceptualized in terms of bilateral trade flows. The existing literature in international political economy (IPE) has primarily examined the determinants of trade with respect to political factors such as polarity (Gowa and Mansfield 1993), alliances (Gowa and Mansfield 1993; Morrow, Siverson, and Tabares 1998), the state of political relations (Pollins 1989; Dixon and Moon 1993), and political similarity (Morrow, Siverson, and Tabares 1998; Dixon and Moon 1993).

Among them, Gowa and Mansfield (1993) pioneered the argument that the polarity of the international system affects trade flows between allies. They demonstrated that alliances embedded in bipolar systems have stronger effects on trade flows than their counterparts in multipolar systems. The logic underpinning this finding is linked to the concept of security externalities generated by trade, which is crucial for understanding the interaction between international politics and trade. Security externality refers to the situation in which trade increases both states' wealth—based on Ricardian comparative advantage—and that wealth can then be converted into military capabilities. Under such circumstances, security externalities can be either positive among allies or negative among potential adversaries under uncertainty. Gowa (1989) and Gowa and Mansfield (1993) argued that trade between allies is likely to be higher under bipolarity

than multipolarity because bipolar systems have fewer credible exit threats and clearer responsibilities for maintaining alliance stability. Using game-theoretical analysis, they showed that free trade between allies becomes a dominant strategy equilibrium under bipolarity.

However, their research compared only bipolar and multipolar systems, without addressing the transitional dynamics from unipolarity to bipolarity. Moreover, Morrow et al. (1999) found that alliances under bipolarity do not significantly increase trade within dyads once joint democracy, and the state of political relations are controlled for. This finding suggests that domestic institutions—such as democracy and interstate relations—have a greater influence on trade flows than do alliance and polarity, which Gowa and Mansfield (1993) emphasized. However, it might be premature to conclude that the effect of polarity on trade is insignificant. Under certain circumstances – particularly during transitions from unipolarity to bipolarity – the structural change in polarity may exert a stronger causal influence on trade relations between the hegemon and its allies.

Recent global affairs indicate that the dynamics of the interaction between economic interdependence and alliance politics have been undergoing significant transformation, as reflected in the growing intersection between the economic and security domains among the United States and its allies amid intensifying U.S.-China competition. However, existing research has paid scant attention to how the interplay between polarity transition and alliance structures influences these evolving patterns of economic interdependence and alliance politics. To address this gap, this study examines the strategic adjustment of economic interdependence—specifically, how the economic linkages of U.S. allies with the United States have evolved as the international system transitions from unipolarity to bipolarity.

## Theoretical Frameworks

This study argues that both the hegemon and its allies have incentives to increase economic interdependence when they face a transition from unipolarity to bipolarity. This section explains why a relatively declining hegemon and its allies adopt strategic adjustments that increase bilateral economic interdependence, focusing on the rationale for each side. On the hegemon's side, Gilpin's theory of hegemonic war (Gilpin 1981, 1988) provides important implications for understanding its incentive to deepen trade relations with allies. On the allies' side, the secondary

dilemma proposed by Snyder (1984) offers insights into the logic underlying their strategic behavior.

**Strategic Adjustment of the Hegemon**

According to Gilpin (1981), a hegemonic power establishes its own international order and manages the international system through material power, military capability, a hierarchy of prestige, system rules, and an international division of labor that favors its own interests. However, this existing governance structure gradually erodes due to the uneven growth rates among states, which redistribute power and create disjunctions among the components of the international system. A relatively slower rate of economic growth, combined with rising government expenditures on defense and international commitments, drives the hegemon into fiscal difficulties and growing debt (Layne 2012).

Consequently, a discrepancy emerges between the perspectives of dominant and rising powers. From the viewpoint of the dominant power, the costs of maintaining the international status quo have increased, generating a serious imbalance between its capabilities and its commitments. Meanwhile, the rising power perceives the hegemon's growing costs as an opportunity and incentive to challenge and delegitimize the existing international order. From a realist perspective, this dynamic induces balancing behavior among revisionist states, in accordance with the logic of the balance of power (Schweller and Pu 2011). Therefore, it becomes difficult for a unipolar power to maintain the status quo, given the strong systemic tendency toward equilibrium within the international system (Waltz 1979).

As the primary provider of international public goods, the hegemon—along with its allies—recognizes its relative decline and attempts to restore dominance within the system. The first approach is to reduce costs by (1) constraining the challenger's growth or (2) reducing international commitments, a strategy referred to as retrenchment. Firstly, to check the challenger, the hegemon seeks to reduce trade interdependence out of concerns over vulnerability and technological leakage. As a result, it pursues decoupling policies from the challenger and relocates production facilities to nearshore or friendly territories or outsources existing contractual relationships to allies—thereby increasing trade with them (substitution effect). Meanwhile, the hegemon decreases its commitments by declaring military withdrawals from allied regions or by reducing military subsidies. Consequently, allies face heightened security threats and are forced to

increase defense spending and military cooperation, which in turn deepens defense-related trade and strategic economic exchanges between the hegemon and its allies.

The second approach is to increase material resources by exacting tribute from other countries or manipulating the terms of trade to its advantage. However, such actions require justification. The incumbent hegemon is likely to blame its allies for underproviding alliance-related contributions and to invoke a logic of fairness in demanding compensation. Such demands are more likely to be directed toward wealth allies that have achieved economic development under U.S. hegemony. In other words, the hegemon may attempt to "call in outstanding credits" from allies through tariffs or by requesting foreign direct investment (FDI), claiming compensation for the prior costs of maintaining the international order and supplying global public goods. Therefore, the hegemon is likely to demand direct investments from its wealthy allies – those that have long benefited from its provision of public goods and technology transfers. As FDI from developed allies increasingly flows into the hegemon, trade deepens and economic interdependence is consequently reinforced. Furthermore, larger economies are more deeply integrated into the global value chains (GVCs) that the hegemon seeks to restructure. Thus, the structural effect of polarity transitions is expected to be more pronounced in core allies with larger economic masses, whereas smaller, peripheral states may have less strategic room or incentive for such drastic adjustments.

