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Is promotion competition responsible for local protectionism in China?

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ABSTRACT

This study investigates the promotion competition for local protectionism in China. Since the personnel evaluation criteria in China shifted from political loyalty to economic performance, local governments strive to pursue regional tax benefits and political promotion opportunities, often adopting a range of protective measures to support the economic development of their regions. However, these actions can significantly impede the normal functioning of the market and result in local protectionism. Addressing local protectionism is crucial for accelerating the establishment of a nationally unified market characterized by fair competition and full openness. Overcoming local protectionism necessitates not only an environment conducive to fair competition, but also the active coordination of local officials. This study investigates the factors that influence local protectionism in China using the spatial econometric methods. Applying provincial panel data spanning the years 2003 to 2019, the study focuses on promotion competition among local officials that contributes to local protectionism. The results of an empirical study show that local protectionism is spatially related between regions. This means that when foreign government implements local protection policies, the local government responds with similar measures, and the level of response varies between regions. Additionally, the spatial spillover effect of promotion competition on local protectionism is found to be significant, with the impact displaying variations across different phases. The findings offer a new understanding of the issue of local protectionism.

Contribution/ Originality: This study introduces the Spatial Durbin Model and uses provincial data from 2003 to 2019 to analyze the relationship between the promotion competition from secretaries of the provincial party committee and local protectionism. It finds that local protectionism is spatially relevant, and the spatial spillover effect of promotion competition on local protectionism is significant.

1. INTRODUCTION

The construction of a unified national market is a key objective of the Chinese socialist market economy reform. However, local protectionism has become a significant obstacle to achieving this goal. The most important feature of local protectionism is that governments prioritize local interests in resource allocation and industrial development. Since 1978, China has implemented a decentralized management model, which has granted local governments greater power and enhanced their efficiency and motivation, but also stimulated competition among them and created space for local protectionism. While local governments have gained increased authority in policy decision-making due to

this decentralization, they have also begun to independently assume the responsibility of providing public goods, services, and social welfare protections for local residents. Consequently, local governments must take measures to expand their fiscal revenues to alleviate the pressures of financial expenditures, with taxes serving as the primary source of revenue. In this context, local governments, as rational organizations seeking to maximize their own interests, have a strong incentive to develop the regional economy in order to increase tax revenue. This motivation also encourages local governments to intervene in fair market competition by exercising administrative power. Thus, local governments often attempt to influence the free operation of the market through various means, such as mandatory local approvals and reviews, policy directives, or local legislation aimed at excluding foreign goods and resources. These actions can increase the operational challenges faced by foreign enterprises, restrict the market activities of certain businesses or products, and prevent the outflow of locally high value-added production factors.

Governments play a crucial role in economic development. This is primarily because they can directly engage in various economic activities or indirectly influence private economic endeavors through strategic formulation. As an organization akin to a business, the government relies on authority for effective operation (Shao & Su, 2023). In this authoritative structure, the central government and local governments are characterized by a principal-agent relationship. The central government facilitates national economic development by delegating responsibilities to local governments, which, in turn, guide the economy by formulating development strategies and policies or by directly participating in economic activities to achieve developmental objectives. Agents, namely government officials, comprise the government, operating within a political system to perform distinct functions and exercise varying rights. This division of roles is delineated by official ranks, which correspond to their respective powers (Hu & Liu, 2019).

In China's political incentive system, officials are primarily motivated by the pursuit of increased political control. This motivation arises from the fact that as the resources under an official's control become more valuable, the potential gains in political influence also increase, including the attainment of higher political positions and additional economic benefits. Government officials aim to maximize their interests by enhancing their political control. Relative economic performance and information constraints impact the returns from political control, influencing officials' decisions regarding industrial investments through peer actions. This may lead to a limitation in cooperation while the potential for competition is significantly heightened.

The current study seeks to explore the underlying reasons for the failure of economic cooperation among provinces in China from the perspective of local officials' promotion competition. We contend that the primary cause of cooperation difficulties lies not in the financial and tax incentives or the economic competition they face, but rather in the political promotion game embedded within the economic competition. In the 1980s, the central government's personnel evaluation criteria shifted from political loyalty to economic performance (Chen, Li, & Zhou, 2005) which set off promotion tournaments for local officials centered on Gross Domestic Product GDP growth rate. Higher-level governments design promotions tournaments, also known as political tournaments, for chief executives of multiple lower-level government departments, with the winner receiving a promotion. The criteria for the contests are determined by the higher-level government (Zhou, 2007). The promotion of one person means the loss of promotion opportunities for others. Local officials in China, regardless of their administrative level, participate in political tournaments. Competition for the promotion of local officials has played an important role in China's economic growth, but it has also given rise to many problems (Zeng, Li, & Wang, 2020).

