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Investigating Political Risk Paths in International High-Speed Railway Projects: The Case of Chinese International Contractors

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Abstract: Contracting in international high-speed railway (HSR) projects is a risky business. The success of these projects and the sustainable development of international contractors are inseparable from effective risk management. However, limited research has been conducted to investigate the political risk involved in international HSR projects. As HSR development is becoming a more major part of the global construction market, this paper investigates the political risk factors specific to the projects and the relationships among the factors. Through a literature review and a pilot interview conducted with five Chinese professionals, 26 political risk factors were proposed. A questionnaire was then administered to 112 experts from both academia and industry to assess the significance of the factors. By applying partial least-squares structural equation modeling (PLS-SEM) technology, the 26 factors were clustered into eight groups, and 10 significant risk paths were identified. Specifically, "government attitudes" can directly influence the "investment profile" and "social support" can directly influence "government attitudes," while "government instability," "economic climate," "financing and costs," "external interference," and "contractors' operations" can indirectly influence investment profile by directly influencing "government attitudes" or "social support." The findings of this study can assist international contractors with gaining a clear understanding of the political risk involved in international HSR projects, which will lead to more effective political risk management as well as better business decisions. Furthermore, this paper will contribute to the global body of knowledge in the area of political risk management for large-scale international projects.

Keywords: international contractors; political risk; large-scale projects; risk management; construction management

1. Introduction

High-speed rail (HSR) refers to railway transport traveling at a speed of over 200 km/h on upgraded regular lines or 250 km/h on unique greenfield lines [1]. As a faster and easier form of transportation, HSR is becoming popular around the world, especially in regions with high population density. The first HSR line was in Japan and began operations in 1964. Over the past five decades, HSR technology has been applied widely and developed rapidly. Large numbers of HSR system have been built in the United States, China, Austria, Japan, Ireland, Belgium, Poland, Germany, Italy, Morocco, Netherlands, Portugal, South Korea, Sweden, Spain, Taiwan, Saudi Arabia, Turkey, Uzbekistan, and the United Kingdom. Moreover, to keep pace with the demands of the burgeoning economy, many developing countries (e.g., India, Thailand, Mexico, Indonesia, and Russia) have

formulated high-speed rail construction plans. The booming global HSR market offers tremendous business opportunities for international contractors. Envisioning potential market shares and high gains, more and more international contractors have expressed their willingness to participate in the execution of international HSR projects [2].

When compared to general construction projects (e.g., buildings, roads, and manufacturing), international HSR projects having the following defining characteristics: (1) a vast integrated technology system related to a variety of fields such as civil, construction engineering, electronics, materials, and information science; (2) massive investment, with diverse sources of funding; (3) a complex management pattern involving multiple stakeholders' interests; (4) the complexity of the project organization (e.g., joint venture); and (5) a high degree of political, economic, and social sensitivity, leading to international HSR contractors being vulnerable to uncertainty [3]. During the past decade, political risk has affected the business climate in the international HSR market; this was confirmed by events such as the deferment and changes of the HSR plans in Thailand resulting from the political crisis [4]; the short-notice cancellation of HSR plans in Indonesia due to the changes in government willingness and policies [5]; and the cancellation of a China-led HSR contract in Mexico because of political instability [6]. Since the international contractors had made a substantial initial investment in these projects, they suffered significant financial losses due to these political risks.

Political risk refers to the likelihood of changes in the operating environment resulting from unexpected political decisions or events that may lead enterprises to fail to achieve their business objectives [7]. The negative consequences of political risk include not only financial loss, schedule overrun, and cost overrun at the project level, but also a negative impact on enterprises' competitiveness, financial stability, and sustainable development. The consensus is that a lack of understanding of risk is the main obstacle to international contractors implementing effective risk management strategies [8,9]. Therefore, it is indispensable for international contractors to understand the political risk when entering into the overseas HSR market.

This study aims to investigate political risk factors in international HSR projects and the underlying relationships between them. While a lot of reviews have focused on political risk factors [10], assessment [11], and strategies [12] in international general business (e.g., foreign direct investment, trade in goods, and international joint ventures) as well as international construction projects [8,13], few research efforts have gone into political risk in international HSR projects. This study expands the literature regarding political risk management by identifying a list of political risk factors in international HSR projects and their connections. Additionally, the findings enable international contractors to better understand political risk in international HSR projects and to be more prepared for risk management when engaging in these projects, thus significantly contributing to best practice.