**Strategic Adjustment of the Allies**

After an alliance has been established, a secondary alliance dilemma emerges, in which member states must decide how firmly to commit themselves to their partner and how much support to provide in specific conflict interactions with an adversary. The strategic choices in this dilemma are either to cooperate or to defect (Snyder 1984). I apply this framework to the decision-making process underlying the strategic adjustment of economic interdependence. When the hegemon calls in its outstanding credits and demands its allies to deepen economic interdependence, will the allies cooperate with the hegemon or defect by rejecting its requests?

The determinants of choice in the alliance dilemma, considering economic interdependence, are the *strategic interests* that the parties share in defending each other and the *relative dependence* of the partners on the hegemon (Snyder 1984, 471-472). The allies possess both internal and external incentives to deepen their economic interdependence with the hegemon in terms of relative dependence and strategic interest. From an internal perspective, the allies of the hegemon

share strategic interests shaped by a long-standing relationship and ideological affinity with the hegemon. In practice, U.S. allies share concerns over China's rise and perceive threats stemming from China's assertive "wolf-warrior diplomacy," particularly among East Asian allies. Therefore, increasing economic interdependence with the United States can be considered a rational strategic option from an internal standpoint. From an external perspective, even under the assumption that an ally shares fewer strategic interests with the hegemon, it remains relatively dependent on the hegemon due to its long-term provision of security public goods, thereby creating asymmetric interdependence (Keohane & Nye 1977). For instance, European countries face security threats from Russia and rely on the U.S. nuclear umbrella and NATO's collective security framework. Hence, regardless of an ally's internal incentive, it often has limited capacity to defect and is compelled to comply with the hegemon's demands—such as increasing NATO defense spending—which in turn leads to expanded military trade with the United States.[1] Consequently, economic interdependence with the hegemon is reinforced due to external reasons.

In summary, this theoretical framework leads to the following testable hypothesis:

*H1: As the international system transitions from unipolarity to bipolarity, the bilateral trade volume between the United States and its allied countries increases, compared to non-allies.*

While Hypothesis 1 focuses on the absolute scale of trade, which is useful for understanding the overall magnitude of interdependence, it may be insufficient to capture the nuanced patterns of strategic adjustment. In a globalized era where trade volumes often grow as a baseline due to systemic economic expansion, an increase in absolute volume does not necessarily signal a deliberate strategic shift. In a deeply integrated global economy, decoupling or significantly reducing trade with a central node like China is costly and almost impossible. However, they can strategically adjust their composition of trade. Instead, they can strategically adjust the composition of their trade, tilting their economic profile toward the hegemon while managing the risks of interdependence with China.

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[1] Mathew George, Katarina Djokic, Zain Hussain, Pieter D. Wezeman, and Siemon T. Wezeman, *Trends in International Arms Transfers, 2024*, SIPRI Fact Sheet (Stockholm International Peace Research Institute, March 2025). The USA accounted for 64 percent of arms imports by European NATO states in 2020-24, which was a substantially larger share than in 2015-19 (52 percent)

*H2: As the international system shifts from unipolarity to bipolarity, the United States' share of its allies' total trade portfolios increases, compared to non-allies.*

However, the analysis of trade shares—a relative metric—implies a zero-sum logic within a country's trade portfolio; a significant increase in the proportion of trade with the hegemon necessitates a relative decrease in the share of other partners. This raises a crucial empirical question: where does this reduction occur? According to the logic of shared strategic interests, U.S. allies are likely to perceive China's rise as a systemic threat. As U.S.-China competition intensifies, allies are expected to undertake a strategic recalibration—reducing their economic vulnerability to the challenger while reinforcing their ties with the hegemon. To test whether U.S. allies pursue strategic adjustment that reduce interdependence with the rising pole, I propose the following:

*H3: As the international system shifts from unipolarity to bipolarity, China's share of U.S. allies' total trade portfolios decreases, compared to non-allies.*

## Research Design

Empirical analyses examining the influence of polarity shifts on bilateral trade remain limited. To test the proposed hypotheses, this study constructs a bilateral trade panel dataset covering the period from 1991 to 2023. The unit of observation is the country–year dyad and the dataset include 142 countries. The treatment group, comprising U.S. allies (N=39), includes Australia, Mexico, the Republic of Korea, Japan and NATO countries identified as having mutual defense pacts in the Correlates of War (COW) dataset. The comparison group consists of non-allies (N=103).

This research applies the gravity model to analyze how polarity transitions affect allies' trade volumes with the hegemon. The gravity model, originating from Newton's law of universal gravitation, has become a foundational framework in international economics for explaining bilateral trade as a function of the economic mass (national incomes of trading partners) and distance (geographical and economic friction costs) between them (Bun and Klaassen 2002). Building on this analogy, the model posits that countries with larger economic sizes tend to trade more with one another, while distance and other forms of resistance reduce flows. The gravity framework has been extensively used to estimate the effects of institutional and policy factors—

such as regional trading agreements, currency unions, political blocs, and joint democracy—on bilateral trade (Aitken 1973; Anderson 1979; Morrow, Siverson, and Tabares 1998; Kien 2009).

Methodologically, this study utilizes a balanced panel dataset to estimate a log-linearized gravity model with political variables. Following the idea of Gowa and Mansfield (1993), and Morrow et al. (1998) the model incorporates polarity (unipolar = 0, bipolar = 1) and alliance dummies (U.S. allies = 1, non-allis = 0), along with their interaction term[2], to isolate the differential effect of polarity shifts on the trade behavior of U.S. allies relative to non-allies. Unlike earlier cross-sectional approaches that may suffer from omitted variable bias, the panel-data specification allows the model to control for unobserved heterogeneity across country dyads and temporal shocks through fixed or random effects estimation. To ensure robust inference under potential heteroskedasticity and cross-sectional dependence, standard errors are estimated using Driscoll–Kraay corrections.

