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CULTURAL DISTANCE, INBOUND TOURISM, AND BILATERAL TRADE: EVIDENCE FROM CHINA, JAPAN, AND SOUTH KOREA

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ABSTRACT

This study examines how cultural distance affects bilateral trade flows and examines whether cross-border mobility mediates this effect. Using panel data from China, Japan, and South Korea and grounded in the gravity model, this study incorporates inbound tourism as a proxy for interpersonal interaction and information diffusion between trading partners. The results indicate that cultural distance increases both inbound tourism and goods trade. Inbound tourism fully mediates this relationship, showing cultural differences can stimulate economic exchange via cross-border mobility. Notably, the effect is heterogeneous. Cultural distance does not directly affect services trade, although tourism remains an indirect channel. These findings underscore the economic significance of people-to-people interactions in mitigating culturally induced trade frictions and enhancing bilateral trade integration.

KEYWORDS: Cultural Distance, Inbound Tourism, Bilateral Trade, Gravity Model, CJK

1. INTRODUCTION

East Asia is among the most dynamic and promising regions in the world, and is known for its rapid economic growth and bustling trade activities (Sarkar et al. 2025). In recent years, the deepening of regional economic integration has significantly enhanced economic cooperation and trade exchanges among East Asian countries. The three major economies in the region, China, Japan, and South Korea, play pivotal roles in promoting regional economic and trade cooperation (cf. Chen, Yuan, and Song 2023). The entry into force of the Regional Comprehensive Economic Partnership (RCEP) in 2022 has injected new momentum into trilateral collaboration. In May 2024, during the Ninth Trilateral Summit, the leaders of South Korea, Japan, and China reaffirmed their commitment to cooperation over the next decade, providing a solid political foundation for a sustained regional economic partnership. Subsequently, in March 2025, after five and a half years, the three countries resumed the Trilateral Economic Ministers' Meeting, reaching a consensus to strengthen regional economic cooperation, stabilize supply chains, and enhance dialogue on export controls. These developments indicate an encouraging upward trend in trade relations among China, Japan, and Korea (CJK).

Despite the active promotion of regional economic cooperation among the three countries, CJK trade collaboration continues to face challenges arising from global economic uncertainty and geopolitical tensions. On the one hand, Japan and South Korea, as key allies of the United States in the Asia-Pacific, maintain strong economic and cultural ties with the West. This dependency has made both countries susceptible to U.S.–China trade frictions, thereby constraining the peaceful and stable development of CJK economic cooperation. On the other hand, ideological divergence and geopolitical frictions have further eroded the foundation of mutual trust, impeding the deepening of multilateral cooperation. Therefore, culture emerges as a critical yet often overlooked factor in understanding the dynamics of trilateral trade cooperation. Geographically situated within East Asia and belonging to the broader East Asian cultural sphere, these three nations share a high degree of cultural similarity rooted in historical ties. However, modern influences, particularly from Western cultures, have also introduced notable distinctions. This unique cultural configuration—characterized by both shared heritage and acquired differences—presents distinct opportunities for the evolution of regional trade cooperation. Consequently, investigating the role of cultural distance in shaping trilateral trade flows is of paramount importance (Liu, Lu, and Wang 2021). These unique cultural backgrounds simultaneously present both opportunities and challenges for regional economic collaboration. Understanding how cultural distance shapes trade relations among the three countries thus holds significant theoretical and practical relevance (Ghaith and Wagner 2025; Mostafiz, Akter, and Rahman 2024).

Existing research emphasizes the significance of cultural distance in the fields of international trade and tourism (Park, Kim, and Yeon 2023; Qin et al., 2023). Shedding light on cultural distance may either hinder or facilitate economic exchanges (Bi and Gu 2019; Reisinger and Mavondo 2006). Conventional theories emphasize the barrier effects, arguing that cultural differences increase transaction costs, reduce trust, and constrain trade (Guiso, Sapienza, and Zingales 2009). Yet, emerging perspectives suggest that cultural distance can also stimulate product differentiation, novelty-seeking behavior, and experiential consumption, enhancing the attractiveness of culturally distinct destinations. This duality is particularly salient in the CJK region, where cultural proximity reduces uncertainty, while residual differences create opportunities for trade and tourism expansion.

Although substantial research has examined cultural distance in international business, several gaps remain in the CJK context. Previous studies treat cultural distance as a direct determinant of trade or tourism, overlooking the possibility that tourism itself may function as a transmission channel linking cultural differences to trade flows. Besides, while tourism fosters interpersonal interactions, knowledge spillovers, and market familiarity, the mediating role of inbound tourism in cultural–economic linkages remains underexplored, particularly in East Asia. Moreover, little is known about whether cultural distance affects goods and services trade differently, despite the distinct informational, experiential, and institutional requirements of these types of trade.

