

STUDY ON CORRUPTION IN URBAN PPP PROJECTS FROM THE PERSPECTIVE OF BUSINESS TO GOVERNMENT RELATIONSHIPS

MENG QINGBIAO¹, FARAZIERA MOHD RASLIM^{1,*},
HAMIZAH LIYANA TAJUL ARIFIN²

¹School of Housing, Building and Planning, Universiti Sains Malaysia, Penang, Malaysia

²Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, Johor, Malaysia

*Corresponding Author: Author: faraziera@usm.my

Abstract

In China, PPP (Public-Private Partnership) models are widely applied in the construction of urban infrastructure and public projects since 2014. B2G (Business to Government) relationships play an important role in realizing the market-oriented allocation of resources and promote the resilient development of urban communities under PPP models. Large numbers of literatures believe that B2G relationships are prone to induce and lead to corruption. The aim of this paper is to build a quantitative evaluation for corruption in urban community PPP projects from the perspective of B2G relationships. Based on the survival analysis and empirical cases methods, it constructs a corruption relationship analysis to further explore the essence of B2G relationship. The results show that B2G is to carry out relationship activities before the PPP project launched, mainly targeting key personnel in important departments selectively, and the duration of the relationship mostly depends on the acquaintances and department classes that have a protective effect on the incubation time of corruption behaviours. Therefore, although the local government has increased its anti-corruption efforts, it's necessary to consider the negative effects of B2G relationships system and take significant measures when governing PPP project corruption behaviours.

Keywords: B2G (Business to Government), Incubation time of corruption behaviours, PPP (Public-Private Partnership), Project corruption behaviours, Survival analysis.

1. Background

As the largest emerging market country, China's total social investment has increased year by year in recent years. Especially, the PPP (Public-Private Partnership) models are widely applied in the construction of urban infrastructure and public projects [1]. The introduction of the PPP model aims to give full play to the endowments of government departments and private capital to improve the quality and efficiency of public service supply, maximizing public interests finally.

As an important interface between government management and market transactions, the PPP model is an important tool for the government to quickly realize the market-oriented allocation of resources and promote the resilient development of urban communities [2]. According to the data from the PPP Centre in China, there are currently 13,554 PPP projects, investing 16.37 trillion yuan, covering many industries such as water conservancy, ecological protection, transportation, municipal engineering, medical and health care, affordable housing, and education [3].

However, due to various factors in reality, some government leaders are prone to deviate from its purpose and function when implementing PPP projects deliberately, resulting in many corruption risks in PPP projects, such as information disclosure, function performance, bidding, system implementation, official corruption [4]. As a cooperative relationship, B2G (Business to Government) relations are a common behaviour in urban community commercial activities, as well as a prominent feature of the PPP model [5]. It's like that the two sides of a coin, B2G relations have an obvious "double-edged sword effect", with both good and bad sides.

In the current context of slow economic development, corruption behaviours have become an important channel for establishing B2G relations to obtain high-value resources that are important to the corporates' development [6]. It has become a "big pie" in the eyes of some people that the PPP projects for the resilient development of urban communities involve investments of hundreds of millions of yuan [7].

In order to ensure corruption safety under the PPP model and cover up abnormal interest transfer behaviours, the deformed relationship between the government and business has become an important carrier and medium for the occurrence and spread of corruption behaviours [8]. It has become a common "free-riding" behaviour and a driving force for corruption for some companies, illegally obtaining PPP projects through B2G. They even depend on B2G relationship-based corruption as a strategic tool for corporate operations. The corruption actors design these B2G relationships as an operating mechanism that is conducive to corruption. The B2G relationship not only stimulates the occurrence of corruption but also plays an indispensable part of project corruption under the PPP model.

Manipulating public project bidding through B2G relations has become the "key" for wealth for some people and is becoming a serious "social epidemic" [9]. It is found that approximately \$2 trillion disappears from global public procurement budgets each year [10], and Transparency International (TI) estimated that losses for corruption account for 10% to 25% of the value of public procurement contracts, with extreme cases accounting for up to 50% [11]. Therefore, based the perspective of B2G relations, is crucial to conduct the research and analyse the causes of project corruption under the PPP model, realizing the goal of optimizing the business environment for sustainable and resilient urban development.