Furthermore, to capture the full spectrum of strategic adjustment in a bipolar system, this study extends the analysis to trade with China. Since a bipolar transition involves economic fragmentation toward two competing poles, examining whether U.S. allies are balancing against China or hedging their economic interests is essential. By applying the same gravity model framework to both U.S. and China trade data, this research provides a comparative assessment of how polarity shifts redefine bilateral dependencies across both poles.

Lastly, considering the potential heterogeneity among the 142 countries, this study incorporates a sub-sample analysis based on economic size. Recognizing that the structural influence of polarity may vary between core and peripheral economies, countries are grouped by their GDP rankings to observe how the magnitude of strategic adjustment differs across various levels of economic power.

**Data and Measurement**

Trade data were obtained from the UN Comtrade Database for the post–Cold War period (1991–2023). Trade values are measured in current U.S. dollars and deflated by the World Bank GDP deflator (2015 = 100) to control for inflation. The treatment group (Allies) includes U.S.

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[2] Gowa & Mansfield (1993) and Morrow et al. (1999) included only an interaction term without the constitutive terms, which may lead to omitted variable bias. Following Brambor, Clark, and Golder (2006), this study includes all constitutive terms.

defense allies as identified in the Correlates of War Formal Interstate Alliance Dataset (v4.1), coded as 1. The comparison group (non-allies) is coded as 0. This alliance classification follows the baseline specification; alternative definitions of U.S. allies are examined in the robustness checks.

GDP (2015 constant USD) and population—are sourced from the World Bank, consistent with standard gravity model specifications. Following Dixon and Moon (1993) and Morrow et al. (1999), joint democracy is included to control for the effect of political similarity, which has been shown to condition the impact of polarity transitions (Gowa and Mansfield 1993). This variable is derived from the V-Dem "Regimes of the World" (v2x_regime) dataset, classifying regimes as closed autocracy (0), electoral autocracy (1), electoral democracy (2), or liberal democracy (3). Since the United States is consistently coded as a liberal democracy, democracy equals 1 when the partner country is either an electoral or liberal democracy, and 0 otherwise.

The key independent variable, *bipolarity*, captures the structural transition of the international system. It is coded as a dummy variable, taking a value of 0 for the unipolar period (1991–2016) and 1 for the bipolar period (2017–2024). Identifying the exact timing of this transition presents a methodological challenge because relying solely on material indicators yields ambiguous results. For instance, China's real GDP (2015 constant USD) surpassed 60% of U.S. GDP in 2015, while its military expenditure exceeded 20% [3] of the U.S. level in 2012. Meanwhile, China's R&D expenditure reached 50% of the U.S. level only in 2018. Unlike the clear demarcations of 1945 or 1991, material data alone do not provide a decisive "moment" of transition.

To address this ambiguity, this study posits that while polarity is structurally defined by material distribution, the specific moment of transition is a "critical juncture" manifested in the realm of perception. To empirically capture this perceptual shift, I analyzed global media discourse using a dataset of 11,451 articles (6,063 from U.S. media, 5,388 from international media) published between 2000 and 2024. Data were collected via Lexis+ from six major global newspapers: *The New York Times*, *The Wall Street Journal*, *The Guardian*, *The Australian*, *The Japan News*, and *The Korea Times*.

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[3] In 1945 and 1946—years widely regarded as the onset of the bipolar system—Soviet military expenditure amounted to merely 9.5% and 19.4% of U.S. spending, respectively. However, this figure surged to 80.9% of the U.S. level in the following year, 1947. Subsequently, the Soviet Union consistently maintained military spending at a level comparable to that of the United States. Despite this material discrepancy in the early years, existing literature defines the period following the end of World War II in 1945 as the emergence of the bipolar system.

I employed frequency analysis and Latent Dirichlet Allocation (LDA) topic modeling to identify when the perception of U.S.–China competition became salient. As illustrated in Figure 1, the frequency of "U.S.–China" bigrams spiked unprecedentedly between 2017 and 2018. Furthermore, the LDA model—optimized with a coherence score of 0.502 and set to 20 topics— revealed that the probability of six competition-related topics (Trade Competition, South China Sea, Human Rights, Technology, Security, and Taiwan) surged in 2017 (Figure 2). Specifically, topics related to trade, technology, and Taiwan showed a sharp upward trend starting that year.
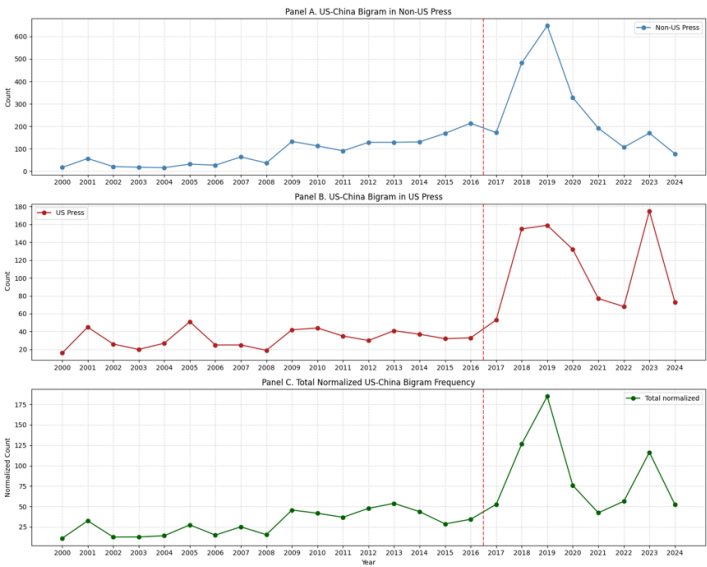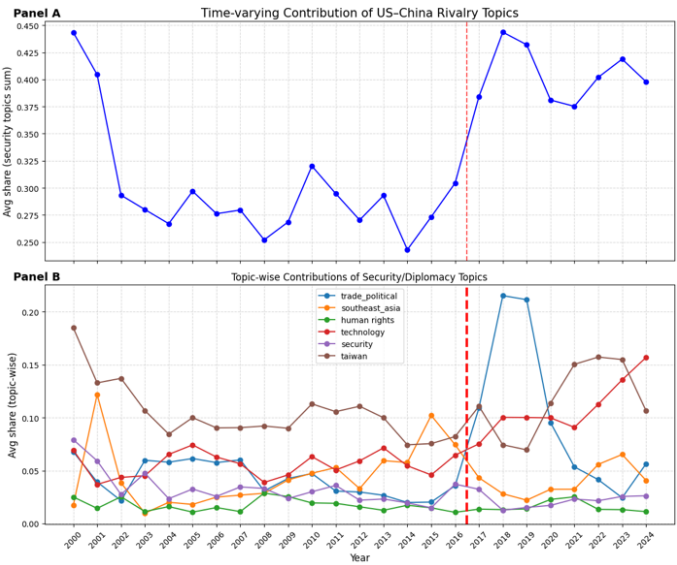
**Figure 1. Frequency of US-China Bigram by years**