To address these gaps, this study develops a comprehensive mediation framework grounded in the gravity model. The gravity model has emerged as a cornerstone in empirical international economics, particularly for analyzing bilateral trade flows. Borrowed from physics, the model posits that the volume of trade between two regions or countries is directly proportional to their economic

masses—typically proxied by GDP or population—and inversely proportional to the distance separating them. This framework, first formalized by Tinbergen (1962) and theoretically grounded by Anderson (1979) and Bergstrand (1985), has been extensively used to quantify trade patterns, revealing that larger economies trade more with each other while greater distances impose barriers through higher transportation and transaction costs. Over time, the model has evolved to incorporate multidimensional distance measures, including not only geographical but also economic, institutional, and cultural factors, to explain variations in trade intensity. By embedding cultural distance and inbound tourism within a gravity-model framework, this study systematically investigates: (1) the direct effects of cultural distance on bilateral goods and services trade; (2) the mediating role of inbound tourism in transmitting cultural effects; and (3) the heterogeneous impacts across goods and services trade. Using panel data spanning 2005–2020, the study provides a robust, empirically grounded assessment of how cultural dynamics and human mobility jointly shape regional economic integration.

This study contributes to the applied international economics literature by examining how inbound tourism moderates the impact of cultural distance on bilateral trade flows within East Asia. While a substantial body of research documents the trade-reducing effects of cultural distance through preference heterogeneity and informational frictions, far less is known about how cultural distance can serve as a catalyst—rather than merely a barrier—within culturally proximate regions. In particular, the mechanisms through which cultural distance shapes bilateral trade remain insufficiently explored. Building on an augmented gravity framework, this study introduced inbound tourism as an economically meaningful channel that facilitates information diffusion, familiarity with foreign products and business practices, and the informal transmission of norms, thereby mitigating the transaction costs associated with cultural distance. Using panel data on the China-Japan dyad and South Korea, the empirical results show that inbound tourism is a significant mediating mechanism through which cultural differences translate into trade expansion. Moreover, this study highlights the heterogeneous impacts of cultural distance on goods and services trade, contributing to a more nuanced understanding of regional economic dynamics in Northeast Asia. These findings extend standard gravity-model interpretations by highlighting the role of people-to-people interactions as a complementary determinant of trade integration, offering new applied evidence on how soft informational channels shape observed trade patterns.

2. LITERATURE REVIEW

2.1. Gravity Model

Building on its early empirical success, the gravity model has evolved into a theoretically grounded and highly flexible framework for analyzing bilateral trade flows (Anderson, 1979; Head and Mayer 2014; van Bilsen 2024). Seminal contributions have established that the gravity equation can be derived from general equilibrium models featuring trade costs, product differentiation, and market-clearing conditions, thereby providing a solid microeconomic foundation for empirical applications (Helpman and Krugman 1985; Anderson and van Wincoop 2003). Within this framework, bilateral trade flows are shaped not only by economic size and geographical distance but also by a broad range of observable and unobservable trade frictions that affect the costs of cross-border exchange (Rosselló-Nadal and Santana-Gallego 2024). As a result, subsequent studies have extended the baseline gravity specification to incorporate variables capturing institutional quality, policy barriers, and informational frictions, enabling a more comprehensive measurement of trade costs beyond physical distance (Head and Mayer 2014).

A prominent strand of the literature focuses on institutional and policy-related extensions of the gravity model. Empirical studies have shown that differences in legal systems, contract enforcement, regulatory quality, and governance structures significantly influence bilateral trade by affecting transaction costs and uncertainty (Rodrik, Subramanian, and Trebbi 2004; van Bilsen 2024). Similarly, trade policy variables such as tariffs, non-tariff measures, and membership in trade agreements have been incorporated into augmented gravity equations to account for formal barriers to trade (Rose 2004; Baier and Bergstrand 2007). These extensions have demonstrated that institutional compatibility and policy coordination can play a role comparable to, or even larger than, geographical proximity in shaping trade patterns (Anderson and van Wincoop 2004; Head and Mayer 2014).

Another important line of gravity-model extensions emphasizes informational and cultural frictions as determinants of trade costs. Cultural distance, language differences, and historical ties

have been widely used to capture persistent barriers arising from preference heterogeneity, communication costs, and limited trust between trading partners (e.g., Guiso, Sapienza, and Zingales 2009; Lankhuizen, De Groot, and Linders 2011; van Bilsen 2024). Empirical evidence consistently indicates that greater cultural distance is associated with lower trade volumes, even after controlling for standard economic and geographical factors (Disdier and Head 2008; Guiso, Sapienza, and Zingales 2009). These findings suggest that informal and soft barriers operate alongside formal trade costs and remain highly relevant in explaining observed trade flows.

