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ABSTRACT

Since the onset of the global financial crisis, trade protectionism has endured, with national security emerging as a prominent determinant of trade policy adjustments. This study seeks to investigate the intricate interplay between geopolitical risk and trade protectionism. To this end, the article formulates a trade protection network employing the geopolitical risk index in conjunction with trade protection data gathered from 26 countries. The objective is to scrutinize the impact of geopolitical considerations on trade protectionist measures. Our investigation reveals that the escalation of geopolitical risks amplifies the proclivity of nations to engage in trade interventions. As geopolitical uncertainties spread and disagreements arise among traditional trade partners, countries characterized by superior institutional quality, greater political system heterogeneity, and deeper reliance on foreign trade are increasingly inclined to institute trade restrictions as a safeguard for their industries in response to geopolitical tensions. In light of these findings, it is imperative for countries and regions to proactively respond to peer influence, enhance domestic monitoring capabilities, foster international collaboration, and collaboratively forge new frameworks governing international trade.

Introduction

Since 2008, the global economy has witnessed a pronounced downturn, accompanied by a steady ascent in state intervention and a notable challenge to the globalization of trade relations. More than a decade post the financial crisis, the inclination towards trade protectionism has gained significant momentum, extending its reach. According to the contributions of countries to intervention measures as reported by the Global Trade Alert(GTA) Database from 2008 to the present, the United States implemented 503 measures aimed at liberalizing trade, contrasted by a substantial 9861 interventions aimed at restricting trade. This trend is mirrored by other nations; during the same period, China enacted 6348 restrictive trade measures, Germany 3440, and Italy 2519, portraying a global proclivity for restrictive interventions over liberalization. The surge in trade protectionism, increasingly shaped by state relations, political dynamics, and economic disparities, poses a formidable challenge to the governance of global trade and the sustained development of the international community.

Simultaneously, the phenomenon of 'geo-economic fragmentation' exerts significant pressure on global GDP. This is exemplified by the Russian-Ukrainian conflict, escalating strategic competition between the United States and China, the United Kingdom's withdrawal from the European Union, and ongoing disputes in supply chains. These dynamics contribute to a mounting surge in geopolitical tensions, resulting in the erosion of traditional trade linkages.

The multilateral framework anchored by the World Trade Organization (WTO) has lagged considerably in adapting to these shifts, ushering in a new era marked by more flexible and regionally tailored bilateral agreements. The landscape of international relations is grappling with fresh challenges.

Economic globalization has elevated geopolitical risk from a peripheral concern, largely confined to emerging markets, to a central issue encompassing nearly all economies. Consequently, the world's political and economic terrain has entered a new phase of development. The question of whether trade protectionism is an integral component of geopolitics has sparked vigorous academic debate. Some studies contend that geopolitical risks are not inherently connected to trade protectionism, while others argue that trade protectionism is inextricably linked to geopolitical tensions, manifesting as an adverse consequence of shifts in geopolitical risk among nations. Furthermore, additional research posits that geopolitical risks have driven countries to pivot away from established alliance regions, actively forging new diplomatic relationships as an effective means to counteract trade protectionism.While the intricate relationship between trade protectionism and geopolitics yields diverse outcomes, clarifying the conceptual underpinnings and methodological rigor of this relationship is imperative. Consequently, in the pursuit of specific research endeavors, it is essential to contextualize them within the broader macro-economic landscape of the era and the unique circumstances of individual countries. How do geopolitical risks influence trade protectionism, and how can the macro-context be interwoven with trade and political dynamics across nations and regions? These inquiries are paramount in establishing novel international economic and trade regulations and upholding stability in inter-country trade relationships.

Geopolitical considerations have assumed a significant role in scrutinizing trade relations, where trade protection measures are frequently employed as countermeasures when geopolitical issues come to the fore. Nonetheless, prevailing research in this domain exhibits several notable deficiencies.Firstly, there exists a lack of consensus regarding the definition of geopolitical risk. Various scholars have employed diverse methodologies to gauge the geopolitical risk index. Hence, it is imperative to establish a universally accepted and comprehensive geopolitical risk index dataset to underpin multidimensional scientific investigation.Secondly, the evolution of traditional and novel cooperative organizations, influenced by interstate collaborations, has led to distinct manifestations of trade protectionism. Consequently, it becomes crucial to discern the underlying heterogeneity and ascertain the factors driving its transformations, thereby fostering a more holistic understanding of global trade relations. Thirdly, the existing body of literature addressing the intricate relationship between geopolitics and trade protectionism remains relatively scant, and the exploration of the mechanisms and arguments underpinning this connection remains in its nascent stages. As such, the imperative of conducting systematic empirical research is evident to propel our comprehension of this complex relationship.

This paper offers several noteworthy contributions (i)It creatively integrates the realms of geopolitical risk and trade protectionism into a unified and coherent framework. The theoretical dimension of the study investigates the influence of geopolitical risk on trade decisions across various organizations, considering both the nations implementing trade interventions and the countries affected by these measures. Methodologically, it goes beyond the existing literature's emphasis on the exogeneity of geopolitical risk indicators by introducing additional instrumental variables into the regression model. This approach effectively mitigates endogeneity concerns related to the impact of geopolitical risk on trade protection measures, enhancing the robustness of the regression results (ii)The study conducts a heterogeneity analysis within the trade dimension, highlighting that traditional tariffs remain a significant instrument in international trade dynamics. Furthermore, it reveals that import restriction measures constitute a substantial component of trade decisions during responses to geopolitical tensions. This discovery expands the scope for examining the intricate interplay between geopolitical risks and trade networks (iii)The research underscores the positive moderating roles played by institutional quality, national systems, and trade dependence in shaping the facilitating impact of geopolitical risk on trade restrictive measures. These findings offer both a theoretical foundation and a practical starting point for comprehending interstate power dynamics and advancing the multilateral cooperation framework.

Theoretical Background and Hypotheses Development

Geopolitical Uncertainty and Trade Protectionism

The proliferation of geopolitical conflicts has led to a discernible shift in global economic and trade dynamics, emphasizing the role of geopolitical factors. This transformation extends beyond mere political interference in cross-border trade and investment activities; it now significantly affects the established framework of international trade and investment regulations. Geopolitical conflicts and their intricate interactions with economic and trade relations have become a salient feature of the contemporary global landscape.

In accordance with the New Economic Geography theory, historical events can instill a concept of 'path dependence' in the trajectory of regional economic growth (Allen and Donaldson 2020; Krugman 1991). This notion underscores the potential influence of both international trade and regional policies. Consequently, as the global economy becomes increasingly interconnected, geopolitical factors, driven by geography, economics, and demographics, are gaining prominence in shaping trade policy decisions.

The root cause lies in ideological differences and geopolitical competition, resulting in policy clashes, trade wars, and economic sanctions, which gradually disrupt the commercial operations and trade value chains of the global economy (Cui et al. 2023). This supports traditional perspectives in economic history: geopolitical events can significantly disrupt economic activities, particularly international trade, and directly impact countries' choices regarding trade protection policies. For instance, warfare, terrorism, and various militarized agreements may affect trade between partner nations, triggering partial or complete trade embargoes, thereby acting as disruptive elements in trade relationships (Glick and Taylor 2010). The impact of geopolitical risks on trade protectionism in specific countries is complex and multifaceted, involving considerations of national security, economic interests, and social stability. Examining these implications, the intricacies of global trade relations deepen the interconnectedness and vulnerability among various economies. The geopolitical turbulence in specific countries amplifies the cascading effects generated by geopolitical events(Singh, Correa da Cunha, and Mangal 2023).