**Figure 2. Yearly Trend of Average US-China Competition Topics**

These empirical findings align with significant strategic shifts in 2017. In China, the 19th Party Congress marked the consolidation of Xi Jinping's power and the establishment of a grand strategy to replace the U.S.-led order (Doshi 2021). Simultaneously, the Trump administration's 2017 *National Security Strategy* (NSS) labeled China a "revisionist power," signaling a return to realist great power competition (Kim 2019). Consequently, this study defines 2017 as the critical juncture where the international system transitioned from unipolarity to bipolarity.

## Empirical Analysis

### Estimation Strategy

To estimate the causal effect of the polarity transition on allies' trade patterns with the United States, this research employs a panel interaction model within a Difference in Difference (DiD) framework. While this approach is not a canonical DiD design, the nature of the observational data makes it difficult to satisfy its strict identifying assumptions. Specifically, the model estimates the coefficients of the interaction term between the time dummy (Bipolarity) and the group dummy (Alliance). This design facilitates a comparative analysis of how the trade behaviors of U.S. allies diverge from those of non-allies following the structural shift to bipolarity.

### Model Specification: U.S. Trade Volume and Share

I estimate a log-linearized gravity model augmented with political variables using Two-Way Fixed Effects to control for unobserved time-invariant country characteristics and common time-specific shocks. While the gravity model is standard in trade literature, country-level panels often suffer from autocorrelation, heteroskedasticity, and cross-sectional dependence (CSD), which can lead to inefficient and inconsistent estimates. To address these issues, all models are estimated using Driscoll-Kraay standard errors, which are robust to general forms of cross-sectional and temporal dependence (Driscoll & Kraay 1998). The baseline model for analyzing bilateral trade volume with the United States is specified as follows:

$$\ln Trade_{ijt}^{US} = \beta_1 \ln GDP_{it} + \beta_2 \ln Population_{it} + \beta_3 \ln Distance_{ij} + \beta_4 Bipolar_t + \beta_5 Alliance_{ijt}^{US} +$$
$$\beta_6 (Bipolar_t \times Alliance_{ijt}^{US}) + \beta_7 Joint\ Democracy_{ijt} + \alpha_i + \lambda_t + \epsilon_{ijt} \dots (1)$$

Where $\alpha_i$ represents country fixed effects and $\lambda_t$ denotes year fixed effects. Time-invariant variables such as *Distance* are absorbed by $\alpha_i$, and time-variant but country-invariant variables such as *Bipolarity* are absorbed by $\lambda_t$. The coefficient of interest is $\beta_6$, which captures the differential effect of the polarity transition on U.S. allies relative to non-allies.

However, relying solely on trade volume may be insufficient to capture strategic adjustments, as trade levels tend to grow naturally over time due to global economic expansion. To complement this, I estimate a second model using trade share (%) ($\frac{trade_{it}^{US}}{Total\ Trade_{it}}$, the proportion of a country's total trade accounted for by the U.S.) as the dependent variable. This captures the relative deepening of economic interdependence within a country's trade portfolio. To control for the effect of economic development and political similarity on trade portfolios, log GDP per capita and joint democracy is included.

$\text{Trade Share}_{it}^{US} = \beta_1 Bipolar_t + \beta_2 Alliance_{ijt}^{US} + \beta_3(Bipolar_{it} \times Alliance_{ijt}^{US}) + \beta_4 Joint\ Democracy_{ijt} + \beta_5 \ln\text{GDPpc}_{it} + \alpha_i + \lambda_t + \epsilon_{ijt} \dots (2)$

Since this research examines the strategic adjustment of economic interdependence in the context of bipolarity, analyzing the relationship with the rising challenger, China, is equally important. As a bipolar system is characterized by the economic fragmentation gravitating toward each pole, adjustment vis-à-vis rising China also needs to be examined. To identify whether U.S. allies are simultaneously balancing against China or hedging, I apply the same model specifications to trade with China.