Extensions of the gravity model increasingly incorporate variables related to cross-border mobility, networks, and interpersonal interactions, such as migration stocks, business travel, and diaspora effects (Felbermayr and Toubal 2012; Rosselló-Nadal and Santana-Gallego 2024). These studies provide evidence that repeated interpersonal contact facilitates information diffusion, reduces uncertainty, and enhances familiarity with foreign markets, thereby lowering effective trade costs.

Against this background, the present study contributes to the gravity-model extension literature by examining inbound tourism as an empirically observable channel through which understand the pathway of cultural distance effect on trade. Rather than treating tourism as a sector-specific outcome, this analysis employed inbound tourism flows as a proxy for cross-border interpersonal exposure and informal information exchange. This approach complements existing extensions based on institutional and cultural variables and offers new applied evidence on how mobility-related interactions shape trade integration in an East Asian context.

2.2. Cultural Distance and Trade

Cultural distances can be defined as the degree to which shared norms and values differ between countries (Hofstede 2001). The mainstream approaches to conceptualizing and measuring cultural distance are largely grounded in two foundational frameworks: Hofstede (2001) and Schwartz (2004). Hofstede (2001) drawing from group-level traits and individual characteristics, conceptualizes culture as a set of collective mental programs that distinguish the members of one region or nation from those of another. His framework evaluates cultural differences across six dimensions: power distance, uncertainty avoidance, individualism versus collectivism, masculinity versus femininity, long-term versus short-term orientation, and indulgence versus restraint. Compared with Hofstede's (2001) model, Schwartz (2004) adopts a perspective more closely centered on individual motivational values. His cultural dimension framework is constructed around three bipolar value orientations: autonomy versus embeddedness, egalitarianism versus hierarchy, and mastery versus harmony. Overall, Hofstede's (2001) framework is more inclined to capture cultural characteristics at the collective or societal level, whereas Schwartz's model focuses more explicitly on individual-level value orientations.

Cultural factors have long been recognized as influential drivers of international trade. Elements such as language, customs, values, and behavioral norms play a critical role in shaping the dynamics of bilateral trade flows (Zimmermann 2021). Empirical evidence suggests that cultural proximity facilitates cross-border exchanges by reducing informational frictions. For example, Guo (2007) finds that shared language exerts a persistent positive influence on East Asian regional trade. In this context, cultural distance is commonly operationalized using Hofstede's (2001) dimensions, with greater cultural distance indicating greater divergence in cultural norms and values.

Despite substantial scholarly attention, empirical findings on the effect of cultural distance on trade remain mixed. Numerous studies document that greater cultural dissimilarity undermines bilateral trade flows by eroding mutual trust and raising transaction costs (Guiso, Sapienza, and Zingales 2009; Heid and Márquez-Ramos 2019; Zou et al. 2009). Similar suppressing effects have been reported by Guo (2004), Tadesse and White (2010), Felbermayr and Toubal (2012), and Coughlin and Wall (2011). Yet an alternative line of reasoning argues that cultural differences may enhance trade by promoting specialization and complementarity, thereby generating gains that outweigh coordination costs (Zimmermann 2021). Supporting this view, Kristjánsdóttir et al. (2017) observe that individualism and masculinity positively influence import flows, while Ghaith and Wagner (2025) identify a nonlinear relationship whereby cultural distance first stimulates and later impedes trade once a threshold is exceeded. Within regional trade blocs—where countries typically share relatively high cultural affinity—the evidence increasingly suggests that moderate levels of cultural distance may promote bilateral trade by enabling differentiated yet compatible market offerings. Taken together, the literature implies that while

excessive cultural dissimilarity may hinder trade, modest cultural differences within culturally proximate regions can facilitate economic exchange.

2.3. Inbound Tourism and Trade

Compared with the extensive literature on cultural distance and trade, research examining the role of cultural factors in international tourism remains relatively limited and often yields conflicting conclusions. Existing studies largely focus on how perceived cultural distance shapes tourists' destination choices. Liu et al. (2018), using regression analysis, find that perceived cultural distance exerts a negative but statistically insignificant influence on Chinese tourists' destination preferences. Similarly, Huang et al. (2022) report a suppressing effect of cultural distance on outbound tourism. Conversely, Heriqbaldi, Esquivias, and Agusti (2023) and Bayrakcı and Ozcan (2023) reveal that cultural distance may stimulate inbound tourism by enhancing tourists' interest in culturally distinct destinations. Bi and Lehto (2018) further highlight the nonlinear nature of this relationship, noting that greater cultural differences can initially enhance inbound tourism flows but eventually deter them once dissimilarity becomes excessive, and Qin et al. (2023) also supported this effect.