2.Literature Review

China is a society that values relationships in the Chinese cultural context, which the relationships are a complex social concept [12]. It's believed that relationships refer to objective connections between people or that relationships are a practice, including gift exchange, favours and banquets, and promoting interpersonal communication [13]. Among the many types of relationships, business relationships refer to the use of other people's power to obtain political or economic benefits [14].

In China, it is very difficult to conduct business activities without relationships [15]. Business relationships can be further divided into two types according to the different groups involved in the relationship: B2B(business-business) and B2G(business-government) [16]. Both parties in the relationship are businesspeople in the former, while one party is a business person and the other is a government official in the latter one [17]. This article focuses on the analysis of B2G relationships.

PPP (Public-Private-Partnership) is a new public service supply model that China has been promoting since 2014 widely [18]. PPP has achieved unprecedented development in China during the last decade. As a new public service supply model, PPP emphasizes strengthening the whole process cooperation between government and private capital in the process of providing public services, and it designs B2G cooperation in a series of standard and transparent process rules [19].

Since the core elements of PPP are very consistent with the dual connotations of the new B2G relationship of being both "close" and "clean", PPP has become an ideal practical vehicle for implementing the new B2G relationship [20]. In practice, as a complex and sensitive connection between business and government, the B2G is so-called "relationship capitalism" [5]. The development of relationships in China has a long history, especially in the current situation where various social relationships are intertwined and complex, the importance of relationships to the spread of corruption has become increasingly prominent. It has also been a topic of heated debate among the public and academic circles.

The relationship between government and business is not a simple private relationship between the government and enterprises, but a concentrated reflection of the economic status quo, political system, social environment, and market competition, and its role in resource allocation is limited by the external institutional environment in which the enterprise is located.

Although B2G relations have opened a "green channel" for related enterprises and greatly eased the pressure of market competition. While obtaining resources for enterprises, B2G relations can also impose heavy burdens and negative impacts on enterprises [21]. It's found that B2G relations easily lead to contracts being obtained by companies that are not the best, which leads to inefficient public procurement and generates additional transaction costs. What worse, it in turn has a negative impact on the expected social welfare and public interest of public procurement.

Compared with enterprises in developed and mature market economies, countries have higher levels of corruption with backward economies and lack of institutions. Seeking corruption media such as political and business relations to promote corporate growth is an important feature of enterprises in developing countries [22].

It believes that the relationship rules are deeply rooted in China, compared with other countries. China is more inclined to conduct business activities through "informal" B2G relations, which fits the traditional Chinese interpersonal communication model. During the country's economic transformation, many resources are still under the control of local governments [23]. It can easily obtain resources and make these resources more efficient by maintaining good relations with local government officials, which provides a lot of opportunities and motivation for enterprises to engage in project corruption under the PPP model.

In general, project corruption under the PPP model is extremely harmful to economic and social development. There is even a saying in the industry that "if corruption is not eliminated in public works procurement, corruption will eliminate public works procurement", which is a "failure of the system" [24].

In addition, as a typical "non-market failure", project corruption under the PPP model is a complex system involving many factors [25]. Once a strong reverse elimination incentive mechanism of "bad money driving out good money" is formed, the corruption behaviours will be deeply embedded in economic, political and social situations until it evolves into a highly organized action [26]. Finally, "power hunting" is an important driving force behind the rampant and widespread project corruption under PPP model in China [27]. A quantitative analysis of corruption in public engineering bidding based on 90 typical cases is conducted [15], the results show that the establishment of B2G relations is highly selective, with a focus on key officials mastering the public resources, especially the heads of various departments.

In these relationships, the actors seek power rather than friends to enter a power-centred network and enjoy monopoly rents and support [28]. It will induce to gain the power of the tenderer to manipulate the bidding activities, thereby satisfying their needs for more power and wealth. B2G relationships have become an important way to obtain resources and information, while also becoming synonymous with corruption and other unethical behaviours such as nepotism, bribery and fraud [29].

Although B2G relationships are generally believed to contribute to the occurrence of corruption, few studies have explored in depth the mechanisms by which relationships breed corruption. Existing studies have mostly focused on the impact of B2G relationships on business activities, and only a few papers have discussed the occurrence and development of relationships. Overall, understanding on the negative impact of B2G relationships is still very limited. How to normatively analyse the impact and connection between B2G relationships and corruption is an issue that needs to be urgently addressed. The aim of this article is to build a quantitative evaluation for corruption in urban community PPP projects from the perspective of B2G relationships. The objectives are as follows:

- Discover the evaluating index with literature reviews on corruption between PPP projects and B2G relationships.
- Identify the corruption indicators influencing the urban community PPP model through collecting empirical cases from China Judgements Online.
- Reveal the essence of B2G relationship with data analysis and conclusion conducted.