When a country's geopolitical risk increases, it inevitably raises uncertainty about future policies and market expectations, consequently influencing adjustments in trade policies (Liu, Han, and Xu 2021). The market uncertainty introduced by geopolitical risk involves the sudden shutdown or dramatic reduction of supply or demand, where the probability might be small but the consequences would be huge. Uncertainty stemming from geopolitical risks propagates and amplifies between economies (Ferrara, Hernando, and Marconi 2018), influencing the trade policy choices of nations. Di Maio (2008) shows that the optimal trade protection is not zero when facing uncertainty. Glaser and Willmann (2012) deduces theoretically that interventionist trade policies will increase welfare when risk aversion makes restricting trade the optimal choice. Existing literature has extensively discussed optimal trade policies under uncertainty shocks (Batra and Ullah 1974; Hennessy 1998; Krebs, Krishna, and Maloney 2010; Rothenberg and Smith 1971; Sandmo 1971; Van Marrewijk and Van Bergeijk 1990). The potential dramatic interruption of supply or demand forces countries to reconsider the level of economic integration with other nations. Trade protectionism is a way to adjust the level of economic integration according to the uncertainty caused by geopolitical risks.

Besides optimal trade policy theory, another possible explanation is through strategic trade policy theory(R. Baldwin and Krugman 1986; Milner 2021; Örgün 2012). Trade policies are products of domestic interest group politics aimed at safeguarding national economic security and stabilizing public confidence in the overall economy. All trade policies are strategic, and both protection and increased free trade affect the utility of others (Lake 1988). Geopolitical tensions cause feelings of uncertainty among the public, with security externalities often taking precedence in public perception. In response to public pressure(Carnegie and Gaikwad 2022), this typically leads to an increase in protection measures, regardless of whether it can really maintain market stability(Yotov 2013).

In response to escalating geopolitical risks, countries often seek collaboration on a global scale, actively fostering sustainable national relationships. This does not preclude the possibility of implementing trade protection measures. For example, China's president recently visited European countries to sustain relations because the EU is clearly a very important counterpart. However, China is rebalancing its overall exposure to the risks of economic integration with the world. China's president calls for the importance of an inner circle economy to reduce reliance on foreign countries, and recently, he called for the replacement of critical technology supplies from foreign to domestic sources. Debaere et al. (2015) argues that free trade exposes countries to the uncontrollable world market, increasing the overall volatility that countries face. In this scenario, a government tends to restrict trade on behalf of its consumers to reduce the risk associated with high volatility and the costs it entails.

Hypothesis 1: Rising geopolitical uncertainty could increase trade protection interventions.

Geopolitical Uncertainty, MFO Heterogeneity and Trade Protectionism

Following decades of global economic integration, the world now faces a heightened risk of fragmentation. The global economy's slow and uneven recovery from the Global Financial Crisis (GFC) has been accompanied by significant events such as the United Kingdom's departure from the European Union (EU), mounting trade tensions, and a growing number of military conflicts. In the post-GFC era, we have observed a stabilization in global commodity and capital flows, alongside a notable surge in trade restrictions. Frequent geopolitical conflicts have further strained international relations and deepened skepticism about the feasibility of globalization. In order to avert uncontrolled economic fragmentation, it is imperative that the rules-based multilateral system continually adapts to the evolving global landscape, with an urgent necessity to reshape the international trading system.

In light of current geopolitical realities, it is not always feasible to make progress through multilateral consensus, and the establishment of trust between countries is often a protracted and challenging endeavor, contingent on their preferences and willingness to cooperate (Steinberg 2002). When countries' preferences align, multilateral cooperation remains the most effective approach to address the complexities of global political change. However, when multilateral cooperation falters, divisions in openness and collaboration often surface within these organizations. Consequently, an increasing number of countries frequently resort to unilateral actions in order to safeguard their self-interests in the evolving landscape, thereby straining traditional alliances and partnerships.

Regarding the trade policy responses of multilateral cooperation organizations to geopolitical risks, there remains a significant gap in our understanding of the impact of interregional and interagency relationships on reshaping the global order and fostering physical development among member countries. These factors, although pivotal in the transformation of the global order, have not received adequate scholarly attention thus far.

According to the International Monetary Fund, the global economy stands at the precipice of a potential reversal in the steady growth of integration that characterized the latter half of the twentieth century. This shift coincides with the sluggish recovery of national and regional economies following the global financial crisis of 2008 and has spurred a growing discourse on the merits of multilateralism and the unequal benefits of globalization. The escalating skepticism among nations toward multilateralism has resulted in a rising inclination toward inward-looking policies and a growing willingness among policymakers to establish trade barriers (Aiyar et al. 2023). It has also been posited that the future of a more robust international order may hinge on fortified organizational institutions (Mazarr et al. 2016).

The internal stability of affluent economies, coupled with prospects for redistribution or stringent regulation, introduces an element of market uncertainty. From an economic perspective, geopolitical threats can potentially affect national economic growth and productivity, although they may confer advantages upon existing markets and capital owners within various industries. Likewise, a consensus among member countries within a multilateral cooperative organization, pertaining to aspects of the economy and trade, can lead to a relaxation of trade policies within these countries. However, this is a double-edged sword, and in the event of a disruptive shock, such as political unrest in a member country or the adverse consequences of an economic crisis, the adverse impacts can swiftly propagate throughout the region encompassing the member countries of the multilateral cooperative organization. The shaken confidence among cooperating nations can precipitate a cascade of short-term repercussions, thereby instigating alterations in the internal and external policies of these member countries.

Hypothesis 2: the diffusion effect of trade protectionism affects not only traditional allies but also remains significant when countries implementing trade protection measures are all members of the same organization.

Geopolitical Uncertainty and Trade Policy Options

In recent years, non-tariff barriers have gained widespread prominence as the primary tool for trade protection. According to the Global Trade Alert (GTA), since 2009, tariff increases have constituted only 20 percent of all protectionist measures, whereas non-tariff barriers have consistently accounted for an average of 55 percent of implemented protectionist measures. This data underscores the steady rise in the utilization of non-tariff barriers. However, the impact of traditional tariffs as trade barriers remains substantial.Amid a global landscape marked by frequent geopolitical risks, nations are incentivized to impose optimal tariffs with the goal of channeling maximum revenue into their domestic markets by manipulating the terms of trade – altering the prices at which goods are exchanged. This approach allows both sides to benefit by imposing reciprocal taxes on each other's trade (DiMascio and Pauwelyn 2008; Dixit 1984).

Trade barriers typically fall into two categories: natural divisions and artificial divisions, each serving political or economic objectives. 'Natural' trade barriers originate within a country due to geographical and other uncontrollable factors. They tend to stimulate policy barriers like tariffs to varying degrees. Countries with more pronounced 'Natural' barriers often exhibit higher tariffs and a greater prevalence of non-tariff barriers. These natural barriers, which encompass factors such as market size, geographic location, and the trade policies of major trading partners, shape domestic society's incentives to enhance institutional quality and influence the constraints on politicians' rent-seeking behavior. In other words, these natural barriers influence the extent to which the occurrence of 'selling protection' takes place(Jiao and Wei 2020). It is not difficult to explain the changes in tariff barriers during geopolitically tinged events with geographical dimensions.