2. Literature Review

Many researchers have switched their attention to issues regarding HSR. To date, much of the literature on HSR has involved aspects such as application of the related technology, policy, risk management, operational management, and evaluation of plans. For example, Roll and Verbeke discussed the financing of the trans-European high-speed rail networks [14]. Rocha et al. focused on methods for assessing the safety of HSR bridges [15]. Gou et al. paid attention to the electrical traction drive system of HSR [16]. Chen et al. developed an analytical model to evaluate the settlement of HSR subgrade [17]. Preteseille et al. proposed a fatigue test method for HSR structures [18]. Beria et al. discussed the delusions of success in the Italian and Spanish HSR projects [19]. Chen et al. investigated the influence of HSR projects on the economy and environment in China [20]. Zhang et al. identified the critical influencing factors of the contractor's competitive advantage in international HSR projects [1]. Pagliara examined the impact of public participation on HSR investments [21]. However, the literature relating to political risk management in international HSR projects is relatively limited.

There have been various studies regarding political risk management in international business. Some of them have focused on identifying political risk factors. For instance, Howell and Chaddick

deemed that political, economic, social, and legal factors could result in political risk in international construction projects [11]. Hashmi and Guvenli considered that delays in profit repatriation, currency inconvertibility, contract repudiation, calling off guarantees, expropriation or nationalization, confiscation of the property, and discriminatory treatment to the firm are the main political risk factors at the enterprise level [22]. Moreover, some researchers focused on the political risk factors in international construction projects. For instance, Wang et al. investigated the political risk factors faced by international constructors operating in China [13]. Deng and Low identified 10 critical political risk factors in international construction projects and categorized them into macro- and micro- groups. However, the literature on identifying political risk factors in international HSR is relatively limited [7].

Some researchers also hypothesized a connection between political risk factors. For example, El Ansari and Andersson deemed that social opposition can reduce the government's willingness to commit to large-scale projects [23]. Rice and Mahmoud believed that poor economic performance is a crucial driver of uncertainty in government policy [24]. Yaprak and Sheldon considered that animosity between the home and host country could result in unfavorable host governmental policy towards foreign enterprises [25]. Ashley and Bonner hold that a project with high desirability to the host country is unlikely to be restricted by the host government [26]. In this study, the political risk factors in international HSR projects would be identified, from a comprehensive literature review as well as an interview with experts, and the relationships among these factors would be examined by applying partial least-squares structural equation modelling (PLS-SEM) technology.

3. Research Methods

3.1. Factor Identification

The aim of this paper is to fill the research gap that has hitherto existed in the literature relating to political risk in international HSR projects. A systematic literature review was first carried out to identify the related political risk factors through the following four phases: (1) the research papers were selected by using the retrieval system of Web of Science; (2) the papers were limited to TOPIC (political risk *) or (political risks *) AND Document Type (Article or Review) AND Timespan (1900–2019) AND Language (English); (3) the received documents were further screened to ensure the papers met the research requirements and the journals relating to this research topic were double-checked to ensure there were no other potential documents; and (4) a total of 24 potential political risk factors were proposed by reviewing the final 928 valid papers.

As the number of research papers regarding political risk in international HSR projects is relatively limited, most of the political risk factors were identified from the literature relating to general construction projects. Therefore, political risk cases in international HSR projects were also checked to ensure these factors are suitable for this topic. As shown in Table 1, these identified factors were also confirmed by related cases.

A pilot interview was then conducted with five Chinese professionals to test the comprehensiveness and accuracy of the proposed factors. Three of the professionals were from universities located in China, while the other two were from China-based international contractors. All of the professionals are registered with the Architectural Society of China (ASC) and have over 20 years of working experience in the field of construction management. In the interview, three topics were discussed: (1) the understanding of political risk in international HSR projects, (2) whether the proposed 24 factors were acceptable and understandable, and (3) whether the initial list of factors sufficiently represented the political risk in international HSR projects.

Table 1. Political risk factors.