$\ln Trade_{ijt}^{China} = \beta_1 \ln GDP_{it} + \beta_2 \ln Population_{it} + \beta_3 \ln Distance_{ij} + \beta_4 Bipolar_t + \beta_5 Alliance_{it}^{US} + \beta_6 Bipolar_t \times Alliance_{it}^{US} + \beta_7 Joint\ Autocracy_{ijt} + \alpha_i + \lambda_t + \epsilon_{ijt} \dots (3)$

$\text{Trade Share}_{it}^{China} = \beta_1 Bipolar_t + \beta_2 Alliance_{it}^{US} + \beta_3 Bipolar_{it} \times Alliance_{it}^{US} + \beta_4 Joint\ Autocracy_{ijt} + \beta_5 \ln\text{GDPpc}_{it} + \alpha_i + \lambda_t + \epsilon_{ijt} \dots (4)$

*Joint Autocracy* is included instead of Joint Democracy to control for regime similarity with China. Comparing the interaction coefficients for the U.S. models with those for the China models will allow for a comprehensive assessment of strategic adjustment.

Finally, to determine the structural extent of the polarity transition, this study address potential heterogeneity across countries. It is implausible to assume that the polarity transition affects all 142 countries in the dataset equally; for instance, the strategic behavior of a major economy like South Korea likely differs from that of a smaller economy like Suriname. To identify the structural range of influence, I conduct a sub-sample analysis based on economic size. I group countries by their 2023 GDP rankings and estimate the models across cumulative cutoffs (e.g., Top 20, 40, 60, 80, 100, 120, and full sample). This strategy allows us to observe how the magnitude and significance of the strategic adjustment effect vary as the sample expands from core powers to peripheral states.

**Statistical Results**

Tables 1 and 2 present the panel regression results estimated with Driscoll-Kraay standard errors, grouped by 2023 GDP rankings to identify the structural scope of the polarity transition. Even though polarity is a system-level variable, its impact varies depending on a state's relative position within the international hierarchy. As Hypothesis 1 and 2 predict, the coefficients of interation term (bipolar × alliance) in both models (1) and (2) exibit positive and statistically significant values. Specifically, Model (1) indicates that following the shift to bipolarity, the bilateral trade volume between the United States and its allies increased by 14.3%, 15.7% and 9.63% respectively, compared to non-allies. Model (2) further shows that the U.S. share of its allies' total trade portfolios increased by 1.359 %p and 2.207%p for the Top 20 and Top 40 GDP countries, respectively. However, when the sample expands to the Top 60 countries, the coefficient loses statistical significance, implying that the impact of the polarity transition on U.S. allies diminishes as the sample includes smaller economies. Another interesting finding is that joint democracy has a statistically insignificant effect on trade volume but significantly reduces the U.S. trade share, suggesting that regime similarity alone does not necessarily drive economic interdependence in this context in the past several decades.

To comprehensively examine the allies' strategic adjustment under bipolarity, their trade relationship with the challenger, China, must also be analyzed. Table 2 presents the results where the dependent variables are replaced with trade volume and trade share with China. Model (3) illustrates that in the bipolar era, U.S. allies in the Top 20 and Top 40 GDP groups saw increased trade volumes with China (10.30%, 25.73% and 9.64%), similar to the U.S. results. This sugguests

that the trade level itself also increased for allies in the bipolar period. In contrast, Model (4) shows a distinct strategic divergence. The U.S. allies' trade share with China decreases by 3.316%p, 0.976%p, and 1.957%p under bipolarity compared to non-allies. While the magnitude of this decline fluctuates, the consistent negative coefficients across all groups indicate that U.S. allies are reducing their relative economic dependence on China in the bipolarity compared to non-allies. In short, U.S. allies appear to be deepening their economic interdependence with the United States while simultaneously reducing their relative reliance on China.

### Table 1. Strategic Adjustment of US allies with Hegemon (US)

| | GDP Top 20(2023) | | GDP Top 40(2023) | | GDP Top 60(2023) | |
|---|---|---|---|---|---|---|
| | Model (1) | Model(2) | Model (1) | Model (2) | Model (1) | Model (2) |
| | $\ln trade$ | $trade\ share(\%$ | $\ln trade$ | $trade\ share(\%)$ | $\ln trade$ | $trade\ share(\%)$ |
| US alliance | 0.319*** | 2.347*** | 0.377*** | 1.249 | 0.471*** | 2.126*** |
| | (0.113) | (0.724) | (0.117) | (1.172) | (0.095) | (0.551) |
| Bipolar× alliance | 0.134*** | 1.359*** | 0.146*** | 2.207*** | 0.092** | 0.942 |
| | (0.046) | (0.359) | (0.037) | (0.564) | (0.041) | (0.733) |
| Country FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Controls | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Observations | 631 | 631 | 1217 | 1217 | 1786 | 1786 |
| Countries | 20 | 20 | 40 | 40 | 60 | 60 |
| R-squared | 0.326 | 0.031 | 0.152 | 0.041 | 0.182 | 0.024 |

Notes: Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All models use Driscoll-Kraay (DK) standard errors to correct for cross-sectional dependence and serial correlation.

**Table 2. Strategic Adjustment of US allies with Challenger (China)**

| | GDP Top 20(2023) | | GDP Top 40(2023) | | GDP Top 60(2023) | |
|---|---|---|---|---|---|---|
| | Model (3) | Model (4) | Model (3) | Model (4) | Model (3) | Model (4) |
| | $\ln trade$ | $trade\ share(\%$ | $\ln trade$ | $trade\ share(\%$ | $\ln trade$ | $trade\ share(\%$ |
| US alliance | 0.430*** | -5.778*** | 0.182* | -6.871*** | 0.349*** | -4.586*** |
| | (0.128) | (0.961) | (0.104) | (1.030) | (0.111) | (0.654) |
| bipolar ×  alliance | 0.098** | -3.316*** | 0.229*** | -0.976* | 0.060 | -1.957*** |
| | (0.045) | (0.532) | (0.055) | (0.490) | (0.038) | (0.575) |
| Country FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Controls | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Observations | 631 | 631 | 1217 | 1217 | 1786 | 1789 |
| Countries | 20 | 20 | 40 | 40 | 60 | 60 |
| R-squared | 0.380 | 0.112 | 0.286 | 0.075 | 0.185 | 0.012 |

Notes: Standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01. All models use Driscoll-Kraay (DK) standard errors to correct for cross-sectional dependence and serial correlation.