In the context of trade barriers, when viewed solely through the lens of political economy, trade instruments inherently become indispensable tools in the geopolitical competition among major powers, serving as crucial means to realize strategic objectives(Lansford 2002). Trade barriers encompass both tariff and non-tariff measures. In comparison to the flexibility and covert nature of non-tariff barriers, tariffs exhibit a compelling deterrent effect in addressing national security risks, owing to their long-term and conspicuous nature(Dorussen 1999). This becomes particularly evident when trading partners display heightened sensitivity and vulnerability to disruptions in the domestic trade market. Tariff measures, being tangible and visible tools, are directly correlated with the perception of geopolitical risks, making them the preferred choice for governments aiming to robustly respond to external uncertainties. Furthermore, due to the historical inertia of tariffs as traditional protectionist tools, governments may

consider increasing tariffs as the optimal means to protect critical sectors, establishing it as the default response to geopolitical risks when safeguarding national security interests(Pinchis-Paulsen 2020).

Hypothesis 3:   Geopolitical risks amplify the trade protection impact of traditional tariff measures when compared to increasingly prevalent non-tariff measures.

Research Design

Sample and Data Sources

In response to the resurgence of trade protectionism following the 2008 financial crisis, the Global Trade Alert (GTA) database, established in 2008 as an independent initiative, has played a crucial role in monitoring trade policies in the aftermath of this crisis. GTA stands as the most comprehensive source of data on trade policy measures implemented since 2008, and thus, for the purpose of this paper, the dataset covering trade protectionist measures from 2008 to 2022 is derived from the GTA database.

Furthermore, for this research, the geopolitical risk index, provided by Caldara and Iacoviello (2022) for 26 countries, was employed as a benchmark, given the scientific validity associated with the measurement of geopolitical risk indicators. Recognizing that trade protection in individual countries and regions can be influenced by a multitude of factors, additional data such as economic development indicators, socio-environmental data, and trade statistics were sourced from the World Bank's World Development Indicators (WDI) database and the Global Economic Monitoring (GEM) database.

Variable Definition

Dependent Variable

In measuring trade protection, this paper aims for precise estimation by disaggregating and aggregating various trade protection events. The primary source for assessing trade protection in this study is the Global Trade Alert (GTA) database. Categorizing measures based on their adverse impact on commercial interests, the database classifies them into three categories: Red measures (those already implemented and discriminating against foreign commercial interests, such as import licenses, safeguard measures, anti-dumping measures, export and import bans, and non-tariff measures related to imports), Yellow measures (those already implemented and possibly discriminating against foreign commercial interests, or where the implementation of policy tools that almost certainly discriminate against certain foreign commercial interests cannot be officially sourced, including export taxes, non-tariff measures related to imports, import tariffs quotas, import quotas, import restrictions, and local sourcing), and Green measures (non-discriminatory measures favoring foreign commercial interests, generally representing trade liberalization measures). Each measure, as a policy tool, has corresponding announcement and implementation dates. Due to the higher specificity of 'Red' measures, which accurately reflect the nature of trade restrictions, they contribute significantly to the understanding of the impact of trade protection measures. Consequently, this paper predominantly investigates the 'Red' measures initiated by a country, aiming to analyze their effects on the trading interests of partner countries in goods and services. The annual frequency of announced red measures is considered as an indicator of the quantity of trade protection imposed by the enforcing country on the affected nations during that period.

The methodological approach employed in this study involves direct analysis. However, it has certain limitations, primarily due to the availability of only medium-term data and a time lag in the publication of data by GTA. These constraints may limit the scope of the study at this juncture.

Nonetheless, the utilization of this database provides valuable insights into the contemporary global development landscape and offers a wealth of potential information for further scientific research.

Independent Variables

In this study, the independent variable 'geopolitical risk' is sourced from the Geopolitical Risk Index. In contrast to the broad conceptualization of security threats, geopolitical risk constitutes a subset within the realm of security threats, centering on the geopolitical interests and spheres of influence among nations(Caldara and Iacoviello 2022). Geopolitics, as defined herein, encompasses 'the threat, occurrence, and escalation of adverse events related to war, terrorism, and any state tensions, along with political activities that disrupt the peaceful course of international relations.' Such disruptions carry significant ramifications for both individual states and the broader international community.

The Geopolitical Risk Index (GPR) conducts an analysis of adverse geopolitical events and their economic implications, spanning back to 1900. This index relies on textual data amassed by Caldara and Iacoviello (2022) from approximately 25 million news articles published in major English-language newspapers since 1900. The index is constructed by calculating the proportion of articles dedicated to unfavorable geopolitical events and associated threats in each newspaper, as a ratio of the total number of news articles, on a monthly basis. The Geopolitical Risk Index provides a comprehensive global perspective and offers intricate insights into both worldwide geopolitical risk and specific country-level variations. This index functions as a continuous measure of risk, encompassing eight primary categories: the threat of war, the threat to peace, military build-up, nuclear threats, terrorist threats, commencement of war, escalation of war, and acts of terrorism. Elevated index values are indicative of increased intensity in ongoing adverse events, such as a higher frequency of conflicts, an augmented likelihood of future adverse events, and an elevated expected intensity in forthcoming adverse occurrences.

While the universal recognition of geopolitical risk index measures is not yet established, Caldara and Iacoviello (2022) have notably contributed to this field by developing a relatively specific and comprehensive database of such indices. Their research work has already made a significant impact. Furthermore, they conduct Granger causality tests to address the endogeneity issue concerning the geopolitical risk index (GPR) and conclude that the index exhibits a substantial degree of exogeneity. It is worth noting that most forms of macroeconomic, financial, and other uncertainties do not exert influence on the GPR. This exogeneity strengthens the GPR index's standing as a valid measure of geopolitical risk within academic literature.

Given the GPR index's validity and robustness as a proxy variable for geopolitical risk, it is adopted as the dependent variable in this paper. The global geopolitical risk index is represented as GPR, while the country-specific geopolitical risk index is denoted as GPRCO. To facilitate comparability between indicators, the geopolitical risk index is standardized.

Control Variables

In light of the potential influence of various factors on the stability of empirical findings, this paper incorporates a set of control variables. These controls encompass economic development indicators, including the inflation rate (Inflation), the GDP of countries implementing trade protectionism and their trading partners (lngdp_o and lngdp_d), as well as social environment indicators such as the unemployment rate (shiye_ratio) and political stability (po_stability). Furthermore, trade-related data is considered through variables like the import share (import_ratio) and the presence of a trade deficit (trade_de). In this context, the import ratio is calculated based on the percentage of each country's imports of goods and services in relation to its Gross Domestic Product (GDP). The trade deficit is defined as the discrepancy between the aggregate value of a nation's imports and the aggregate value of its exports. A positive value signifies a trade deficit, assigned the numerical value of 1, whereas a negative value indicates a trade surplus, assigned the numerical value of 0.Additionally, to account for the potential impact of national and temporal factors, this paper introduces controls for both national and time-related

Table 1. Descriptive statistics for each variable.