Factors	References	Importance Evaluation	Asymptotic Significance of Kruskal–Wallis Test	
			Experience	Position
A1: forthcoming elections	[4,7]	4.15	0.387	0.432
A2: factional conflict	[6,27]	4.01	0.265	0.371
A3: popular support	[6,28]	3.88	0.557	0.642
B1: inflation	[4,29]	3.78	0.227	0.451
B2: currency instability	[30,31]	3.56	0.389	0.541
B3: per capital income	[4,11]	3.62	0.452	0.313
B4: unemployment rate	[29,31]	3.51	0.661	0.397
C1: interference from power groups	[5,25]	3.89	0.556	0.378
C2: public opposition	[6,30]	4.12	0.297	0.266
C3: negative media report	[6,32]	4.05	0.327	0.379
D1: changes in policies	[5,30]	3.97	0.445	0.388
D2: budget and guarantee	[5,33]	4.09	0.509	0.437
D3: government's project desirability	[5,19]	4.25	0.382	0.450
E1: sufficient external funding	[5,34]	3.95	0.601	0.723
E2: lending rates	Interviewee	3.86	0.705	0.534
E3: overinvestment	Interviewee	3.94	0.599	0.507
F1: external pressure	[5,35]	3.68	0.720	0.457
F2: relations between host and home countries	[5,26]	3.85	0.288	0.687
G1: contribution to the local economy	[6,25]	3.71	0.324	0.421
G2: misconduct of contractors	[6,36]	3.69	0.612	0.545
G3: involvement of local business interests	[5,37]	3.79	0.238	0.415
G4: relations with the host governments	[5,25]	3.89	0.397	0.425
H1: contract repudiation	[5,22]	4.27	0.754	0.321
H2: delays in profit repatriation	[31,38]	4.05	0.201	0.467
H3: discriminatory treatment to the firm	[5,23]	3.89	0.360	0.484
H4: changes in cost	[25,31]	3.78	0.487	0.311

At the suggestion of the experts, two factors, "lending rates" (E2) and "overinvestment" (E3), were added to the final factor list. Moreover, as Table 1 shows, the 26 factors were divided into eight groups (i.e., Groups A to H): government instability (A1–A3), economic climate (B1–B4), social support (C1–C3), government attitudes (D1–D3), financing and costs (E1–E3), external interference (F1–F2), contractors' operations (G1–G3), and investment profile (H1–H3). The factors in group A and B are the regular macro political risk factors in general international business, the factors in groups C to G are the micro political risk factors relating to the project or contractor's characteristic, and the factors in group G are the consequence-related factors.

After the grouping of the 26 political risk factors, the potential relationships among the eight factor groups were also identified from the related existing literature and cases. Then, the five professionals were asked to double-check the proposed relationships. Finally, a total of 11 hypothesized relationships (see Figure 1) among these were identified to be tested in this study.

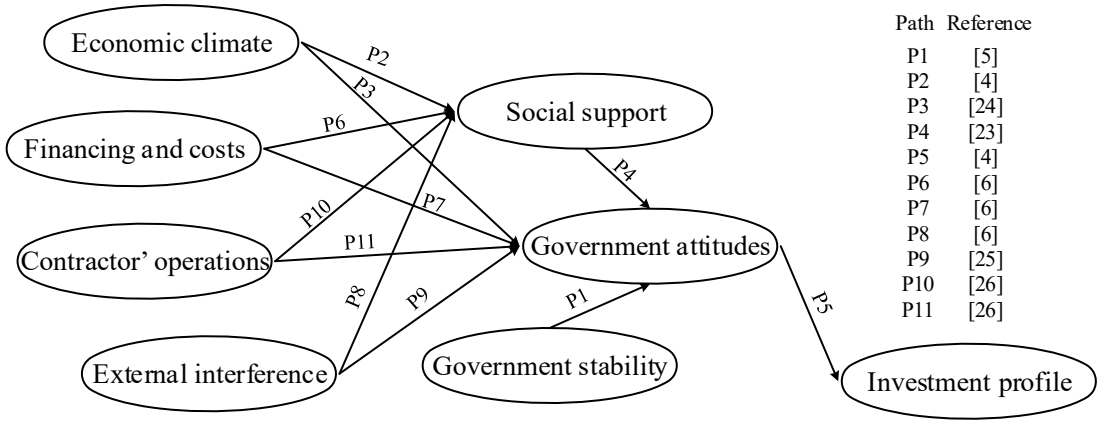

Figure 1. Hypothetical relationships among factor groups.

3.2. Questionnaire Survey

The data used in this study were collected from a specially designed questionnaire. As a popular technique to obtain data regarding attitudes and opinions, the questionnaire has been widely accepted by academia in project management study e.g., [39–41]. In this study, the questionnaire includes two sections: (1) questions to gather personal information (i.e., years of work experience, position, and institution) on respondents and (2) items to measure the importance of each factor on a Likert scale of 1 to 5, with 1 being very low, and 5 being very high.