Research on the interaction between international tourism and trade constitutes a more specialized domain, with most studies employing cointegration analyses, Granger causality tests, and time-series approaches to examine their bidirectional dynamics. Kulendran and Wilson (2000) identify a unidirectional causal effect from Japanese tourist flows to Australia's exports, while Fischer and Gil-Alana (2009) and El-Sahli (2018) demonstrate that tourism flows significantly stimulate export growth and contribute to broader regional economic development. Luo et al. (2022) similarly find that inbound tourism exerts a positive, reinforcing influence on bilateral trade relationships.

Synthesizing the existing evidence reveals a consistent pattern: among countries with high cultural similarity—particularly within regional economic groupings—cultural distance tends to exert a facilitative effect on both inbound tourism and trade. Moreover, studies on the tourism–trade nexus, although limited in scope, consistently show that international tourism acts as a catalyst for trade development, strengthening economic linkages and deepening regional integration. Despite this, the precise magnitude and underlying mechanisms of these interactions remain underexplored, underscoring the need for further empirical investigation in the context of regional economies.

3. HYPOTHESIS DEVELOPMENT

Geographically, China, Japan, and South Korea are all located in East Asia and share a common heritage of traditional Eastern cultural elements, resulting in a certain degree of cultural similarity (cf. Zhou and Zhou 2022). However, differences in historical development trajectories and the substantial influence of Western culture have also produced pronounced cultural divergences among the three countries. This is particularly evident in the case of South Korea, whose deep exposure to Western—especially European and American—cultural influences widened its cultural distance from China. Within regional trade, cultural distance may affect bilateral exchanges through multiple channels. On the one hand, greater cultural distance increases negotiation and communication costs, thereby raising overall trade costs (Ribbink and Grimm 2014; Xiong, Wang, and Zhao 2022). On the other hand, cultural distance acts as a determinant influencing the extensibility demand of the product (Parente, Baack, and Hahn 2011). This dynamic compels firms to strategically elevate their product quality to strengthen their core competitive advantage, ultimately driving and expanding market size. The common forms of regional trade are goods and services trade. Goods trade, characterized by the exchange of tangible products, involves the direct export of physical merchandise to destination markets. In contrast, services trade is inherently intangible, primarily involving the cross-border flow of expertise, skills, and labour (WTO 2020). Given the distinct nature of these trade forms, the impact of cultural distance on each is likely heterogeneous. Furthermore, cultural distance significantly influences international tourists' destination choices. Although the precise effect of cultural distance on destination selection remains a subject of academic debate, a nuanced perspective reveals its salient role in regional tourism development. Within regional contexts, cultural distance can effectively stimulate tourism flows by enhancing a destination's novelty and appeal (Qin et al. 2023). This effect is particularly pronounced in the case of inbound tourism, where cultural differences positively influence visitor attraction and regional tourism growth (Li et al. 2024). Based on the above reasoning, the following hypotheses are proposed:

Hypothesis 1. Cultural distance positively affects goods trade.

Hypothesis 2. Cultural distance positively affects services trade.

Hypothesis 3. The effects of cultural distance on goods trade and services trade are heterogeneous.

Hypothesis 4. Cultural distance positively influences the development of inbound tourism.

Goods trade and services trade are closely associated with the movement of people within a region, as mobility can facilitate business interaction, coordination, and the exchange of knowledge that supports trade activities (Cantwell and Shukla 2025; Brau and Maria Pinna 2013). The expansion of regional tourism not only facilitates such population movements but also enhances the circulation of information, capital, and other economic factors across borders. Especially in the initial stages of regional trade agreements, tourism activities—such as leisure travel, study visits, and family-related travel—often provide strong momentum for the growth of regional merchandise trade, labor- or skill-based services, and technological exchanges (Söderlund 2023). Building on this logic, the following hypotheses are proposed:

Hypothesis 5. The development of inbound tourism promotes the expansion of goods trade.

Hypothesis 6. The development of inbound tourism promotes the expansion of services trade.

Hypothesis 7. Cultural distance indirectly affects goods trade through inbound tourism.

Hypothesis 8. Cultural distance indirectly affects services trade through inbound tourism.

4. METHODOLOGY

4.1. Data Source and Variable Description

The data are sourced from the World Development Indicators (WDI) and the Ministry of Data and Statistics of South Korea. To ensure research consistency, this study employs panel data for China, Japan, and South Korea from 2005 to 2020 for empirical analysis. To eliminate the impact of units on the model and to mitigate heteroskedasticity issues, all data are logarithmically transformed. The variables involved in this study and their corresponding descriptive statistics are presented in Table 1.