VARIABLES	N	mean	sd	min	max
coun_re	40,994	9.950	35.712	0	612
SGPRCO	74,272	−0.014	0.947	−1.701	2.959
SGPRCO_d	26,146	−0.001	0.996	−3.029	19.958
SGPR	74,272	0.0252	1.160	−1.380	2.400
Inflation	74,269	5.688	10.238	−18.845	75.277
lngdp_o	58,032	16.934	2.028	13.241	21.168
lngdp_d	62,862	18.410	2.284	10.207	25.337
shiye_ratio	73,523	128.441	94.271	1	304
po_stability	74,062	22.364	53.275	−2.801	193
import_ratio	71,459	41.592	21.579	11.78	135.357
trade_de	73,521	0.603	0.489	0	1

effects in the regression analysis.The descriptive statistics for the aforementioned variables are presented in Table 1.

Baseline Empirical Model

To explore the influence of geopolitical risk on trade protection measures, a regression analysis is employed. The number of trade restrictive measures denoted as y_{ijt}, imposed by country i on country j in year t, serves as the primary explanatory variable. If an increase in country-specific geopolitical risk leads to heightened trade protection measures, the coefficient of GPRCO is expected to exhibit a significantly positive value. Given that many of the trade policies examined in this study are tailored to specific trading partners, the gravity model is incorporated into the analytical framework. Furthermore, considering the over-dispersion of the dependent variable (the quantity of newly implemented trade restrictions), assuming a standard Poisson distribution is inappropriate. Therefore, a negative binomial regression model is employed. The negative binomial model, as a functional form, relaxes the 'equidispersion' constraint of the Poisson model. A common approach is to incorporate an additional term in the logarithmic expression of the conditional expectation function:

$$\lambda_{ijt} = exp\left(x_{ijt}\beta + \varepsilon_{ijt}\right) \tag{1}$$

In this context, the random variable ε_{ijt} signifies the unobservable component or individual heterogeneity in the conditional expectation function(Allison and Waterman 2002; Greene 2008) As derived from equation (1):

$$E(y_{ijt}|x_{ijt}, v_{ijt}) = \lambda_{ijt} = exp\left(x_{ijt}\beta\right) * exp\left(\varepsilon_{ijt}\right) \equiv u_{ijt}v_{ijt} \tag{2}$$

Where $u_{ijt} \equiv exp\left(x_{ijt}\beta\right)$ is a deterministic function of x_{ijt}, v_{ijt} is assumed to follow a gamma distribution. Additionally, we have incorporated fixed effects for both countries and time in x_{ijt} to enhance the accuracy and interpretability of the research model. Adhering to the conventional practice in negative binomial regressions, we present the Incidence Rate Ratios (IRRs) rather than the estimated coefficients in this paper. For instance, an IRR of 1.01 suggests that a one-unit increase in the corresponding regression variable will result in a 1 percent increase in the count of newly implemented trade restrictions y_{ijt}. Conversely, an IRR of 0.99 indicates that a one-unit increase in the corresponding regression variable will lead to a 1 percent decrease in the number of newly imposed trade restrictions y_{ijt}.

Table 2. Benchmark regression results.

VARIABLES	(1) IRR	(2) IRR	(3) IRR	(4) Fixed effect	(5) Fixed effect
SGPRCO	1.079***	1.093***	1.095***	0.089***	0.091***
	(0.014)	(0.016)	(0.015)	(0.015)	(0.014)
SGPRCO_d	1.003	0.995	0.997	−0.005	−0.003
	(0.012)	(0.015)	(0.015)	(0.015)	(0.015)
SGPR	1.660***	1.009	1.008	0.009	0.008
	(0.044)	(0.080)	(0.071)	(0.079)	(0.070)
Inflation		1.009***	1.008***	0.009***	0.008***
		(0.002)	(0.002)	(0.002)	(0.002)
lngdp_o		2.225***	2.140***	0.800***	0.761***
		(0.216)	(0.182)	(0.097)	(0.085)
lngdp_d		0.901	0.872	−0.104	−0.136
		(0.160)	(0.136)	(0.177)	(0.156)
shiye_ratio		0.998***	0.998***	−0.002***	−0.002***
		(0.0003)	(0.0003)	(0.0003)	(0.0003)
po_stability		1.006***	1.005***	0.006***	0.005***
		(0.001)	(0.001)	(0.001)	(0.001)
import_ratio		0.999		−0.001	
		(0.002)		(0.002)	
trade_de			0.847***		−0.166***
			(0.046)		(0.054)
Observations	14,555	9,515	9,878	9,515	9,878
Country-pair FE	YES	YES	YES	YES	YES
year FE	YES	YES	YES	YES	YES

Note: The table provides Incidence Rate Ratios (IRR) in columns (1)-(3) and regression coefficients in columns (4)-(5). Standard errors reported below in parentheses. Significance levels are denoted as *** for $p<0.01$, ** for $p<0.05$, and * for $p<0.1$. The empirical regressions include controls for year and trading partner country fixed effects, and cluster-robust standard errors are employed, with country as the clustering variable.

Analysis and Findings

Benchmark Regression Results

Table 2 presents the fundamental regression results. It is noteworthy that given the current trend of global economic integration, global geopolitical risks impact multiple countries, especially when strategic commodities are affected. Concerns about market uncertainty, coupled with pressure and threats from trading partners, may lead to a corresponding increase in trade protection measures. Therefore, to better capture the influence of specific domestic dynamics on trade protectionism, we control for global geopolitical risk factors in our baseline model. This enables us to eliminate external influences and enhance the internal coherence of the model, particularly in situations where strategic commodities are affected, and countries express concerns about market uncertainty due to pressures and threats from their trading partners.

In Column (1), country and time-fixed effects are introduced, along with country-specific GPR and trading partner country GPR in the regression model. Once global factors are taken into account, a one-percentage point increase in country/region-specific GPR leads to a 7.9 percent increment in the number of trade restrictive measures. Importantly, the GPR of the trading partner country does not exert a direct effect on country i's trade policy.Columns (2) and (3) incorporate a series of control variables. Even after controlling for the import share and the existence of a trade deficit in country i, an elevation in the GPR of a particular country/region continues to yield varying levels of trade restrictive interventions. Notably, an escalation in the GPR of a trading partner has not been associated with trade policy changes in each country/region since the financial crisis.Columns (4) and (5) provide insight into the regression coefficients of the model. The country/region-specific geopolitical risk indices all exhibit statistically significant positive values at the upper 1 percent level. This underscores the direct contribution of geopolitical risk to trade protection, emphasizing that geopolitical risk exacerbates trade protectionism. Hypothesis 1 is validated.

Heterogeneity Analysis

Following the 2008 financial crisis, the world has faced unprecedented challenges affecting both its political landscape and economy. These challenges have given rise to a surge in anti-globalization sentiments, accompanied by shifts in regional trade preferences and trade policymaking within a geopolitical framework. Currently, international cooperation among nations has transitioned from multilateral collaboration to regional economic and trade cooperation. This shift has led to the waning influence of the multilateral cooperation mechanism, exemplified by the WTO, and a corresponding strengthening of mechanisms facilitating inter-state economic and trade cooperation. It is essential to recognize the varying impacts of geopolitical risk on trade protection under different multilateral cooperation organizations. Taking into account the influence of these organizations and the efficacy of trade protection measures, this study focuses on four cooperation organizations – namely, the WTO, the EU, the G20, and the Wassenaar Agreement – for a comprehensive analysis of their heterogeneity.