A list of 200 scholars was drafted based on a comprehensive review of the related studies. The 200 scholars focused on studies relating to political risk management and international project management. Beyond that, an industry list was developed, including 300 practitioners. They have relevant experience in the international construction market, and can be found in the China International Contractors Association (CICA).

The survey was conducted from April to May 2018. A total of 500 questionnaires were disseminated to scholars and practitioners via electronic mail and an online chat tool. A brief introduction to political risk and descriptions of some factors were also attached to the questionnaire to ensure that all respondents were informed and were using consistent definitions for each risk factor.

A total of 116 responses were received out of the eligible sample of 500. Among the 116 responses, four were ineffective because of the incomplete or irrational answers. The remaining 112 valid responses represent a 23.2% response rate, which was acceptable for the data analysis compared with the previous related studies e.g., [42–44]. The profiles of the 112 valid respondents were showed in Table 2. Out of them, 47 respondents were academics, and 65 were practitioners. Most of the respondents (69.6%) had more than 10 years of working experience (including academic background), which further ensured the data quality.

Table 2. Profiles of effective survey respondents.

Characteristics	Category	Overall (N = 112)	
		N	%
Work experience (years)	Over 20	15	13.4
	16–20	21	18.8
	11–15	42	37.5
	5–10	34	30.4
Position	Professor	16	14.3
	Associate professor	21	18.8
	Assistant professor/lecturer	10	8.9
	Senior manager	24	21.4
	Project manager	41	36.6

3.3. Structural Equation Modeling (SEM)

SEM, a robust multivariate statistical analysis method, has been widely adopted by researchers to reveal the structural relationships among variables in construction and project management research e.g., [42,44,45]. The SEM technique is a combination of path analysis, confirmatory factor analysis (CFA), second-order factor analysis, regression models, covariance structure models, and correlation structure models [46]. In recent years, the use of this method has become common in management research because of its ability to estimate multiple and interrelated dependence in a single analysis [47]. SEM involves two types of variables: an observable variable, which can be directly measured, and a latent variable, which is estimated using one or more observed variables. In addition, SEM is composed of measurement and structural models. The former determines the relationships between each observable variable and its respective latent variable, while the latter provides the relationships among the latent variables. PLS-SEM and covariance-based SEM (CB-SEM) are two types of SEM using different algorithms. When compared to CB-SEM, PLS-SEM is preferred by construction management researchers because it does not require a large sample size and rational distribution of data [48].

Due to the advantages of PLS-SEM, it was used to analyze the hypothesis in this study. In the first step, CFA was performed to test the proposed measurement model that describes the relationships between the 26 political risk factors (observable variables) and their respective groupings (latent variables). After the measurement model achieved high reliability and validity, path analysis was conducted to evaluate the relations among the eight factors' groupings.

The reliability and validity of the measurement model were assessed using the following principles: the factor loading of each observable variable should not be lower than 0.450, the composite reliability (CR) value of each latent variable should not be lower than 0.700, the average variance extracted (AVE) value of each factor category should not be lower than 0.500; for adequate discriminant validity, the correlation between any two latent variables should be greater than the square root of the AVE of each latent variable, while the loading of each observable variable on its respective latent variable should be greater than the cross-loadings [48,49]. For the structural model, the significance of the causal relationships among the eight factor categories were assessed by the t-value for a two-tailed test, where 1.650 was the path supported at the 0.10 level, 1.960 was the path supported at the 0.05 level, and 2.580 was the path supported at the 0.01 level [50].

4. Results

4.1. Results of Descriptive Statistics

First, the reliability of the collected data was measured. According to the SPSS 19.0 (IBM, New York City, NYC, USA) analysis results, the Cronbach's alpha value was 0.907, which was higher than the 0.700 threshold. As shown in Table 1, the mean values of the 26 risk factors range from 3.51 (B4: unemployment rate) to 4.27 (H1: contract repudiation), much higher than 3.00, showing the vital

importance of the 22 risk factors. After that, the Kruskal–Wallis test, a non-parametric method, was conducted to test whether there are significant differences in the significance of each risk factor among respondents from different backgrounds. The Kruskal–Wallis test can analyze problems without clear numerical interpretation, different to the one-way analysis of variance [51]. The asymptotic significance values of the 26 risk factors were considerably greater than the 0.05 recommended by Siegel and Castellan [52], showing that the respondents agree on the significance of each risk factor.