Dependent Variables To accurately reflect the development of South Korea's goods trade, this study selects South Korea's goods import value from China and Japan as the indicator for measuring the development of goods trade, rather than using the total bilateral import–export value. The rationale is that using import value better captures South Korea's dependence on goods trade with China and Japan. The total goods import–export value is further introduced for robustness checks to verify the robustness of the model.

The other dependent variable in this study is services trade. To maintain consistency in measurement with the goods trade indicator, this article selects the value of South Korea's services imports from China and Japan as the metric for services trade development.

Independent Variables The independent variables involved in this study mainly include cultural distance and service trade. Cultural distance reflects the cultural differences between China, Japan, and South Korea. Following the commonly adopted Hofstede (2001) cultural dimension indicators, and based on the calculation method proposed by Kogut and Singh (1988), this study applies the modified cultural distance formula proposed by Liu et al. (2018), which incorporates the number of years since diplomatic relations were established between the two countries to measure the cultural distance. The specific formula is as follows:

$$CD_{cit} = \left\{ \sum_{n=1}^{6} \frac{\left[\frac{I_{cn} - I_{in}}{V_n} \right]}{6} \right\} + \left(\frac{1}{T_{cit}} \right) \qquad (1)$$

Mediating Variable The mediating variable in this study is tourism development. At the national level, inbound tourism arrivals and tourism revenue are commonly used indicators to assess the level of regional tourism development. This study adopts inbound tourist arrivals as the primary measure of tourism development among China, Japan, and South Korea.

Control Variables In addition to cultural distance, factors such as economic distance, institutional distance, and geographic distance also play important roles in shaping bilateral goods trade. Institutional distance reflects the political and administrative differences between China, Japan, and South Korea. Following existing literature, this study measures institutional distance using the World Development Indicators (WDI) index of government effectiveness. The bilateral institutional distance is calculated as the absolute value of the difference in government effectiveness between two countries. The specific formula is as follows:

$$SD_{ijt} = | Gove_{it} - Gove_{jt} | \qquad (2)$$

Where SDijt denotes the institutional distance between country i and country j in year t. Goveit and Govejt represent the levels of government effectiveness in countries i and j, respectively. The economic distance is measured using the absolute ratio of GDP per capita between country i and j. The specific calculation formula is as follows:

$$ED_{\text{ijt}} = \left| \frac{PGDP_{it}}{PGDP_{jt}} \right| \qquad (3)$$

Air and Rail are designed to measure the differences in air and rail transport levels between the China-Japan dyad and South Korea, respectively, thereby reflecting the geographical distance disparity between South Korea and the two countries.

Table 1: Descriptive Statistical Characteristics

Variable Name	Variable Symbol	Mean	Standard Deviation (SD)
Explained Variable			
Goods Trade Import	lngood	11.081	0.291
Services Trade Import	lnservice	9.038	0.679
Explanatory Variable			
Cultural Distance	lncd	-1.152	0.076
Mediating Variable			
Inbound Tourism	lntour	5.471	0.68
Control Variables			
Economic Distance	lned	0.56	1.063
Institutional Distance	lnsd	-0.517	0.494
Air Passenger Capacity	lnair	7.365	0.41
Rail Passenger Capacity	lnrail	7.774	0.144

4.2. Research Model Design

To better analyze the influencing factors of trade flows among different countries, the gravity model has been widely applied in the research of international trade (e.g., Liu, Lu, and Wang 2020). Its basic form is:

$$T_{ijt} = \frac{K(Y_{it} - Y_{jt})}{D_{ij}} \qquad (4)$$

In the equation, Tijt represents the trade flow between countries i and j in period t; Yit and Yjt denote the economic scale of country i and country j in period t, respectively; Dij is the geographical distance between countries i and j, and K is a weighting coefficient.

To better explore the effect of the cultural distance between South Korea and the China-Japan dyad on South Korea's trade imports, this study tests a mediating effect model from two dimensions: goods trade imports and services trade imports. Following the mediating effect test method by Wen and Ye (2014), the mechanism is analyzed through the following specific econometric models:

$$\ln good_{ijt} = \alpha_0 + \alpha_1 \text{Ln}cd_{ijt} + \alpha_2 control_{it} + \varepsilon \qquad (5)$$

$$\ln good_{ijt} = \beta_0 + \beta_1 \text{Ln}tour_{ijt} + \beta_2 control_{it} + \varepsilon \qquad (6)$$

Where Lngoodijt denotes goods imports volume of country i from country j in year t, Lncdijt denotes the cultural distance between country i and country j, Lntourijt denotes the tourists from country j visiting country i in year t, controlit represents the control variables, and ε represents the error term. In the models, i represents South Korea, and j represents the China-Japan dyad.

$$\ln good_{ijt} = \gamma_0 + \gamma_1 \text{Ln}cd_{ijt} + \gamma_2 \text{Ln}tour_{ijt} + \gamma_3 Control_{it} + \varepsilon \qquad (7)$$

Equation (7) is formulated by introducing Lntourijt in equation (6) as a mediating variable into Equation (5). Collectively, these three equations constitute a complete mediating effect model. Within this framework, α_1 represents the total effect, γ_1 denotes the direct effect, and β_1 signifies the indirect effect. This model allows us to examine whether the impact of cultural distance on goods trade is mediated by inbound tourism and to what extent this mediation operates. Moreover, the Sobel test applies to evaluate the mediating effect in this study, thereby further determining its significance and robustness.