Existing studies indicate that under promotion tournaments, local officials adopt protectionist policies to defend local industries in order to gain competitive advantages (Bai, Du, Tao, & Tong, 2004). The political game among local officials in a promotion tournament, which does not aim for a win-win outcome, may further intensify local protectionism. Due to the "GDP-only" appraisal mechanism, local authorities have to set up trade barriers to protect local industries and improve economic performance (Zhou, 2004).

However, the relationship between officials' promotion competition and local protectionism has not received adequate attention in existing literature, particularly in empirical studies. The current study contributes to the existing knowledge in two ways. First, the degree of local protectionism in 31 provinces in mainland China is assessed based on market segmentation, providing data support for the study of local protectionism. Second, this study uses the Spatial Durbin Model to find out how local officials react when neighboring regions adopt local protectionist policies. It also looks into the spatial spillover effect of official's promotion competition, which gives us a new way to think about how to deal with local protectionism.

The rest of the paper is organized as follows: Section 2 reviews the literature surrounding this topic. Section 3 presents the methodology employed, including discussions on data, variables, and the econometric model. Section 4 presents the empirical findings from the analysis. Section 5 discusses the main findings and policy implications.

2. LITERATURE REVIEW

2.1. Local Protectionism

Existing research indicates that local protectionist policies may enhance local economic growth in the short term. For instance, local governments prevent local industries from external shocks by erecting market barriers (Bown & Crowley, 2013). However, local protectionism may result in resource allocation distortions (Rodrik, 2018), inhibit economic efficiency (Naughton, 2017) and trigger international trade disputes (Fredriksson, Matschke, & Minier, 2011). To control local protectionism, China issued the State Council's Provisions on the Prohibition of Regional Embargoes in Market Economic Activities in 2001. However, in practice, local protectionism continues to persist. The question that can be asked is: What is the underlying cause of local protectionism in China? The proposed theoretical framework identifies four main aspects.

First, there is a link between local protectionism and fiscal decentralization. The literature emphasizes that fiscal decentralization distorts the incentives of local governments, leading to various forms of local protectionism. For example, Chen, Dai, Tan, and Chen (2024) indicated that, since the 1980s, the fiscal decentralization system has strengthened the fiscal and economic incentives of local governments. Local governments set trade barriers to protect local resources. Similarly, Li and Liu (2021) argued that fiscal decentralization has led local governments to compete for economic resources, even adopting predatory competitive strategies. Using a dynamic panel data model, Shi and Li (2021) found that fiscal decentralization incentivizes local governments to adopt protectionist policies, resulting in regional de-specialization. Zhang and Li (2023) found that the greater the degree of fiscal decentralization, the higher the level of local protectionism.

Second, some studies attribute the formation of local protectionism to the catch-up strategy of less developed regions against more developed ones. According to Han and Zhang (2022) the root cause of local protectionism and market segmentation lies in the catch-up strategy implemented by local governments. Moreover, the stronger the characteristics of this strategy, the more severe the local protectionism. The study from Lu and Yan (2004) found that due to differences in industrial comparative advantages and the distribution of trade benefits between less developed and more developed regions, the former may temporarily choose not to join the national division of labor system. While they may lose short-term gains, they can improve their returns and possibly catch up with the latter.

Third, some researchers provide explanations from the perspective of local governments' competition. Lu and Sun (2021) stated that local governments implement protectionist measures to safeguard their interests, leading to market segmentation. Lee (2003) found that, although local government competition significantly accelerates China's economic growth, the allocation of resources may become ineffective if they focus on their economic benefits without considering the externalities of their behavior. Tan and Lai (2022) proposed that local protectionism is strengthened by disorderly competition among local governments, which is also evidenced by Poncet (2003) and Fan and Zhang (2010). However, these studies fail to involve the incentive mechanism behind the government's economic competition.

Finally, some studies theorized about the impact of political promotion on local protectionism. Due to the limited number of positions in the promotion game, one official's promotion reduces the chances of other officials' promotion (Zeng et al., 2020). Therefore, when there is a spillover effect of local officials' behavior on neighboring regions, they are only concerned about their relative position to their competitors. The incentives for promotion among officials far outweigh the incentives for cooperation, making local protectionism and unhealthy competition the norm. Chen (2013), He and Wang (2007) and Liu (2007) constructed a political tournament model to analyze the mechanism between the tournaments. The model confirmed that local officials tend to adopt local protection policies to avoid external risks.