Figures 3 and 4 visualize the estimated interaction coefficients across varying sample cutoffs based on 2023 GDP rankings. The x-axis represents the cumulative sample size, while the y-axis displays the coefficient estimates with 95% confidence intervals. Figure 3 compares the effect of the polarity transition on trade volume with the U.S. versus China. The results indicate that the causal effect of bipolarity on trade volume is structurally different for the hegemon and the challenger across different sample scopes. However, it is difficult to discern a substantive difference between adjustment patterns with the U.S. and China due to overlapping 95% confidence intervals. For the Top 20 and Top 40 economies, U.S. allies significantly increase trade volumes with both the United States and China, suggesting that major powers have engaged trade expansion. However, the positive effect on trade volume with the U.S. remains largely robust except for Top 80 and 100 countries, whereas the effect on trade with China is statistically insignificant (indistinguishable from zero) for groups beyond the Top 60. This implies that, overall,

U.S. allies have increased trade volumes with the United States under bipolarity compared to non-allies, whereas no such general trend is observed in their trade with China.

Figure 4 provides a clearer picture of strategic adjustment by focusing on trade share, effectively controlling for the natural expansion of global trade levels. This analysis yields two critical insights. First, the deepening of economic interdependence with the United States is concentrated among wealthy powers. The U.S. trade share increases significantly only for the Top 20 and Top 40 allies. For the broader sample (Top 60 through 142), the coefficients are statistically insignificant, indicating that smaller allies do not structurally shift their trade portfolios toward the United States to the same extent as major middle powers. This suggests that economic alignment with the hegemon is primarily a strategy of capable states. Second, and most notably, U.S. allies exhibit a consistent decoupling trend from China. Across all sample specifications (from Top 20 to 142), the interaction coefficients for China's trade share are consistently negative and statistically significant. Unlike the U.S. case, where positive adjustment is limited to the wealthy, the relative reduction of dependence on China is a systemic phenomenon observed across all U.S. allies regardless of their economic size. In summary, the transition to bipolarity prompts U.S. allies to universally reduce their relative economic reliance on the challenger. However, the compensatory shift toward the hegemon (the United States) is a stratified behavior, predominantly driven by the world's big economies.
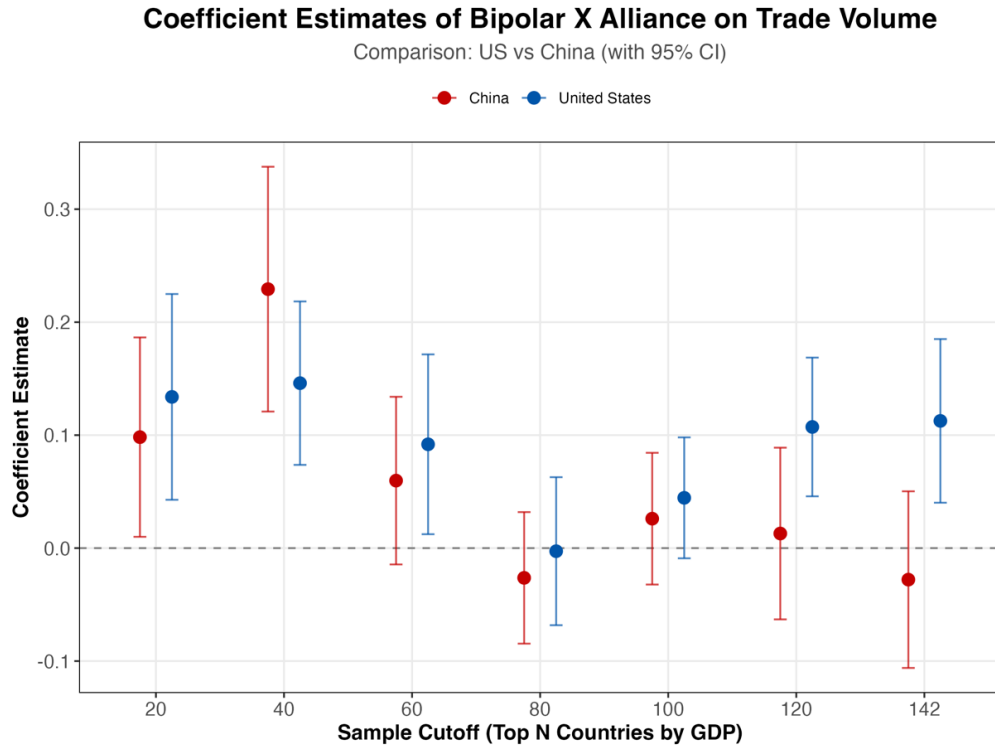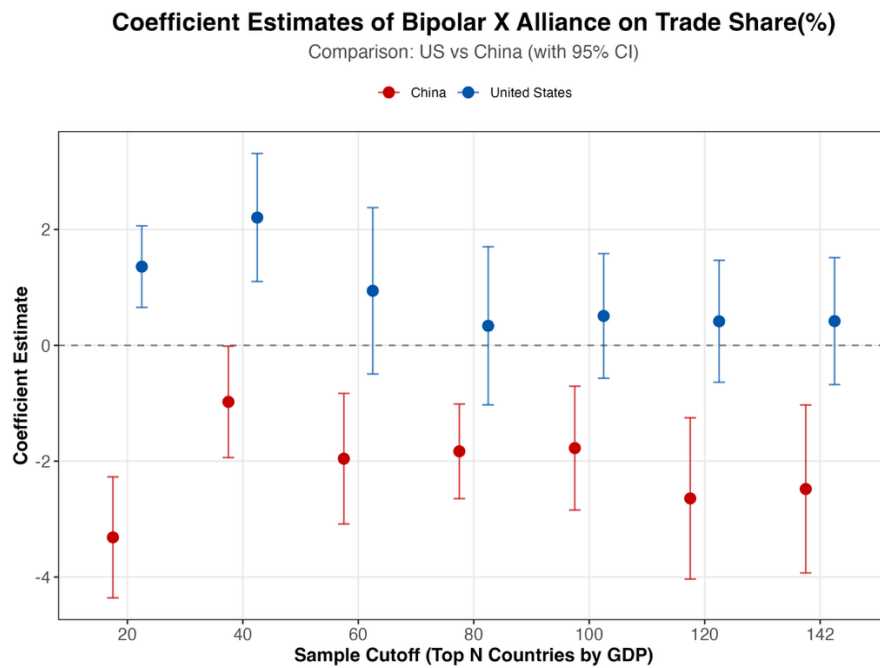
**Figure 3**