4.2. Results of PLS-SEM

The results in Table 3 revealed that the CFA factor loadings ranged from 0.736 to 0.851, the CR scores ranged from 0.851 to 0.931, and the AVE scores ranged from 0.723 to 0.799. All of them were higher than their respective thresholds. Furthermore, the square roots of the AVE values were above the interconstruct correlation, and all the factors acknowledged the highest loading on its respective grouping (see Table 4), indicating that the measurement models were reliable and valid. Additionally, among the 11 hypothesized causal relationships among the eight factors groupings, 10 were supported, but one was not. Clearly, P1, P2, P4, P5, P7, P9, and P10 were supported at the 0.01 level; and P3, P6, and P8 were supported at the 0.05 level; but P11 was not supported (see Table 5; Figure 2).

Table 3. Results of confirmatory factor analysis.

Variable	Loading	CR	AVE
A1	0.792	0.915	0.783
A2	0.807		
A3	0.848		
B1	0.817	0.896	0.684
B2	0.736		
B3	0.762		
B4	0.657		
C1	0.811	0.879	0.706
C2	0.743		
C3	0.725		
D1	0.758	0.891	0.731
D2	0.762		
D3	0.813		
E1	0.797	0.922	0.799
E2	0.851		
E3	0.834		
F1	0.779	0.851	0.740
F2	0.789		
G1	0.712	0.900	0.693
G2	0.698		
G3	0.784		
G4	0.805		
H1	0.835	0.931	0.773
H2	0.822		
H3	0.776		
H4	0.798		

Table 4. Discriminant validity of the eight factor groups.

Groups	A	B	C	D	E	F	G	H
A	0.885 [1]							
B	0.345	0.827 [1]						
C	0.431	0.605	0.840 [1]					
D	0.585	0.434	0.577	0.855 [1]				
E	0.358	0.446	0.238	0.591	0.894 [1]			
F	0.479	0.385	0.297	0.373	0.492	0.860 [1]		
G	0.297	0.231	0.416	0.384	0.403	0.375	0.832 [1]	
H	0.368	0.274	0.365	0.268	0.509	0.477	0.421	0.879 [1]

Note: [1] indicates that the numbers are the square root of the AVEs.

Table 5. Results of path analysis.

Path	Coefficient	t-value	Interpretation
P1	0.484	12.873	Supported
P2	0.245	3.981	Supported
P3	0.168	2.117	Supported
P4	0.371	9.982	Supported
P5	0.568	19.887	Supported
P6	0.189	2.378	Supported
P7	0.215	5.632	Supported
P8	0.185	2.315	Supported
P9	0.231	6.753	Supported
P10	0.156	4.382	Supported
P11	0.086	0.964	Not supported

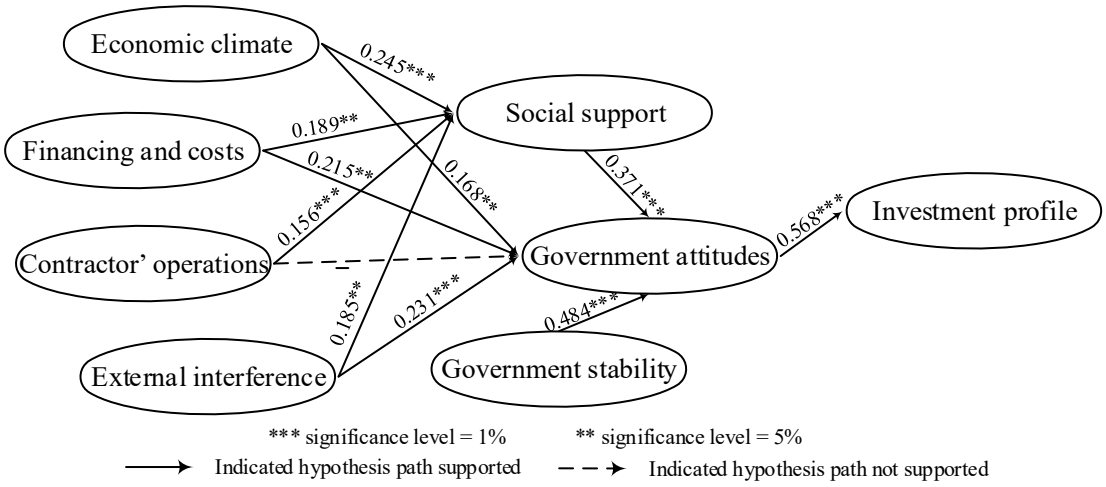

Figure 2. Networking of political risk paths in international HSR projects.