2.2. Promotion Competition Among Local Officials

The traditional assumption of a benevolent government in political economy theory is challenged by public choice theory. Public choice theory emphasizes that maximizing one's interests is the motivation in the political field (Weingast, 2009). Zhou (2007) proposed a promotion tournament theory based on this proposition. Officials, faced with limited promotion opportunities, engage in fierce competition within the framework of promotion tournaments to gain recognition from superiors and advance their careers (Zhou, 2021). In their study, Xu, Wang, and Shu (2007) underscored that China's personnel assignments served as key institutional underpinnings for local officials seeking to boost economic development. Officials strive to enhance their performance to increase their chances of career advancement. In their pursuit of political promotions, local officials may prioritize economic growth, and initiate a range of policy measures, such as attracting external investments, promoting infrastructure development, and innovating industrial policies, to achieve substantial economic outcomes. For instance, Mao, Liu, and Gan (2021) revealed that, in the face of interregional competition for promotions, local officials allocate more resources to facilitate rapid economic growth. However, this promotion-driven competition may result in shortsighted behavior. Local authorities excessively prioritize GDP growth while neglecting long-term concerns such as environmental protection and resource conservation, particularly notable in China (Guttman et al., 2018). Moreover, excessive competition among local governments may lead to the widening of development disparities between regions (Cai & Treisman, 2006).

2.3. Summary

This section examines the existing literature on the factors that influence local protectionism and the competition for promotion among local officials. This study focuses on the discussion of local protectionism from the perspective of political promotion of officials.

Although some scholars have elaborated theoretically on the relationships between local protectionism and competition for promotion, few studies focus on empirical analyses, especially in the application of spatial econometrics. There exists a gap in existing knowledge on how local officials will react in the face of local protection policies in foreign regions and whether there are spatial spillovers from local official promotion competition.

3. METHODOLOGY

3.1. Variables

3.1.1. Local Protectionism

Local protectionism can be defined as a variety of governmental behaviors in which local governments use their administrative power to safeguard local economic interests. Currently, there is no standardized method for measuring local protectionism. Following Zhang and Lu (2017) and Fan and Li (2020) the current study employs market segmentation as a proxy variable for local protectionism. Market segmentation refers to the behavior of local governments to restrict the entry of foreign manufacturers into the local market and the outflow of local enterprises and capital, which is an important form of local protectionism (Lv & Zhang, 2021). Based on the method used by Bian

and Bai (2021) the degree of market segmentation is calculated in this study using the Consumer Price Index (CPI) of food, clothing, household equipment and maintenance services, healthcare and personal goods, transportation and communication, entertainment, education and cultural goods, and housing. The calculation steps are as follows:

Step 1 - Determine the value of the relative price using Equation 1;

$$\Delta Q_{ij,t}^{k} = \left|\ln\left(p_{i,t}^{k}/p_{i,t-1}^{k}\right) - \ln\left(p_{j,t}^{k}/p_{j,t-1}^{k}\right)\right| \quad (1)$$

Where k is commodity, i and j are provincial units, t is a time dimension, p is CPI, $\Delta Q_{ij,t}^{k}$ is the relative price of the commodity.

Step 2 - Eliminate commodity heterogeneity using Equation 2;

$$q_{ij,t}^{k} = \Delta Q_{ij,t}^{k} - \overline{\Delta Q_{ij,t}^{k}} \quad (2)$$

where $\overline{\Delta Q_{ij,t}^{k}}$ is the average of $\Delta Q_{ij,t}^{k}$. $q_{ij,t}^{k}$ is the value after eliminating commodity heterogeneity.

Step 3 - Calculate the variance of $q_{ij,t}^{k}$, denoted by $Var(q_{ij})$;

Step 4 - Determine the average of $Var(q_{ij})$ by Equation 3. Local protectionism is measured using the average, with larger values indicating greater local protectionism. Since the average is too small, it is multiplied by 100 as listed in Equation 4.

$$Var(q_i) = \sum_{i \neq j} Var(q_{ij})/N \quad (3)$$

$$LP_{ij,t} = 100 * Var(q_i) \quad (4)$$

Where LP represents the local protectionism.

Figure 1 presents the evolution trend of local protectionism in China from 2003 to 2019. As depicted in Figure 1, local protectionism fluctuated during the sample period, reaching a peak (0.0479) in 2004 and a nadir (0.0074) in 2014.