**Coefficient Estimates of Bipolar X Alliance on Trade Volume**

Comparison: US vs China (with 95% CI)

China    United States



**Figure 4**

**Coefficient Estimates of Bipolar X Alliance on Trade Share(%)**

Comparison: US vs China (with 95% CI)

China    United States



## Robustness Check and Predictive Analysis

As an additional robustness check, I estimate models excluding Pakistan, Brazil, and Venezuela from the ally classification due to their ambiguous or adversarial contemporary alignment with the United States. Results remain substantively unchanged (Appendix Table A2).

The preceding comparative analysis established that the transition to bipolarity significantly affects the trade behavior of U.S. allies relative to non-allies. However, the interaction term itself utilized the differential impact while absorbing the effect of the polarity transition (Bipolar) into the year fixed effects. Consequently, the baseline models do not explicitly reveal the absolute trade levels—specifically, whether U.S. allies actively increased their economic interdependence or simply maintained it. Moreover, the robustness of this estimation should be tested through varing control variables.

To address this, Table 3 presents robustness checks using alternative specifications for the Top 20 GDP countries. Columns (2) and (4) exclude year fixed effects to get the coefficient of the Bipolar variable, allowing for the estimation of predicted values before and after the transition. Column (5) tests sensitivity by replacing log of gdppc with log of gdp to control for the aggregate economic size rather than development level. Across all specifications, the key interaction term remains positive and statistically significant, confirming that the results are consistent over model variations.

Figure 5 visualizes the predicted marginal effects of the polarity transition on trade volume and trade share, derived from the model (2), (4) without year fixed effects. This visualization clarifies difference between allies and non-allies. The left panel (Total Trade Volume) shows that while the trade volume of non-allies (dashed grey line) exhibits a clear downward trend in the bipolar era, U.S. allies (solid blue line) maintain a slight upward slope. The right panel (Trade Share) illustrates a similar pattern: the U.S. trade share within non-allies' portfolios declines notably under bipolarity, whereas it slightly increases for U.S. allies.

These results imply that the strategic adjustment of U.S. allies proceeds by increasing economic interdependence with U.S. in an era where the general trend for non-allies is to reduce trade with the United States relatively (potentially due to 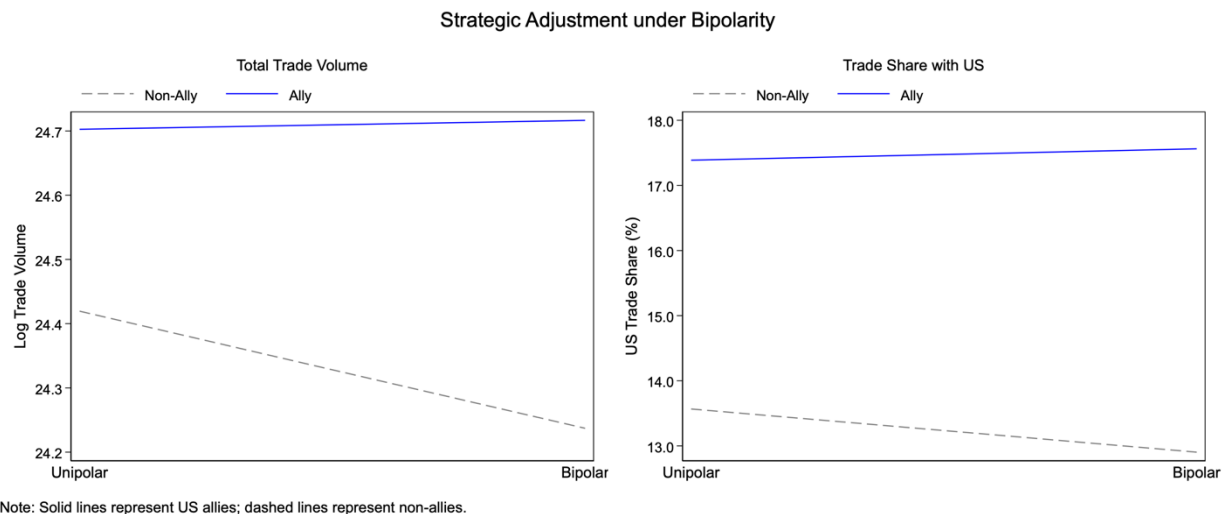diversification or Chinese influence), U.S. allies remains by the side of U.S., sustaining and even deepening their economic interdependence with the hegemon.