5. Discussion

5.1. Significance of the Risk Factors

This study identified 26 factors that have significant importance for political risk in international HSR projects. These factors, such as "contract repudiation" (H1, mean score 4.27), "government's project desirability" (D3, mean score 4.25), "forthcoming elections" (A1, mean score 4.15), "public opposition" (C2, mean score 4.12), and "budget and guarantee" (D2, mean score 4.09) were the most significant factors, in line with the political risk in Thailand, Indonesia, and Mexico HSR projects. Among the 26 political risk factors, 24 are common political risk factors that can be found in general international business or international construction projects, but the two added in the pilot interview (lending rates and overinvestment) are unique factors to political risk in international HSR projects. HSR projects require a massive amount of funding, and accordingly, the host governments welcome international investment to flow into these projects. However, the high lending rates and huge investments mean more government debt, leading to an increase in political risk.

Different from the results of previous studies regarding political risk in general international construction projects [7], the results of this study also showed that the factors in groups C (social support) and D (government attitudes) had relatively high importance in determining the level of political risk in international HSR projects. Due to the significant involvement of social and economic interests, international HSR projects may face more risks and challenges relating to public opposition and government intervention.

5.2. Influence of the Risk Factors

5.2.1. Government Stability

"Government instability" (A), consisting of three factors, "forthcoming elections" (A1), "factional conflict" (A2), and "popular support" (A3), was shown to influence "government attitudes" (D) significantly. This result was in line with the view considering that government instability was the primary macro determinant of political risk [7,11,27]. Government stability in the host country is an essential condition of the implementation of large-scale construction projects [53]. The unstable host governments may influence the implementation of the projects through: (1) causing changes in associated policies [54], (2) resulting in changes in HSR plans, (3) reducing government willingness to support HSR plans, and (4) reducing the capability of government to mitigate social opposition to HSR projects. As an example, in 2014, a China-based contractor was in trouble after the prime minister of Thailand, Yingluck Shinawatra, left office. The new Thai government ruled that the HSR plans proposed by the former government were unconstitutional and cancelled them. The new Thai government introduced a new HSR plan afterwards, resulting in enormous losses to the contractor [4].

5.2.2. Economic Climate

There were four factors, "inflation" (B1), "currency instability" (B2), "per capital income" (B3), and "unemployment rate" (B4), in this group. The research findings indicated that "economic climate" (B) in the host countries has a significant impact on "social support" (C) and "government attitudes" (D), and thus indirectly impacts the political risk level in international HSR projects. On the one hand, host governments with financial stress are prone to change foreign trade policy, leading to more uncertainty for international contractors [7]. On the other hand, HSR projects are generally characterized by large-scale investment and high sensitivity to the economic climate. Economic depression (e.g., high inflation, exchange-rate misalignment or volatility, low income, and high unemployment rate) in the host countries can result in the following: (1) public opposition to the large-scale construction projects; (2) balance of payments deficit of the host country [29]; (3) an increase in the cost of living for the international contractors [55]; and (4) a decrease in the project's desirability to the host government, thus resulting in political risk (e.g., contract or debt repudiation) in HSR projects. For instance, in

2017, the Venezuelan government suspended the implementation of the HSR project supported by China due to the domestic economic depression. The Venezuelan government cannot afford the debt payments on the HSR project, which cost China Railway Group Limited $7.5 billion [56].

5.2.3. Social Support

"Social support" (C) was composed of three factors, "interference from power groups" (C1), "public opposition" (C2), and "negative media report" (C3), which can significantly influence "government attitudes" (D). The implementation and operation of the HSR is a massive systematic project, which not only involves land expropriation, environmental protection, and labor rights guarantee, but also concerns the growth of the regional economy and changes in public lifestyle [30]. The practical implementation of HSR projects can never exist without sufficient social support [25]. Powerful interest groups (e.g., labor unions, business associations, environmental organizations, and radical organizations) and the public (e.g., community and residents) can assess the political risk involved in large-scale projects by their ability to impact government policies [56]. International contractors with high social support would have a sustainable operational environment, while contractors with low social support would be confronted with more pressure and challenges. A case in Mexico confirmed this: on 3 November 2014, the Chinese-led consortium won the contract for the HSR project connecting Mexico City with Queretaro. However, the Mexican government revoked the deal due to opposition from the public after three days [6].