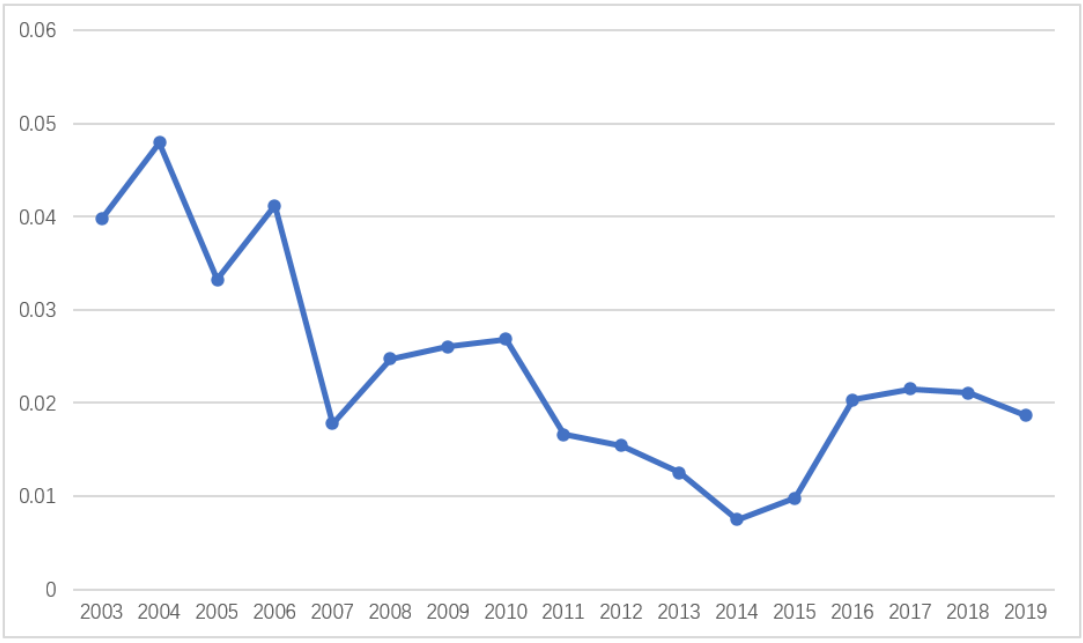

Figure 1. Local protectionism by year in China (Average).

3.1.2. Promotion Competition Among Officials

This study focuses on the promotion competition of secretaries of the provincial party committee in China, who hold the highest authority within their respective jurisdictions. Measures of competition for the promotion of officials include the official turnover ratio (Wang & Xu, 2010), officials' age (Xiong & Wang, 2017), GDP growth speed (Zhang & Cui, 2019) and the speed of promotion (Chen, 2017). *In 2006, the Interim Provisions on the Term of Office of Party and Government Leaders* stipulated a five-year tenure for party and government leaders, and prohibited the renewal of two

consecutive terms in the same position. The longer the tenure, the greater the promotion pressure officials face (Qian, Cao, & Li, 2011). Moreover, they are often transferred or promoted in about three years (Wang, Xiong, Zhang, & Zhong, 2020). As a result, we use promotion pressure as a proxy variable for the promotion competition of provincial party secretaries and take three years as a cut-off point. If the official's term exceeds three years, the value is 1; otherwise, it is 0.

Figure 2 presents the term distribution of the party secretaries from 2003 to 2019. As shown in Figure 2, the shortest and longest tenure are one year and ten years, respectively, while the average tenure is 3.2 years.

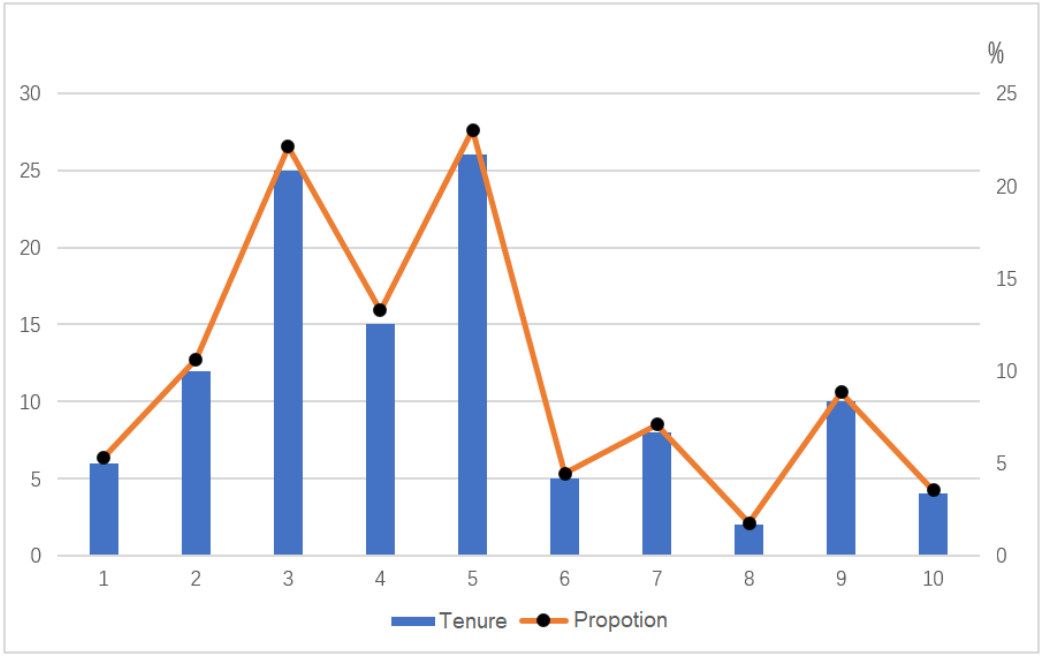

Figure 2. The tenure of party secretaries.