In the context of traditional multilateral cooperation organizations, the WTO and the EU hold significant positions. The WTO serves as a pivotal platform for member states to negotiate and regulate international trade agreements. It provides a framework for resolving trade disputes, ensuring alignment with established rules and regulations, and fostering cooperative trade relations among nations. Conversely, the EU, one of the world's largest trading blocs, leverages its internal unity and collective decision-making mechanisms to present a united front on global issues. The EU actively participates in global diplomacy, negotiations, and partnerships with other countries and regional organizations. Nonetheless, the evolving dynamics of the global economy have made it challenging to adapt to the requirements of political security. Internal divisions, varying national interests, and differing policy perspectives have led to a fragmented trade landscape, with some countries seeking alternative regional or bilateral trade agreements.

The G20, established in response to the post-2008 financial crisis global economic changes, marks the beginning of a shift in global governance from a Western-centric approach to a more inclusive 'Western and non-Western governance' paradigm. As an organization facilitating economic cooperation among major economies, the G20 significantly influences global economic stability, financial markets, and international trade due to its economic and political clout.

The Wassenaar Agreement, signed by over 40 countries, regulates traditional arms and dual-use goods through a multilateral export control mechanism. Notably, it exhibits a distinct bloc nature and tends to target developing countries, emphasizing trade protection. Consequently, this paper employs Wassenaar Agreement membership as a benchmark for subsequent analyses.

By Group of Implementing States

To investigate potential heterogeneity in the relationship between geopolitical risk and trade protectionism across different organizational cooperation groups, this study presents the results in columns (1) and (2) of Tables 3–6, divided based on whether the country implementing trade policy measures is a member or non-member of the WTO, the EU, the G20, and the Wassenaar Agreement.

Compared to the baseline regression results, variations exist in the impact of geopolitical risk on trade protection across different cooperative organizations. While the majority of sub-samples still exhibit a stimulating effect of geopolitical risk on trade protection measures, there is no apparent influence observed in non-member countries of the WTO and G20, as well as among member countries of the European Union. Furthermore, there are quantitative differences in the regression results of economic entities within each cooperative organization. The statistical significance of the test statistic for the geopolitical risk coefficient specific to certain countries/regions is noteworthy. In the European Union and Wassenaar Arrangement, the relationship between geopolitical changes and trade protectionism is more pronounced in non-member countries than in member countries. Conversely, in the case of the WTO and G20 organizations, the situation is precisely the opposite. These observed differences may be attributed to various factors, including the unique institutional

Table 3. IRR estimates for WTO-implementing and affected country groups.

VARIABLES	(1) WTO	(2) Non WTO	(3) WTO vs WTO	(4) WTO vs non-WTO
SGPRCO	1.072***	1.046	1.079***	1.071***
	(0.016)	(0.029)	(0.013)	(0.016)
SGPRCO_d	0.973	0.983	0.974	0.971
	(0.022)	(0.031)	(0.022)	(0.022)
Controls	YES	YES	YES	YES
Observations	6,675	1,524	8,186	6,688
Country-pair FE	YES	YES	YES	YES
year FE	YES	YES	YES	YES
Test statistic	——		6.63[0.010]***	

Note: Incidence Rate Ratios (IRR). Significance levels are denoted as *** for $p<0.01$, ** for $p<0.05$, and * for $p<0.1$. Empirical regressions control for year and trading partner country fixed effects while employing cluster-robust standard errors with country as the clustering variable. The p-values within square brackets are based on the testing of inter-group difference coefficients using a seemingly unrelated regression framework. The inter-group difference coefficients are primarily employed to examine group comparisons that cannot be distinguished based on significance. For group comparisons that can be differentiated based on significance, this study did not conduct inter-group difference coefficient tests.

Table 4. IRR estimates for EU-implementing countries and groups of affected countries.

VARIABLES	(1) EU	(2) Non EU	(3) EU vs EU	(4) EU vs non-EU
SGPRCO	0.877	1.037***	1.124***	1.089***
	(0.106)	(0.011)	(0.027)	(0.016)
SGPRCO_d	0.957	0.968	0.970	0.970
	(0.050)	(0.020)	(0.044)	(0.023)
Controls	YES	YES	YES	YES
Observations	1,861	6,338	3,552	6,508
Country-pair FE	YES	YES	YES	YES
year FE	YES	YES	YES	YES
Test statistic	——		0.75[0.387]	

Note: Incidence Rate Ratios (IRR). Significance levels are denoted as *** for $p<0.01$, ** for $p<0.05$, and * for $p<0.1$. Empirical regressions control for year and trading partner country fixed effects while employing cluster-robust standard errors with country as the clustering variable. The p-values within square brackets are based on the testing of inter-group difference coefficients using a seemingly unrelated regression framework.

Table 5. IRR estimates for G20 implementing and affected country groups.

VARIABLES	(1) G20	(2) non G20	(3) G20vsG20	(4) G20vsnon G20
SGPRCO	1.075***	1.017	1.084***	1.083***
	(0.017)	(0.038)	(0.016)	(0.017)
SGPRCO_d	0.997	0.975	0.997	0.999
	(0.017)	(0.019)	(0.015)	(0.017)
Controls	YES	YES	YES	YES
Observations	7,994	1,521	9,048	8,461
Country-pair FE	YES	YES	YES	YES
year FE	YES	YES	YES	YES
Test statistic	——		0.06[0.804]	

Note: Incidence Rate Ratios (IRR). Significance levels are denoted as *** for $p<0.01$, ** for $p<0.05$, and * for $p<0.1$. Empirical regressions control for year and trading partner country fixed effects while employing cluster-robust standard errors with country as the clustering variable. The p-values within square brackets are based on the testing of inter-group difference coefficients using a seemingly unrelated regression framework.

Table 6. IRR estimates for Wassenaar-implementing countries and groups of affected countries.

VARIABLES	(1) wassen	(2) non wassen	(3) wassen vs wassen	(4) wassen vs non-wassen
SGPRCO	1.080***	1.263***	1.085***	1.082***
	(0.017)	(0.049)	(0.017)	(0.017)
SGPRCO_d	0.991	0.995	0.995	0.996
	(0.018)	(0.024)	(0.016)	(0.017)
Controls	YES	YES	YES	YES
Observations	7,631	1,884	8,679	8,467
Country-pair FE	YES	YES	YES	YES
year FE	YES	YES	YES	YES
Test statistic	11.5[0.001]***		6.14[0.013]***	

Note: Incidence Rate Ratios (IRR). Significance levels are denoted as *** for $p<0.01$, ** for $p<0.05$, and * for $p<0.1$. Empirical regressions control for year and trading partner country fixed effects while employing cluster-robust standard errors with country as the clustering variable.

frameworks and policy dynamics of each organization. This does not imply that member countries of organizations adopt fewer trade protection measures than non-member countries; rather, countries exhibit variations in the flexibility and agility of their trade policies. Additionally, among the four cooperative organizations, except for the EU economies, member countries of the WTO, G20, and Wassenaar Arrangement demonstrate more pronounced trade protection responses to geopolitical risks. Indeed, driven by economic recovery pressures and the resurgence of global trade protectionism, countries have strengthened trade and investment rules to enhance protection for domestic enterprises, resulting in the development of distinctive trade protection policies(M. Baldwin 2006; Meunier and Nicolaïdis 2006; Walter 2021).