The econometric model for services trade, as the other outcome variable, is specified as follows:

$$\ln service_{ijt} = \alpha_0 + \alpha_1 \text{Ln}cd_{ijt} + \alpha_2 Control_{it} + \varepsilon \qquad (8)$$

$$\ln service_{ijt} = \beta_0 + \beta_1 \text{Ln}tour_{ijt} + \beta_2 control_{ijt} + \varepsilon \qquad (9)$$

Where Lnserviceijt represents the overview of services trade imports by country i to country j in year t, Lncdijt denotes the cultural distance between country i and country j, Lntourijt denotes the tourists from country j visiting country i in year t, controlit represents the control variables, and ε represents the error term.

$$\ln service_{ijt} = \gamma_0 + \gamma_1 \mathrm{Ln}cd_{ijt} + \gamma_2 \mathrm{Ln}Tour_{ijt} + \gamma_3 Control_{it} + \varepsilon \quad (10)$$

Equation (10) is formulated by introducing Lntourijt in equation (9) as a mediating variable into Equation (8). Same as above, these three equations constitute a complete mediating effect model. Within this framework, α_1 represents the total effect, γ_1 denotes the direct effect, and β_1 signifies the indirect effect. This model allows us to examine whether the impact of cultural distance on service trade is mediated by inbound tourism and to what extent this mediation operates. Further, the Sobel test applies to evaluate the mediating effect in this study, thereby further determining its significance and robustness.

5. DATA ANALYSIS

5.1. Mediating Effect of Inbound Tourism between Cultural Distance and Goods Trade

This study constructed a series of models to examine the mediating effect of inbound tourism between cultural distance and goods trade. Model 1 tested the impact of cultural distance on goods trade, Model 2 examined the influence of cultural distance on inbound tourism, and Model 3 was used to assess the mediating effect of inbound tourism. The results are presented in Table 2. In Model 1, cultural distance exerted a significant positive effect on goods trade. This indicated that as the cultural distance between South Korea and the China-Japan dyad increased, the value of South Korea's goods imports from Japan and China also increased. In Model 2, cultural distance also had a significant positive impact on inbound tourism. This suggested that, in the context of short-haul travel, cultural differences could effectively enhance the attractiveness of a tourist destination, thereby attracting more visitors.

After inbound tourism was introduced into the model, the results of Model 3 showed that the effect of cultural distance on goods trade became statistically insignificant, while inbound tourism itself demonstrated a significant positive effect on goods trade. Furthermore, the Sobel test yielded a Z-value of 2.079, which was significant at the 5% level. This confirmed that inbound tourism played a full mediating role in the relationship between cultural distance and goods trade.

Table 2: Regression Results of Model 1 to 3

	Model 1	**Model 2**	**Model 3**
variables	lngood	lntour	lngood
lncd	3.213***(1.167)	5.368**(2.468)	1.138(.745)
lntour			0.387*** (.054)
control	Y	Y	Y
constant	17.34** (8.201)	5.197 (17.342)	
Sobel Z			2.079**
N	32	32	32
Adj.R2	.237	.376	.737

Notes: ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 3 presents the results for the mediating effect of inbound tourism between cultural distance and goods trade. The total effect of cultural distance and inbound tourism on goods trade was 3.214 ($p < 0.01$), the direct effect was 1.138 ($p = 0.127$), and the mediating effect of inbound tourism was 2.076 ($p < 0.05$). These results further confirm that inbound tourism played a full mediating role in the relationship between cultural distance and goods trade.

Table 3: Mediating Effect of Inbound Tourism between Cultural Distance and Goods Trade

	observed Cofe.	**Std.Err**	**Z**	**P>|z|**
a_coefficient	5.368	2.469	2.174	.030
b_coefficient	.387	.054	7.108	.000
Indirect	2.076	.999	2.079	.038
direct	1.138	.745	1.528	.127
Total	3.214	1.167	2.753	.006

5.2. Mediating Effect of Inbound Tourism between Cultural Distance and Service Trade

Models 4 and 5 were constructed to further validate the mediating role of inbound tourism in the relationship between cultural distance and services trade, and to analyze the heterogeneous effects of cultural distance on goods trade versus services trade. Model 4 examined the effect of cultural distance on services trade, and Model 5 tested the mediating effect of inbound tourism between cultural distance and services trade.