3.1.3. Control Variables

To ensure more accurate results, following Fan, Song, and Zhao (2017), Zhang and Li (2022) and Feng and Wang (2022) four control variables are employed that may have an influence on local protectionism, including fiscal expenditure (FE) measured as fiscal expenditure as a share of GDP, opening intensity (OPEN) measured as the share of import and export trade in GDP, transportation infrastructure (TI) measured as the ratio of highway mileage to area, and economic development (ED) measured by GDP growth rate.

3.2. Samples and Data Sources

Based on the availability of data, 31 provincial units in mainland China are selected for the years 2003 to 2019 as research samples. The data are obtained from the provincial Statistic Yearbook (2004-2020) and the Chinese Statistic Yearbook (2004-2020). Information on local officials is manually collected from the Chinese authority website and sorted according to the format of panel data.

Table 1. The definitions and descriptive statistics of variables.

Variable	Code	N	Min.	Mean	P50	Max.	Std.
Local protectionism	LP	527	0.0048	0.0236	0.0189	0.1780	0.0177
Promotion competition	PC	527	0	0.3210	0	1	0.4670
Fiscal expenditure	FE	527	0.0842	0.2540	0.2120	1.3540	0.1880
Openness intensity	OPEN	527	0.0127	0.3130	0.1380	1.7110	0.3720
Transportation infrastructure	TI	527	0.0336	0.7700	0.7320	2.1260	0.4930
Economic development	ED	527	0.0053	0.1040	0.1040	0.2160	0.0304

Note: N-Number of observations. Min-Minimum. Max-Maximum. P50-median, Std.- Standard deviation.

Table 1 presents the descriptive statistics of the variables in this study. Table 1 indicates that all variables have 527 observed values. The mean value of local protectionism is approximately 0.0236, with a median value of 0.0189. This suggests that varying degrees of local protectionism exist across different regions in China. The tenure of official represents the promotion competition among officials as a binary variable, with an average value of 0.3210. The mean value of fiscal expenditure (FE) is 0.2540, with a minimum value of 0.0842 and a maximum value of 1.3540, resulting in a standard deviation of 0.1880. The standard deviation for openness intensity (OPEN) is 0.3720, with a minimum value of 0.0127 and a maximum value of 1.7110. For transportation infrastructure (TI), the minimum value is 0.0336 and the maximum value is 2.1260, accompanied by a standard deviation of 0.4930. Economic development (ED) has a standard deviation of 0.0304, with a minimum value of 0.0053 and a maximum value of 0.2160. These statistics indicate significant disparities in fiscal expenditure, openness intensity, infrastructure development, and economic development across regions.

3.3. Econometric Model

In contrast to traditional econometric models, spatial econometric models take into account the spatial dependence prevalent in economics (Anselin, 2013). According to Elhorst (2010) and LeSage and Pace (2009) the spatial econometric model consists of three forms: Spatial Lag Model (SLM), Spatial Error Model (SEM), and Spatial Durbin Model (SDM). To select the appropriate model, we conduct a Lagrange Multiplier (LM) test, a Wald Test, and the Hausman test sequentially. The LM and the Wald tests are used to determine whether the SDM can be degraded into the SLM or SEM. The Hausman test is employed to decide between fixed effects and random effects. Table 2 displays the test results. The p-value of LM-Error is 0.033, with statistically significant at the level of 5%. The LM-Lag test is consistent with the LM-Error result. For the test of Wald, no matter Wald-SLM or Wald-SEM, it is statistically significant at the level of 1%. The results of LM and Wald suggest that the SDM is appropriate. At the 1% level of statistical significance, the Hausman test with p=0.003 rejects the null hypothesis, suggesting that the fixed effects model is more appropriate. Therefore, this study builds the Spatial Durbin Model depicted by Equation 5.

$$LP_{it} = \rho \sum_{j=1}^{n} W_{ij} LP_{it} + \beta \sum_{j=1}^{n} W_{ij} PC_{it} + \gamma PC_{it} + \mu \sum_{j=1}^{n} W_{ij} X_{it} + \theta X_{it} + \varepsilon_{it} \quad (5)$$