In the backdrop of global geopolitical and economic dynamics, geopolitical risks are gradually eroding support for multilateralism. The trade disagreements within the WTO, G20, and Wassenaar Arrangement underscore the challenges faced by traditional multilateral cooperation principles, contributing to the division in international trade and finance. The impact of geopolitical events on the world economy exposes the flip side of economic interdependence, namely, vulnerability. The prevailing trend of 'nationalism' emphasizes the maximization of national interests, prompting many countries to pursue greater autonomy (Walters 2004). The turbulence caused by geopolitical events tends to trigger risk-averse behaviors among nations, obstructing cooperation and maintenance of multilateralism. Although not a new trend, the fact remains that protectionist inclinations have gradually increased in recent years, and excessive interdependence between nations may become a vulnerability in the new economic landscape.

By Group of Affected Countries

Additionally, this paper explores whether countries implementing trade protection measures respond differently to geopolitical risks when dealing with various trading partners. Columns (3) and (4) in Tables 3–6 present the results of sample estimates categorized by the impacted trading partners. The findings in column (3) are exclusively based on observations of the trade restrictive measures imposed by implementing countries within multilateral cooperation organizations (MCOs) on their affected partners. Similarly, the results in column (4) are associated with observations of trade restrictive measures imposed by countries within these organizations on non-members of the same organizational group.

Remarkably, the estimated results in both cases align closely with the baseline findings. When member states within an organization establish trade barriers in response to political risks, it also exerts an impact on fellow member states within the same organization. This finding substantiates Hypothesis 2. This phenomenon can potentially be attributed to the notion that the ripple effect of trade protectionism extends further than the economic community organization (ECO) relationship. Furthermore, taking into account geographic factors and political risks associated with geopolitical risk, countries have become more integrated and diversified in their trade interactions. Their

Table 7. IRR estimates distinguishing trade policy dimensions.

VARIABLES	(1) tariff measure	(2) non-tariff measure	(3) trade remedy	(4) Import measures	(5) export measure
SGPRCO	1.115***	1.015	1.200***	1.072**	1.046
	(0.020)	(0.020)	(0.065)	(0.030)	(0.039)
SGPRCO_d	0.997	0.986	0.908*	0.969	0.961
	(0.024)	(0.014)	(0.053)	(0.026)	(0.034)
Controls	YES	YES	YES	YES	YES
Observations	13,602	13,602	13,602	13,602	13,602
Country-pair FE	YES	YES	YES	YES	YES
year FE	YES	YES	YES	YES	YES

Note: Incidence Rate Ratios (IRR). The statistical significance levels are indicated as follows: ***$p<0.01$, **$p<0.05$, *$p<0.1$. In our empirical regressions, we account for fixed effects associated with the year and the trading partner country. Furthermore, we employ cluster-robust standard errors, with country serving as the clustering variable.

traditional allies and security partners have also been affected. To ensure stability in their domestic markets and promote national economic development, they have resorted to reversing trade deficits and upholding their positions in regular trade patterns.

However, no conclusive evidence exists to suggest that the connection between national geopolitical risks and trade protectionism hinges on whether the affected trading partners are members of the same organizations.

By Trade Policy Dimension

Finally, to investigate whether the estimates relating to a country's geopolitical risk and trade protectionism vary depending on specific trade policies, we turn to Table 7 for guidance. Following the categorizations provided in Table 7, we begin by narrowing down the dependent variables to encompass tariff measures and non-tariff measures. Using the GTA's primary classification of trade interventions and the number of measures involved, we delve into an analysis of heterogeneity across three dimensions: trade remedies, import restrictions, and export controls, which fall under the purview of non-tariff measures.

In particular, trade remedies involve border measures implemented by governments in response to imports of products affected by aggregate import surges (safeguard measures) or facing issues of import dumping and subsidies (anti-dumping and countervailing measures, respectively). Import restrictions comprise 'hard' measures consistently utilized in trade policies, such as licenses, quotas, and various quantitative control measures. On the other hand, export measures encompass actions taken by a country concerning its own exports. This category includes export taxes, export quotas, and export bans.

The relationship between geopolitical risk and trade protectionism extends beyond traditional tariff measures and encompasses non-tariff measures that are not solely discretionary. As indicated in columns (1) and (2) of Table 7, relative to non-tariff measures, the impact of geopolitical risk on tariff measures is more pronounced. For every one-percentage-point increase in geopolitical risk, the quantity of tariff measures adopted by countries/regions increases by 11.5%. This validates Hypothesis 3, suggesting that tariffs remain a conventional policy measure for countries dealing with political shocks and loss of competitiveness. Across different dimensions of trade policy, countries continue to focus on imposing restrictive conditions on imported products, underscoring the necessity of prioritizing import factors when analyzing the relationship between macro-political factors and trade protection. It is essential to note, however, that this result only partially explains the landscape of trade protectionist activities since the financial crisis. Focusing solely on specific trade intervention measures is insufficient to grasp the entirety of trade protectionist activities.

Robustness Check

To enhance the credibility and validity of our findings, this paper subjects the benchmark regression results to a robustness test through the following approaches:

Substitution of Dependent Variables

In this section, the measurement approach for the dependent variable is modified to replace the count of trade protection measures. Specifically, the 'Red Minus Green' count is employed to represent the difference between the annually implemented trade restriction measures and trade liberalization measures. Given the absence of green measures, which might affect the red-green difference, the missing values for green measures are set to 0, resulting in a new variable with non-negative integer values. This approach is adopted because countries that implement more trade restrictive measures might also implement more trade liberalization measures. In such cases, it's not necessarily indicative of a pursuit of trade protectionism. The results in columns (1) and (2) of Table 8 indicate that trade protectionism exhibits greater sensitivity to changes in geopolitical risk. Specifically, a one percentage point increase in the Geopolitical Risk Index (GPR) for a given country/region leads to a significant 6.7 percent and 5.9 percent increase in the red-minus-green difference. This corresponds to a significant increase in newly implemented trade restrictive measures compared to newly implemented trade liberalization measures, aligning with the benchmark regression results.

On the other hand, in order to comprehensively and accurately depict the impact of trade protection measures, this study has recalibrated the dependent variable of the model from the perspective of goods affected under the backdrop of trade protectionism. The calculation involved assessing the number of products each country targets annually with trade protection measures against its trading partners, substituting the explained variable for examination. The empirical results following the substitution, as illustrated in columns (3) and (4) of Table 8, reveal that with the increase in the geopolitical risk index, the number of affected products in trade protection measures also rises. This phenomenon is attributed to the growing interconnectedness of global trade networks and global value chains among nations. Consequently, when confronted with geopolitical uncertainty, countries may be inclined to adopt more extensive and profound trade protection measures to mitigate potential economic impacts(Gong and Xu 2022). This finding further supports the baseline conclusions of this study.