The results are presented in Table 4. In Model 4, cultural distance had an insignificant positive effect on services trade. Consequently, inbound tourism was introduced to construct Model 5 for examining this mediating pathway. Combined with the results from Model 2, it can be concluded that the impact of cultural distance between South Korea and the China-Japan dyad on services trade is dependent on inbound tourism. Furthermore, the Sobel test yielded a Z-value of 2.055, which was significant at the 5% level, confirming that inbound tourism played a full mediating role in the relationship between cultural distance and services trade.

Table 4: Regression Results of Model 4 to 5

	Model 4	Model 5
variables	lnservice	lnservice
lncd	1.318(1.471)	-1.185(1.014)
lntour		.466***(.074)
control	Y	Y
constant	20.436* (10.332)	18.012** (6.569)
Sobel Z		2.055**
N	32	32
Adj.R2	.017	.604

Notes: ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

As shown in Table 5, the total effect of cultural distance and inbound tourism on services trade was 1.318 ($p = 0.370$), the mediating effect via inbound tourism was 2.503 ($p < 0.05$), and the direct effect was -1.185 ($p = 0.243$). This validates the presence of a full mediating role of inbound tourism between cultural distance and services trade. However, the total effect was not pronounced. Although cultural distance effectively increased tourist arrivals from China and Japan to South Korea, and these visitors boosted South Korea's services trade with both countries, a clear pathway whereby cultural distance enhances regional services trade levels through tourism development was not established. Furthermore, a comparison of the results from Model 1 and Model 4 highlights significant heterogeneity. Cultural differences directly and significantly boosted goods trade but failed to exert a significant direct positive effect on services trade.

Table 5: Mediating Effect of Inbound Tourism between Cultural Distance and Service Trade

	observed Cofe.	Std.Err	Z	P>|z|
a_coefficient	5.368	2.469	2.174	.034
b_coefficient	.466	.074	6.288	.000
Indirect	2.503	1.218	2.055	.040
direct	-1.185	1.015	-1.168	.243
Total	1.318	1.471	.896	.370

6. DISSCUSION AND CONCLUSION

Based on the empirical findings, the analysis reveals that inbound tourism fully mediates the relationship between cultural distance and South Korea's goods trade with China and Japan. In Model 1, cultural distance exerted a significant positive direct effect on goods trade, indicating that greater cultural differences directly increased the value of South Korea's imports from these countries. Model 2 confirmed a significant positive effect of cultural distance on inbound tourism, where larger cultural gaps enhanced South Korea's appeal as a short-haul destination, driving higher visitor numbers from China and Japan.

Model 3 demonstrated full mediation: the direct effect of cultural distance on goods trade became insignificant after including inbound tourism, which itself showed a significant positive effect. This pattern held across Table 3's decomposition, with a total effect of 3.214 ($p < 0.01$), a mediating effect of 2.076 ($p < 0.05$), and a non-significant direct effect of 1.138 ($p = 0.127$). The Sobel test further supported this, yielding a Z-value of 2.079 ($p < 0.05$), confirming inbound tourism as the complete pathway linking cultural distance to elevated goods trade volumes. A parallel full mediation emerged for services trade, though with distinct patterns. Model 4 showed that cultural distance had an insignificant positive effect on services trade,

lacking the direct boost observed for goods. Model 5, incorporating inbound tourism from Model 2, rendered the cultural distance-services trade link fully mediated, with inbound tourism displaying a significant positive effect. Table 5 quantified this: total effect of 1.318 ($p = 0.370$), mediating effect of 2.503 ($p < 0.05$), and direct effect of -1.185 ($p = 0.243$). The Sobel test corroborated full mediation with a Z-value of 2.055 ($p < 0.05$).

These results highlight heterogeneity between trade types. Cultural distance directly and significantly promoted goods trade (Model 1) but not services trade (Model 4), with inbound tourism channeling its influence equally across both in a fully mediating capacity. Visitor inflows from China and Japan thus amplified South Korea's trade in goods and services alike, fully accounting for cultural distance's role.