Where i and j represent spatial individuals; t is time; ρ is the spatial autocorrelation coefficient, which is also called the response coefficient of local protectionism, indicating that local protectionism in a region is not only affected by the independent variables in that region but also by local protection policies in spatially connected regions. The coefficient β is the spatial spillover effect of competition for the promotion of party secretaries. The coefficient represents the impact of competition in spatially interconnected regions on local protectionism within the region. The coefficients ρ and β are the key concerns of this study. The variable matrix X are control variables. The term ε_{it} is the random disturbance term, and W_{ij} is the spatial weight matrix. As shown in Equation 6, the current study constructs and economic spatial weight matrix.

$$w_{ij} = \begin{cases} 1/|\overline{GDP_i} - \overline{GDP_j}|, & i \neq j \\ 0, & i = j \end{cases} \quad (6)$$

Where GDP is a gross domestic product. $\overline{GDP}$ is the average value of GDP from 2003 to 2019. The subscripts i and j represent spatial individuals.

Table 2. The results of Hausman, LM, and Wald.

Test	Statistics	P-value
Hausman	18.080	0.003
LM-Error	4.551	0.033
LM-Lag	5.604	0.018
Wald-SLM	32.390	0.000
Wald-SEM	36.880	0.000

Note: SLM- Spatial lag model, SEM- Spatial error model.

This section provides the findings of the current study. Due to the potential endogeneity problem associated with the SDM, the regression results may be invalid if ordinary least squares (OLS) is used (Anselin, 2013). Referring to the method proposed by Elhorst (2003) we use the method of Maximum Likelihood Estimation (MLE) to estimate the SDM.

4. RESULTS

4.1. Benchmark Regression

Table 3 presents the regression results of the benchmark model. The coefficient of W×LP with ρ=0.354, and p=0.000, is positive at the 1% level of significance. The result indicates a positive spatial correlation in local protectionism. This implies that when foreign regions adopt local protection measures, the local government will respond similarly to its local protection policies. In the process of China's transition from a planned economy to a market economy, the interests among local authorities have become increasingly complex, leading to a pronounced phenomenon of local protectionism (Hong & Xu, 2016). Since the 1980s, the means of market segmentation have exhibited diverse characteristics, evolving from traditional geographic distance and cultural differences to the establishment of barriers to entry, exit barriers, and technical obstacles. These forms of segregation have weakened the formation of a unified domestic market due to the distortion of resource allocation (Zhang & Wu, 2023). Although the central government has implemented relevant policies and measures aimed at dismantling local fragmentation and establishing a modern market system, historical legacies have resulted in the duplication of local markets. Local governments formulate policies to safeguard local industries in response to protection policies in other regions, which are influenced by the 'prisoner's dilemma.'

Further, the coefficient of W×PC with β=0.007, and p=0.020 is found to be positive and statistically significant at the significance level of 5%. Evidently, the spatial spillover effect of promotion competition on local protectionism is positive, suggesting that competition for promotion from foreign regions exacerbates local protectionism in the region. This may be because the behavior of local governments is primarily influenced by incentives, with the central government's evaluation system and the resources available to local governments shaping their objectives and actions. Local government officials are predominantly appointed by higher levels of government, making them primarily accountable to their superiors. Consequently, their aim is to gain recognition from superiors to achieve higher positions and increased power. The assessment of political performance is largely dependent on economic performance, compelling local governments to focus on the expansion of economic resources. Given the constraints of limited resources, local governments inevitably engage in competitive behavior with one another for access to these resources, which fosters local protectionism.

Table 3. The results of benchmark regression.

Variable	Coefficient	Standard error	z-statistics	p-value
W×LP (ρ)	0.354***	0.062	5.680	0.000
PC	0.003**	0.001	2.520	0.012
FE	-0.020	0.016	-1.290	0.196
OPEN	0.003	0.006	0.580	0.561
TI	-0.002	0.005	-0.490	0.626
ED	0.098**	0.039	2.500	0.013
W×PC (β)	0.007**	0.003	2.320	0.020
W×FE	0.070***	0.027	-2.630	0.009
W×OPEN	0.049***	0.017	-2.890	0.004
W×TI	-0.010	0.008	-1.350	0.178
W×ED	0.129**	0.054	-2.380	0.017
Observations	527			
Log-likelihood	1533.983			

Note: The dependent variable is local protectionism. **, *** refer to the significant level at 10%, and 5%. W is the spatial weight matrix.

To test the reliability of results, following Wu, Dang, Pang, and Xu (2021), the current study conducts a robustness test in three ways. First, we run the baseline regression with SLM. Second, for the regression we use ordinary standard errors rather than robust standard errors. Finally, we apply a two-sided 1% shrinkage to the sample. As depicted in Table 4, the results of the robustness test are consistent with those of the benchmark regression. Hence, the conclusions of this study are reliable.