*Table 3. Robustness Check: Alternative Specifications (Top 20 GDP) with USA Trade*

| | (1)Trade Volume (Baseline) | (2) Trade Volume (No YearFE) | (3) Trade Share (baseline) | (4) Trade Share (No YearFE) | (5) Trade Share (lnGDP) |
|---|---|---|---|---|---|
| ln_gdp | 1.044*** | 1.332*** | | | -3.488*** |
| | (0.070) | (0.085) | | | (0.362) |
| ln_gdppc | | | -0.215 | -7.258*** | |
| | | | (0.759) | (1.502) | |
| ln_pop | -0.556 | -0.460 | | | |
| | (0.344) | (0.315) | | | |
| Bipolar | | -0.182*** | | -0.664 | |
| | | (0.068) | | (0.743) | |
| Alliance | 0.319*** | 0.283** | 2.347*** | 3.821*** | 2.988*** |
| | (0.113) | (0.118) | (0.724) | (0.704) | (0.724) |
| Bipolar × Alliance | 0.134*** | 0.196*** | 1.359*** | 0.838*** | 0.707** |
| | (0.046) | (0.045) | (0.359) | (0.281) | (0.299) |
| Joint Democracy | 0.002 | 0.088 | -0.800** | -2.651*** | -1.579*** |
| | (0.059) | (0.059) | (0.401) | (0.621) | (0.558) |
| Country FE | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE | ✓ | | ✓ | | ✓ |
| Observations | 631 | 631 | 631 | 631 | 631 |
| R-squared | 0.326 | 0.702 | 0.031 | 0.257 | 0.079 |

Notes: Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All models use Driscoll-Kraay (DK) standard errors to correct for cross-sectional dependence and serial correlation.

**Figure 5**

Strategic Adjustment under Bipolarity

Total Trade Volume — Trade Share with US

Note: Solid lines represent US allies; dashed lines represent non-allies.

## Conclusion

This study has examined the strategic adjustment of economic interdependence among U.S. allies in response to the structural transition from unipolarity to bipolarity. By identifying 2017 as the critical juncture of this systemic shift, I analyzed how U.S. allies have reshaped their trade portfolios vis-à-vis the hegemon (the United States) and the challenger (China) based on theory of hegemonic war and secondary alliance dilemma framework.

The empirical findings offer strong support for the strategic adjustment hypothesis. As the international system entered the bipolar era, major U.S. allies—particularly the top 20 and 40 economies—have demonstrated a clear trend of aligning their economic interests with their security commitments. Specifically, while non-allies have shown a tendency to reduce their relative economic engagement with the United States, U.S. allies have maintained or deepened their trade share with the hegemon. Conversely, a systemic decoupling trend from China was observed across all U.S. allies, regardless of their economic size.

This research implies that the global economy is drifting toward fragmentation. As the United States calls in its outstanding credits and allies respond by consolidating their economic ties with the hegemon while distancing themselves from the challenger, the international system is likely to become increasingly bifurcated. Future research should further investigate whether this strategic adjustment extends beyond trade into investment (FDI) which would serve as long-term indicators of solidified economic blocs in the new bipolarity.

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Appendix

## *A1. Robustness Check: Alternative Specifications (Top 20 GDP) with China Trade*

| | (0) Volume (Baseline) | (1) Volume (No YearFE) | (2) Share (baseline) | (3) Share (No YearFE) | (4) Share (lnGDP) |
|---|---|---|---|---|---|
| ln_gdp | 0.928*** | 3.148*** | | | 7.334*** |
| | (0.079) | (0.229) | | | (0.460) |
| ln_gdppc | | | 4.837*** | 15.145*** | |
| | | | (0.380) | (1.845) | |
| ln_pop | 1.815*** | 3.102*** | | | |
| | (0.202) | (0.262) | | | |
| Bipolar | | -0.508*** | | 5.538*** | |
| | | (0.196) | | (1.311) | |
| Alliance | 0.430*** | 0.531*** | -5.778*** | -7.699*** | -5.561*** |
| | (0.128) | (0.152) | (0.961) | (1.393) | (0.913) |
| Bipolar × Alliance | 0.098** | 0.650*** | -3.316*** | -2.548*** | -2.293*** |
| | (0.045) | (0.137) | (0.532) | (0.501) | (0.428) |
| Joint Autocracy | -0.148 | -0.789*** | -3.980*** | -6.488*** | -4.599*** |
| | (0.106) | (0.163) | (0.802) | (0.986) | (1.098) |
| Country FE | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE | ✓ | | ✓ | | ✓ |

|  | (0) Volume (Baseline) | (1) Volume (No YearFE) | (2) Share (baseline) | (3) Share (No YearFE) | (4) Share (lnGDP) |
|---|---|---|---|---|---|
| Observations | 631 | 631 | 631 | 631 | 631 |
| R-squared | 0.380 | 0.838 | 0.112 | 0.557 | 0.163 |

Notes: Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. All models use Driscoll-Kraay (DK) standard errors to correct for cross-sectional dependence and serial correlation.

A2.

This appendix presents robustness checks using alternative definitions of U.S. allies. In the baseline specification, U.S. allies are identified using the Correlates of War Formal Interstate Alliance Dataset (v4.1), where defense pacts are coded as 1. While this definition captures formal security commitments, some countries included in the dataset exhibit increasingly ambiguous or weakening alignment with the United States in the contemporary period.

To assess whether the main results are sensitive to these cases, I construct an alternative alliance measure that excludes countries whose strategic orientation toward the United States has become increasingly ambivalent in recent years.

Specifically, Brazil and Pakistan are excluded from the ally category in the alternative specification. Although both countries are formally coded as U.S. allies in the Correlates of War dataset, recent scholarship characterizes them as swing or ambivalent states rather than reliable U.S. security partners. Brazil's participation in BRICS and its strategic autonomy in foreign policy, as well as Pakistan's increasingly adversarial relationship with the United States, motivate this recoding.

Under the alternative specification, these countries are recoded from ally (=1) to non-ally (=0). All other coding rules remain unchanged.