Collectively, the findings indicate that cultural distance between South Korea and the China-Japan dyad exerts a positive influence on both tourist flows from the China-Japan dyad to South Korea and the development of bilateral goods trade. A clear mediating pathway is established, forming a mechanism through which cultural factors promote goods trade. Specifically, cultural distance stimulates tourism flows, which in turn foster the development of goods trade and commercial cooperation, thereby creating a transmission mechanism whereby cultural exchanges drive economic interactions. These finding challenges the conventional wisdom in trade theory, which often posits cultural distance as an impediment to economic exchanges (e.g., Doanh, Truong, and Heo 2022; Tadesse and White 2010). It demonstrates that within deeply integrated regional value chains, cultural differences can be transformed into catalysts for economic synergy through the channel of tourist mobility. The identified transmission mechanism provides empirical evidence for non-institutionalized cooperation as a driver of regional economic integration. However, cultural distance between South Korea and the China-Japan dyad does not exhibit a significant promoting effect on services trade development. That is, a parallel pathway, which cultural distance promotes service trade through inbound tourism is not established. This absence of effect may be attributed to persistent institutional barriers and divergent service standards within the trilateral cooperation framework. These structural constraints prevent inbound tourism from effectively translating into growth momentum for services trade between the nations.

7. IMPLICATIONS

7.1. Theoretical Implications

This research makes several significant contributions to the theoretical literature on cultural distance, tourism, and international trade. First, it advances the conceptualization of cultural distance by demonstrating that cultural differences can generate positive economic outcomes within culturally proximate regional systems. This study shows that in the East Asian context—where shared cultural roots coexist with meaningful distinctions—cultural distance can generate novelty-seeking effects, stimulate cross-border interactions, and broaden consumption patterns. This finding enriches cultural distance theory by incorporating the dual nature of cultural differences as both barriers and opportunities. Further, the study introduces inbound tourism as an intermediary mechanism through which cultural distance influences trade flows. This mediation perspective is rarely explored in tourism and international business literature. By identifying tourism as a conduit for experiential cultural learning, product awareness, and market familiarization, the study provides a more holistic understanding of how human mobility shapes economic integration. Moreover, the research contributes to trade theory by distinguishing between goods and services trade in cultural and tourism contexts. The finding that cultural distance affects goods and services differently highlights the importance of considering heterogeneity across trade types. Goods trade—characterized by tangibility and easier codification—responds differently to cultural and experiential factors than services trade, which relies heavily on interpersonal interaction and institutional compatibility. This distinction advances theoretical discussions on the cultural determinants of trade structures. Finally, by focusing on China, Japan, and South Korea, the study contributes region-specific theoretical insights into East Asian economic integration, highlighting the role of cultural mechanisms that go beyond traditional economic determinants.

7.2. Managerial Implications

The findings generate several policy and managerial implications with relevance for governments, tourism authorities, and regional organizations. First, respecting regional cultural diversity and strengthening cultural soft power are of paramount importance for fostering regional trade among China, Japan, and South Korea. In regions with high cultural similarity, cultural

differences can paradoxically act as a catalyst for bilateral trade. Although the three nations share the broader East Asian cultural sphere, historical trajectories have engendered distinct cultural identities. Therefore, it is imperative for China, Japan, and South Korea to further cultivate their unique cultural connotations, proactively enhance their cultural soft power, and mutually respect each other's cultures, avoiding mere cultural replication. Leveraging their shared historical and cultural resources, the three countries could collaboratively design themed tourism routes, such as an "East Asian Civilization Tour", and establish transnational cultural heritage corridors. This effort should focus on developing cultural products and tourism destinations that authentically reflect their distinct national cultural characteristics. Besides, leveraging their geographical proximity and shared East Asian cultural affiliation, China, Japan, and South Korea should further enhance regional mobility—including through streamlined visa processes, improved transportation networks, and coordinated tourism marketing—can amplify the positive spillover effects of tourism on trade. Finally, establishing a robust mechanism that systematically leverages culture to drive tourism and regional trade development is essential, promoting the deep integration of culture, tourism, and commerce. Initiatives should include advancing the creation of a shared tourism data platform for China, Japan, and South Korea, optimizing visa policy coordination, and exploring options for mutual exemption of group visas or extensions of permitted stay durations. Furthermore, local governments and private enterprises should be encouraged to collaborate, forming cross-border cultural-tourism industry alliances to achieve resource complementarity and shared market expansion.

7.3. Limitations and Future Research

Although this study offers important insights, it is subject to several limitations that provide opportunities for future research. First, expanding the scope to include additional RCEP members or other regional blocs would enhance generalizability and allow for comparative regional analysis. Besides, while inbound tourism is identified as a key mediator, other potential mediating mechanisms—such as digital connectivity, cultural exchange programs, business travel, or migration—may also shape the relationship between cultural distance and trade. Future studies could integrate these channels into a more comprehensive analytical framework. Finally, geopolitical tensions and global disruptions—such as public health crises, security concerns, or supply-chain restructuring—may alter the dynamics among culture, tourism, and trade. Incorporating dynamic models or structural break analyses would allow future studies to capture the evolving effects of geopolitical shifts on the tourism–trade nexus.

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The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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