Table 4. The results of Robustness test.

Variable	SLM	Unrobust SE	Winsorizing
W×LP (ρ)	0.4678***	0.3542***	0.4084***
	(0.0548)	(0.0624)	(0.0585)
PC	0.0036***	0.0033**	0.0026**
	(0.0013)	(0.0013)	(0.0011)
FE	-0.0440***	-0.0203	-0.0194
	(0.0103)	(0.0157)	(0.0136)
OPEN	-0.0008	0.0032	-0.0058
	(0.0053)	(0.0055)	(0.0047)
TI	-0.0066**	-0.0024	-0.0002
	(0.0032)	(0.0049)	(0.0041)
ED	0.0232	0.0981**	0.0829**
	(0.0262)	(0.0393)	(0.0350)
W×PC (β)	-	0.0070**	0.0051**
		(0.0030)	(0.0025)
W×FE	-	-0.0701***	-0.0570**
		(0.0267)	(0.0228)
W×OPEN	-	-0.0491***	-0.0367**
		(0.0170)	(0.0147)
W×TI	-	-0.0101	-0.0122*
		(0.0075)	(0.0063)
W×ED	-	-0.1291**	-0.1031**
		(0.0543)	(0.0468)
Observations	527	527	527
Log-likelihood	1517.9650	1533.983	1628.657

Note: Standard error in parentheses. Unrobust SE refers to the unrobust standard error. The dependent variable is local protectionism. *, **, *** refer to the significant level at 10%, 5%, and 1%. W is the spatial weight matrix.

4.2. Heterogeneity Test

4.2.1. Regression Results in Different Regions

Due to substantial disparities in economic development levels and the degree of marketization across regions in China, local governments often implement varying market regulations (Sun, Xu, & Kang, 2021). Coastal regions, in contrast to inland areas, typically exhibit higher levels of market saturation boasting more advanced technology and financial resources for active market participation. Developed provinces in coastal regions may have a stronger motivation to resist government-imposed trade barriers. Consequently, we divide the full sample into two categories (inland and coastal areas) for further analysis. The results are presented in columns (1) and (2) of Table 5. The coefficient of W×LP with ρ=0.1728, and p=0.0630 is statistically significant at a 10% level in coastal regions, and in non-coastal areas, the coefficient with ρ=0.3210, and p=0.0000 is statistically significant at a 1% level of significance. In addition, the coefficient of W×PC with β=0.0059, and p=0.2990 shows that the coefficient is not statistically significant in coastal provinces, but it is statistically significant at a 5% level of significance in non-coastal areas, as shown by β=0.0068, with p=0.0200. The results suggest that, compared to developed areas in China, the response to local protectionism in less developed provinces is more sensitive, and the spatial spillover effect of promotion competition is more notable in less developed areas.

Table 5. The results of heterogeneity test.

Variables/ Coefficient	Different area		Different phase	
	(1)	(2)	(3)	(4)
	Coastal	Non-coastal	The first stage (2003-2013)	The second stage (2014-2019)
W×LP(ρ)	0.1728*	0.3210***	0.2234***	0.2575**
	(0.0929)	(0.0667)	(0.0758)	(0.1238)
PC	0.0060**	0.0024*	0.0049***	0.0007
	(0.0031)	(0.0013)	(0.0018)	(0.0019)
FE	-0.0671	-0.0237*	-0.0181	-0.0044
	(0.0660)	(0.0131)	(0.0239)	(0.0366)
OPEN	-0.0017	-0.0046	0.0174*	-0.0322*
	(0.0100)	(0.0082)	(0.0099)	(0.0183)
TI	-0.0087	0.0006	0.0003	-0.0069
	(0.0123)	(0.0044)	(0.0066)	(0.0144)
ED	0.0369	0.1071***	0.1427***	-0.0331
	(0.0921)	(0.0373)	(0.0535)	(0.0764)
W×PC(β)	0.0060	0.0068**	0.0082*	0.0036
	(0.0057)	(0.0029)	(0.0046)	(0.0033)
W×FE	-0.2896**	-0.0465**	-0.0782**	-0.1062
	(0.1249)	(0.0214)	(0.0380)	(0.0814)
W×OPEN	-0.0617***	-0.0425**	-0.0469**	-0.0358
	(0.0214)	(0.0213)	(0.0206)	(0.0369)
W×TI	-0.0056	-0.0116*	-0.0193**	0.0608**
	(0.0176)	(0.0065)	(0.0096)	(0.0297)
W×ED	-0.1140	-0.1155**	-0.1993**	0.0248
	(0.1446)	(0.0490)	(0.0870)	(0.2064)
Observations	187	340	341	186
Log-likelihood	497.7953	1063.6524	960.2321	619.2956

Note: The dependent variable is local protectionism. Standard error in parentheses. *, **, *** refer to the significant level at 10%, 5%, and 1%. W is the spatial weight matrix.