5.2.4. Government Attitudes

"Government attitudes" (D), consisting of three factors, "government policy" (D1), "government's project desirability" (D2), and "sufficient budget and guarantee" (D3), had significant relationships with seven other factor groups. (H). The finding was consistent with the literature [25,57], considering that most of the political risk factors have the potential to influence international construction projects due to their ability to impact government attitudes towards the projects. First of all, government policy can directly affect international contractors' ability to carry out their operational strategies and receive the expected profits. Second, the government's project desirability has a strong relationship with the relative importance of construction projects to the host countries [19]. International construction projects with high governmental desirability would benefit from more government support (e.g., fewer restrictions, favorable policies, convenient approval procedures, sufficient national budget, and guarantee), while international construction projects with low governmental desirability would suffer from more discriminatory treatment [7,58]. Finally, international contractors undertaking the projects without a national budget and guarantee may suffer from contract repudiation.

5.2.5. Financing and Costs

There were three factors, "sufficient external funding" (E1), "lending rates" (E2), and "overinvestment" (E3), in this group. The findings indicated that "financing and costs" (E) can significantly impact "social support" (C). The financing and costs of large-scale construction projects have been a major concern in society. Public groups tend to be against these projects in case the costs exceed the expected benefits [30]. Financing and costs is a critical variable that can impact the attitude of host governments towards international contractors. Larger projects funded by the host government would be exposed to more adverse regulations than those projects funded by external financing packages (e.g., funding from allied owners or aid programs, and loans from the home country or international bank) [33]. Apparently, high lending rates and substantial investment represent high returns for international construction, but a financial burden for the host government. Larger projects with high lending rates and substantial investment are vulnerable to political risk. As an example, after the election in 2014, the new Indonesian government changed the plan for the HSR projects owing to vociferous and widespread social opposition and adopted a new policy focus on strengthening infrastructure in the countryside and outlying islands [5].

5.2.6. External Interference

"External interference" (F) contains two factors, "external pressure" (F1) and "relations between host and home countries" (F2), and had a significant relationship with "social support" (C) and "government attitudes" (D). As Wu and Chong pointed out, that the implementation and development of HSR plans is not only a business activity, but also an issue that can influence future geopolitics and the geo-economy [34]. External pressure from other countries, especially from powerful nations, may directly affect the decision-making of the host government, leading to more uncertainty in the market environment of international HSR. External forces can also impact the government's attitudes towards international contractors or HSR projects. For example, the negative report from the British Broadcast Corporation and the Voice of America contributed to the Indonesian society's opposition to the HSR project. Moreover, relations between host and home countries have an important influence on the international construction business [25,59]. ICCs operating in foreign countries having good relations with their home country are likely to experience better rapport with the host society and government.

5.2.7. Contractors' Operations

"Contractors' operations," containing four factors, "contribution to the local economy" (G1), "misconduct of contractors" (G2), "involvement of local business interests" (G3), and "relations with the host governments" (G4), can significantly influence "social support" (C). This finding was consistent with the literature e.g., [30,35] maintaining that foreign enterprises with significant involvement in local business interests and contributing to the local economy would benefit significantly from social support. Moreover, the misconduct of international contractors in the overseas construction market, such as limited social protection, corruption, dishonest acts, environmental pollution, malpractice, safety accidents, and discrimination against natives [60,61], may trigger adverse societal events (e.g., strikes and negative media report) and elicit negative reactions of the host government towards the contractors [7], thereby increasing the political risk in HSR projects.