Exclusion of Global Geopolitical Risk Factors

In the baseline regression, we controlled for global geopolitical risk, leading to the conclusion that there is a direct relationship between the escalation of geopolitical risk in specific countries/regions and the inclination toward trade protectionism. However, ongoing global geopolitical conflicts can also have potential impacts on trade, technological innovation, and economic growth, increasingly emerging as driving factors behind trade policies (Góes and Bekkers 2022). To gain a more nuanced understanding of the relationship between geopolitical risk and national trade protectionism,

Table 8. Robustness test results I.

VARIABLES	Red-green		Number of products affected	
	(1)	(2)	(3)	(4)
SGPRCO	1.067***	1.059***	1.236***	1.215***
	(0.142)	(0.140)	(0.042)	(0.046)
SGPRCO_d	−0.000	0.004	0.992	0.989
	(0.191)	(0.186)	(0.034)	(0.031)
import_ratio	−0.004		1.034***	
	(0.018)		(0.005)	
trade_de		0.271		0.877
		(0.439)		(0.098)
Controls	YES	YES	YES	YES
Observations	9,515	9,878	13,031	13,787
Country-pair FE	YES	YES	YES	YES
year FE	YES	YES	YES	YES

Note: Incidence Rate Ratios(IRR).Significance levels are denoted as follows: ***$p<0.01$, **$p<0.05$, *$p<0.1$. The empirical regressions include controls for year and trading partner country fixed effects. Cluster-robust standard errors are employed, using country as the clustering variable.

independent of global geopolitical risk interference, we focus on the impact of national factors on trade policies. Table 9 presents the research results after excluding the global geopolitical risk factor (SGPR). Consistent with the basic regression, it demonstrates the robustness and reliability of the study.

Controlling for the Effects of Exchange Rates

The time series period under investigation in this study begins after 2008, a period marked by the economic crisis. During this time, exchange rates across various countries experienced varying degrees of sharp fluctuations. Countries tended to implement trade restriction policies when the appreciation of their real exchange rate resulted in weakened domestic economic growth and decreased competitiveness(Georgiadis and Gräb 2016). To mitigate the potential influence of exchange rate fluctuations on the regression outcomes, this paper incorporates the real exchange rate (real_ex) of each country as a control variable in addition to the benchmark regression. The results, presented in columns (3)-(4) of Table 9, indicate that even after accounting for the real exchange rate of each country, the impact of geopolitical risk on trade protection restrictive measures remains consistent, affirming the robustness of the findings.

Endogenous Issues

A noticeable correlation between geopolitical risk and trade protection measures in the country/region exists, contingent upon fulfilling the identification assumption. This assumption necessitates the independence of the main explanatory variable from the error term, considering all control variables. While Caldara and Iacoviello (2022) previously indicated the exogeneity of the geopolitical risk measurement, it is imperative to delve further into the endogeneity of the model to achieve a more precise relationship identification.

To enhance the robustness of the empirical findings, this study employs an instrumental variable (IV) estimation method. Previous research has indicated that increased military spending tends to bolster national security, consequently diminishing geopolitical risks (Mbaku 1991). However, given the indirect relationship between military spending and trade protectionism, with trade policies exerting limited influence on existing government military expenditures, this paper employs military_exp_ratio as an instrumental variable for geopolitical risk (GPRCO). Endogeneity is evaluated using the IV method, and the regression results are presented in Table 10. The coefficients of the instrumental variables exhibit a significant negative correlation. The Kleibergen-Paap rk LM statistic is notably significant at

Table 9. Robustness test results II.

	Exclusion of SGPR factors		Controlling exchange rate fluctuations	
VARIABLES	(1)	(2)	(3)	(4)
SGPRCO	1.093***	1.095***	1.085***	1.095***
	(0.016)	(0.015)	(0.016)	(0.015)
SGPRCO_d	0.995	0.997	0.992	0.995
	(0.015)	(0.015)	(0.016)	(0.016)
lnreal_ex			0.948***	0.952***
			(0.010)	(0.009)
import_ratio	0.999		0.994**	
	(0.002)		(0.003)	
trade_de		0.847***		0.867***
		(0.046)		(0.047)
Controls	YES	YES	YES	YES
Observations	9,515	9,878	9,165	9,528
Country-pair FE	YES	YES	YES	YES
year FE	YES	YES	YES	YES

Note: Incidence Rate Ratios(IRR).Significance levels are denoted as follows: ***p<0.01, **p<0.05, *p<0.1. The empirical regressions include controls for year and trading partner country fixed effects. Cluster-robust standard errors are employed, using country as the clustering variable.

Table 10. Endogenous treatments.

VARIABLES	(1) SGPRCO	(2) Trade restrictive measures
military_exp_ratio	−0.108***	
	(0.034)	
SGPRCO		22.970***
		(3.933)
SGPRCO_d		
Controls	YES	YES
Country-pair FE	YES	YES
year FE	YES	YES
Observations	8,066	8,066
Kleibergen-Paap rk LM statistic	62.449***	
Cragg-Donald Wald F statistic	49.136[16.38]	

Note: ***$p<0.01$, **$p<0.05$, *$p<0.1$; empirical regressions incorporate fixed effects for the year and trading partner country, and employ cluster-robust standard errors with country serving as the clustering variable.

the 1 percent level, thus rejecting the original hypothesis of insufficient instrumental variable identification. Additionally, the Cragg-Donald Wald F statistic surpasses the critical value for the weak instrumental variable identification F-test at the 10 percent significance level, also rejecting the original hypothesis of weak instrumental variables. In conclusion, the instrumental variables chosen in this paper are justifiable and reliable, affirming the fundamental conclusions of this study.

Further Analysis

Positioned within the context of global geopolitical relations, trade policy, as an outcome of political maneuvering, exhibits a substantial correlation with significant changes in political systems and institutional quality (Wagner and Plouffe 2019). The efficacy of trade policy is also contingent upon the extent to which a nation relies on trade. Consequently, it is essential to investigate the intricate interplay between geopolitical risk and political systems. This exploration aims to contribute to a more comprehensive understanding of the multifaceted factors influencing trade protectionism within the broader context of global geopolitical dynamics.

To explore the role of institutional quality in the relationship between geopolitical risk and trade protectionism, we utilize the Worldwide Governance Indicators (WGI) provided by the World Bank to measure a country's institutional quality. The WGI encompasses six dimensions: political stability, government effectiveness, control of corruption, regulatory quality, rule of law, and voice and accountability. These indicators are aggregated and averaged to produce a composite index ranging from −2.5 to 2.5, where higher values indicate superior institutional quality. The specific regression results are presented in column (1) of Table 11. The results show that countries with higher institutional quality have fewer trade restrictions because the IRR value is significantly less than 1. Moreover, the coefficients for the interaction terms are positive, indicating that countries with higher institutional quality are more sensitive to changes in geopolitical risk.

Generally, high-quality institutions and democratic regimes are more inclined towards free trade. Higher institutional quality is commonly associated with more stable, transparent, and rule-of-law-oriented governmental structures. Such institutions significantly reduces overall trade costs, including those for agricultural and manufactured goods (Hou, Wang, and Xue 2021), thereby enhancing the benefits of trade liberalization (Nam, Frijns, and Ryu 2024). Furthermore, democratic countries, with their emphasis on public interest and accountability, ensure that policy decision-making processes are more transparent and open. Milner and Kubota (2005) posits that democratization leads to trade liberalization in developing countries. More democratic regimes tend to have lower trade barriers and are more likely to open their trade regimes. Mansfield et al. (2000) examines the

Table 11. Further analysis.