4.2.2. Regression Results in Different Phases

In 2013, the decision of *the Central Committee of the Communist Party of China on Several Major Issues Concerning Comprehensively Deepening Reform*, which was issued by the central government of China, explicitly emphasized the significance of a unified market system as a crucial pillar for resource allocation. Hence, local governments embarked on a series of reforms aiming to dismantle various regulations that obstructed market unity. They also adopted strict measures to prohibit and penalize any forms of illegal preferential policies while actively opposing local protectionism, monopoly practices, and unfair competition. The question that arises: did this policy lead to differential changes in local protectionism? To address the issue, we select 2013 as a pivotal cut-off point and divide the full sample into two sub-samples: the first sample period is between the years 2003-2013, and the second sample period is between 2014-2019. The regression results are displayed in columns (3) and (4) of Table 5. Firstly, in the first stage (2003-2013), the coefficient of W×LP with ρ=0.2234, and p=0.0030 is positive and statistically significant at the 1% level. Similarly, in the second stage (2014-2019), the coefficient is 0.2575 with p=0.0380, which is positive and statistically significant at the 5% level. This suggests that whenever a foreign government implements local protection policies, local governments respond with corresponding measures, regardless of stage. Notably, the response coefficient of local protectionism is more pronounced in the second stage. Secondly, in the first stage, the coefficient of W×PC is 0.0082 with p=0.0760, which is positive and statistically significant at the 10% level, while it is β=0.0036, with p=0.2630 indicating not statistically significant at the second stage. These findings suggest that the policy launched by the central government in 2013 mitigated the impact of promotion competition on local protectionism.

5. CONCLUSION AND DISCUSSION

The process of dismantling local protectionism and establishing a modern market system is intricate. Since 1978, China's political promotion mechanisms have played a pivotal role in facilitating remarkable economic growth, leading to a series of *Chinese Miracles*. However, it has also created fertile ground for the emergence of local protectionism.

Although some scholars, such as Zhou (2004), Niu (2006), He and Wang (2007) and Chen (2013) have theoretically constructed game models to explain the impact of local officials' promotion on local protectionism, they have not provided empirical evidence. This study empirically examines the effect of competition for official promotion on local protectionism by utilizing data from Chinese provinces and employing a spatial Durbin model. The findings can be summarized in four aspects. First, local protectionism is spatially relevant. When foreign governments implement local protectionism policies, the local government tends to respond with corresponding measures. Second, the promotion competition from secretaries of the provincial party committee creates a spatial spillover effect on local protectionism. This implies that competition in foreign provinces exacerbates local protectionism. Third, the response coefficient for local protectionism varies among regions. It is more pronounced in less developed provinces than in developed areas, but it is generally consistent across phases. Finally, regardless of region or stage, the spatial spillover effect of party secretaries' promotion competitions differs significantly. The impact is considerable in underdeveloped regions but less in more advanced localities, with significance observed during the initial period of 2003-2013 but lacking in the subsequent phase of 2014-2019.

Findings from this study suggest that the promotion tournament with Chinese characteristics is a significant factor in the formation of local protectionism. Local protectionism between provinces in China appears as mutual economic blockades, but it fundamentally represents competition among party secretaries for economic and political benefits. Based on the findings of this study, several policy implications can be derived. Firstly, local authorities operating at the same administrative level lack direct jurisdiction over one another, potentially leaving their careers unaffected. However, during promotion tournaments, the evaluation mechanism based on relative outputs promotes competition over cooperation. Therefore, it is necessary to improve the evaluation index for local authorities. For example, regional coordinated development is used as an evaluation index for local governments. Second, considering the persistence of the beggar-your-neighbor phenomenon in China, the central government should take proactive measures to encourage regional integration and cooperation, such as improving the transportation infrastructure in less developed provinces, establishing a robust market circulation system for commodities, and eliminating policy biases. These can mitigate the adverse effects of geographical boundaries on market integration. Finally, local governments should fully exercise their government-oriented functions, avoid excessive artificial intervention in market order, and completely leverage the decisive role of the market in resource allocation.

Studies on local protectionism from the perspective of political promotion can use the outcomes of this study as a reference. Further research can be conducted to analyze the impact of provincial governors, who are not included in this study, but who also play vital roles in local area development. The current study measures promotion competition using tenure periods of party secretaries. This measure of promotion competition can be made more comprehensive enough in further studies. Future research may also include other measurements of political competition to verify the findings of the current study. Furthermore, researchers may employ various spatial weight matrices, including the spatial adjacent matrix, geographical space weight matrix, and economic geographical space weight matrix.

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