5.2.8. Investment Profile

The "Investment profile" (H), consisting of four consequence-related factors, "contract repudiation" (H1), "delays in profit repatriation" (H2), "discriminatory treatment to the firm" (H3), and "changes in cost" (H4), was directly affected by "government attitudes" (D) and indirectly influenced by six other groups. These findings were consistent with the view that political risk in international construction projects could arise from macro as well as micro political risk factors [7,25]. Contract repudiation, such as the host governments refusing to honor the HSR contract and failing to make payments, is the ultimate political risk consequence factor in international HSR projects [4]. Delays in profit repatriation may result from the following: (1) delay payment from the host government, (2) schedule overrun, and (3) repatriation restrictions, leading to a reduction in contractors' expected return. Discriminatory treatment to the firm (e.g., unfair tax laws, foreign ownership restrictions, restrictions on local market access, and restrictions on information flow), has a strong relationship with protectionist policy, which is one of the most common political risk factors in international business [36]. Changes in cost are most often caused by labor-related policies (i.e., labor restriction, change in labor costs, labor impacting delays), material-related policies (i.e., taxation on imported materials, supply of local materials, per-unit cost of material), and the general requirements of the host government [25].

5.3. Recommendations on Risk Management

The identified political risk factors and paths provide contractors with insight into how to reduce or mitigate political risk in international HSR projects. Therefore, four managerial recommendations can be drawn from the analysis mentioned above, as follows:

1. Since the international contracts will be ill-equipped to deal with the uncontrollable political risk factors relating to the "economic climate," "government stability,, "external interference,"

"financing and costs," and "project desirability" during the construction stage [62], these factors should be considered early on, in the stage of target project selection. A comprehensive measurement of these factors should be conducted to ensure that the right decisions can be made by international contractors. It is essential for international contractors to collect up-to-date and valuable information from several channels, such as the government, business partners, industry associates, and international institutions related to risk assessment, to ensure the accuracy of the assessment results. It should be noted that, while the high investment and high lending rate of HSR projects mean potentially high revenue, international contractors without the ability to influence the political environment should avoid performing these projects in countries with a high-risk environment.

2. In the pre-project stage, it is critical for international contractors to develop corresponding business strategies (e.g., entry mode, financing, alliance, and localization) to address the political risk factors relating to "contractors' operations," "social support," and "government attitudes." Suitable strategies can help international contractors to decrease their exposure to micro political risk [7]. For instance, in high-risk areas, a suitable mobile entry mode (e.g., short-term subcontracts and labor service contracts) can help international contractors avoid opposition and restriction; alliance and localization strategies can help international contractors create a favorable operating environment.
3. In most cases, international contractors only attach importance to relationships with local governments, but tend to lose sight of public perceptions [63]. As political risk in international HSR projects can also arise from social opposition, measures such as participating in general welfare, getting involved in the protection of the local environment, creating jobs, and respecting local customs can decrease international contractors' exposure to political risk during the construction stage. Additionally, there is a need for international contractors to remain sensitive to all the political risk factors during this stage [20]. A political risk alert and prevention system, consisting of risk identification, assessment, action plans, and renegotiation technology, should be established by international contractors. It can help them to be prepared for the challenge beforehand.
4. Once political risk occurs, countermeasures (e.g., claiming, settling disputes through renegotiation, and seeking help from the home country) can be implemented to relieve the adverse influence on international contractors' investment objectives. Moreover, a political risk management report is necessary for evaluating the effectiveness of the countermeasures and pooling political risk management experience. The lessons learned will be a useful reference for international contractors to deal with similar risk.

6. Limitations

All the responses in the industry group and all the cases used in this study were from Chinese contractors. Therefore, further research should be carried out using cases from ICCs of different nationalities, to further test the factors of political risk identified in this study.

7. Conclusions

This paper attempted to investigate political risk paths in international HSR projects. Overall, a total of 26 political risk factors were identified and divided into eight groups. In addition, through PLS-SEM analysis, 10 significant risk paths were identified.

Three conclusions can be derived from the research findings. First, in addition to the macro political and economic factors, project-related and contractor-related factors also have the potential to influence political risk in international HSR projects. Second, international HSR projects are more sensitive to factors relating to "financing and costs," "social support," and "government attitudes" than general international construction projects. Finally, "government attitudes" and "social support" occupy a central position in the political risk paths.

International contractors can better address political risk by (1) making political risk assessment and correct business decisions in the project selection stage, (2) developing suitable business strategies in the pre-project stage, (3) maintaining good relationships with the local government and the public and remaining sensitive to the political risk factors during the construction stage, and (4) obtaining a reasonable response and producing political risk management reports in the post-event stage.

As the political risk formation process in international HSR projects is generally similar to political risk in other types of large-scale projects, this paper can serve as a useful reference for international contractors of political risk management. Therefore, it is believed that this study makes a significant contribution to the body of knowledge regarding political risk management in large-scale international construction projects.

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