VARIABLES	(1) Institutional quality	(2) Political system	(3) Trade dependence
SGPRCO	1.123***	1.063***	1.084***
	(0.018)	(0.017)	(0.014)
WGI	0.207***		
	(0.073)		
c.SGPRCO#c.WGI	1.035***		
	(0.009)		
democracy_eiu		0.329**	
		(0.167)	
c.SGPRCO#c.democracy		1.233***	
		(0.094)	
de_foreign trade			0.972***
			(0.004)
c.SGPRCO#c.de_foreign trade			1.001**
			(0.000)
Controls	YES	YES	YES
Observations	7,540	8,966	9,455
Country-pair FE	YES	YES	YES
year FE	YES	YES	YES

Note: Incidence Rate Ratios(IRR). The statistical significance levels are indicated as follows: ***$p<0.01$, **$p<0.05$, *$p<0.1$. In our empirical regressions, we account for fixed effects associated with the year and the trading partner country. Furthermore, we employ cluster-robust standard errors, with country serving as the clustering variable.

impact of political regimes on trade policy, demonstrating that democratic countries are more effective in promoting free trade compared to protectionist autocratic regimes.

Despite the general tendency of high-quality institutions to promote free trade, these countries may adopt more trade protection measures in the context of geopolitical risks. Well-designed institutions provide a certain degree of stability and predictability amid uncertainty (Ngo et al. 2016). High-quality institutions enhance the perceived efficiency of the public sector, enabling countries to better manage and implement policies (Chong and Gradstein 2007), respond swiftly to international developments, and continually strive to promote public welfare (Andabaka and Kovac 2019). Democratic countries, in particular, have shown more proactive responses to geopolitical risks. This heightened responsiveness is largely due to their sensitivity to different environments, as emphasized by Saward (2003), who adopted a reflexive and procedural perspective in analyzing the implementation of democracy. Some studies suggest that democracies are more responsive to public demands and tend to align their policies with citizens' preferences. When demand elasticity is high, all countries lean towards lower levels of protectionism; however, due to the heightened sensitivity of voters to price increases and income losses, democracies often impose relatively higher trade barriers (Peterson and Thies 2014).

Given that institutional quality and democratic systems are conceptually aligned with democracy, we conducted robustness checks by including the democracy index as an alternative variable in our analytical framework (Table 11, column 2). The democracy index (democracy_eiu) is calculated as a weighted average of scores across five dimensions: electoral process and pluralism, civil liberties, the functioning of government, political participation, and political culture. These scores range from 0 to 10, with higher scores indicating a greater degree of democratization, suggesting that a country's governance more closely resembles a fully democratic system. The empirical results are similar to those of the WGI. A country with a higher democracy index has less trade protectionism but is more responsive when geopolitical risk rises.

Existing research indicates that democratic countries are more inclined to engage in free trade. However, are countries that adhere to free trade more vulnerable to uncertainties? Albertoni (2023) suggests that high trade dependence promotes the spread of international trade liberalization. Nevertheless, under economic uncertainty, it can also become a channel for disseminating less transparent protectionism, such as non-tariff measures. Policymakers must balance responding to domestic protectionist pressures with preventing a spiral of protectionism with key trading partners. Similarly,

Quinones and Gates (1995) argues that countries with higher trade dependence are more likely to face risks. As these risks increase, countries tend to adopt inward-oriented trade strategies, whereas they shift towards outward-oriented trade policies as the risks diminish. To further investigate this issue, we introduce the concept of 'trade dependence' (de_foreign trade) to measure a country's economic openness and sensitivity to external economic factors. The data for trade dependence is sourced from the World Bank database and is calculated by evaluating the ratio of exports and imports to the gross domestic product (GDP). This indicator reflects a country's reliance on international trade. A higher percentage indicates a stronger inclination towards economic openness.

As shown in the regression results in column (3) of Table 11, countries with higher trade dependence have fewer trade restrictions, as the IRR value is significantly less than 1. Additionally, the positive coefficient for the interaction term suggests that countries more inclined towards free trade are more susceptible to geopolitical risks. Democratic countries, being more open to free trade, are particularly vulnerable to these uncertainties. Sudden changes in supply and demand in the global market are more disruptive to open economies than to closed economies. For instance, the pandemic disrupted product supplies from China, causing shortages of critical medical supplies in open economies such as the United States and Western Europe. Policymakers need to consider the current political environment to prevent potential disruptions to their international trade networks, thereby reducing uncertainty and protecting national security and interests.

Conclusion

From the perspective of exogenous shocks brought about by geopolitical risk, this paper delves into whether geopolitical risk between trading partner countries has exacerbated trade protectionism from 2008 to 2019, using annual data. It goes beyond the implementer of trade restrictive measures and explores the trade policy choices among multilateral organizations in response to geopolitical risk. The paper also discusses the moderating mechanisms of national institutions, institutional quality, and trade dependency in shaping the impact of geopolitics. Controlling for economic, social, and trade-related factors, the research reveals the following key findings:

(1) Geopolitical risk significantly fosters trade protectionism between trading partner countries, with an increase in the geopolitical risk index leading to more trade restrictive measures implemented by countries.
(2) The contagious nature of geopolitical risk affects not only traditional allies within multilateral cooperative systems but also diffuses its trade protection effects to member countries.
(3) Traditional tariffs continue to serve as a deterrent in international relations, particularly during periods of heightened geopolitical tension, making them a primary tool used by nations when faced with geopolitical risk.
(4) The further analysis suggest that better institutional quality, more liberalized political systems, and deeper trade dependency relationships strengthen the promotion effect of geopolitics on trade protection.

Since the financial crisis, trade protectionist activities have seemingly slowed down, possibly due to international peer pressure, trade policy rules, and the gradual vertical disintegration of global supply chains, which reduced the threat of trade conflicts. However, this paper provides compelling empirical evidence that the specter of trade protectionism has not vanished. This finding contributes to the ongoing discourse.The rise in geopolitical risk leads to domestic political tensions in various countries, prompting government agencies to lean toward adopting protectionist trade policies. The longer geopolitical crises persist, the riskier trade relations become between nations. International organizations like the World Trade Organization (WTO) and other multilateral cooperation bodies find themselves under pressure to manage trade protectionism. Over the prolonged period following the financial crisis, the WTO's influence has

gradually waned, and disagreements within multilateral cooperative systems have intensified, putting international trade relations to the test.

Therefore, there is a need to intensify efforts to enhance peer pressure, monitoring, and international cooperation. As major influential nations in the international community, both China and the United States should shoulder their responsibilities. They can initiate dialogues regarding the list of regulations, striving to reach an early consensus and working steadily alongside other major economies. By doing so, they can push for the early implementation of this regulatory list, ultimately making a significant contribution to building a community of shared future for humanity. The conclusions drawn from this research carry important policy implications for how to systematically promote trade cooperation and reshape the construction of the trade rules system.

Disclosure Statement

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