3.Methods

Since the B2G relationship is utilitarian, it needs to be constantly maintained and consolidated. Most B2G relationships play three roles in corruption: information asymmetry, facilitating corrupt transactions, and guiding the establishment of behavioural norms that lead to corrupt tendencies. The “money-relationship-power-corruption” model is proposed [30] (Fan, 2002), which constructed the connection between corruption and relationships. That B2G relationships are the medium connecting business people and government officials, which business people rely on the power of government officials and make money as a carrier to build corrupt relationships, showing the nature of B2G corrupt relationships.

The model constructs the connection between B2G corruption and the power and explains the mechanism of B2G relationship in theory. But it is just a simple model from a macro perspective and does not show the deep-level characteristics of the connection between relationship and corruption. In view of this, this paper will solve the shortcomings of current research by constructing a new corruption relationship model and empirically study the construction process and characteristics on B2G corruption relationship.

3.1. Establish the corruption relationship model

Although the “money-relationship-power-corruption” model reveals the nature and internal logic of B2G corruption relationships and the role of B2G relationships in corruption, there is no further analysis on the process and stages of the occurrence of corruption relationships. A relationship development process model is proposed based on the business relationship level [31]. The model divides the relationship into three stages: the initial stage of the relationship, the stage of relationship establishment and maintenance, and the stage of relationship utilization.

The relationship development process model can make up for the above shortcomings and analyse the occurrence process of business relationships from a dynamic perspective. The combination of the two model will be able to reveal the essence of B2G relationships from a macro perspective, as well as and explore the binary relationship construction process of B2G corruption relationships from a micro perspective. Therefore, abstracted from the two model, this paper constructs a corruption relationship analysis model with three stages, as shown in Fig. 1.

In the initial stage of the B2G corruption relationship, the actor is concerned about choosing what type of official to establish a relationship with; in the relationship establishment and maintenance stage, the actor needs to pay attention to three issues as relationship form, establishment time, and medium. The relationship form emphasizes the principle of relationship selection, the establishment time focuses on when to establish the B2G relationship, and the medium mainly analyses how to establish the B2G relationship. The core content of the relationship utilization stage is the subsequent content after the B2G relationship is utilized, whether to continue or interrupt the relationship.

3.2. Research method

According to the corruption relationship analysis model, survival analysis is used to further analyse the impact of the various influencing factors on the incubation time of corruption from the empirical cases. Survival analysis is mainly used to

study the laws of survival status of the population, the changing trends of survival rate curves [32]. With the expansion of research, its application areas have gradually expanded from traditional research fields to other research fields. This paper uses the survival analysis method to study the incubation period of corruption and its influencing factors.

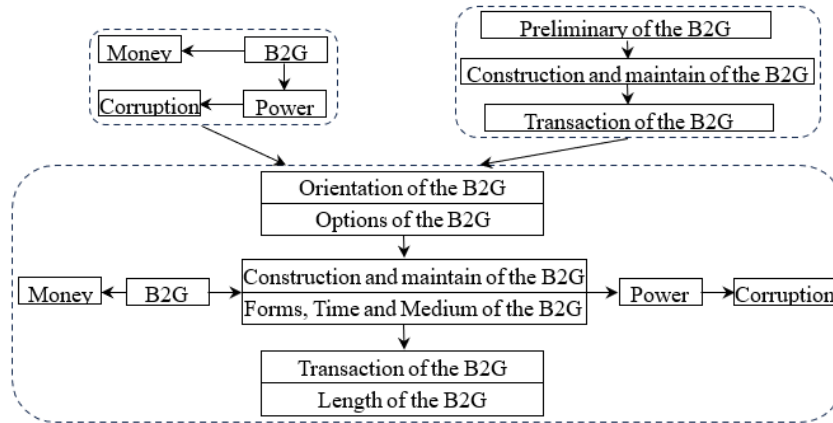


Fig. 1. The corruption relationship analysis model.

In terms of analytical functions, survival time is often expressed by survival function and hazard rate function, which the hazard function is the core function. Survival function is also called cumulative survival function, which is the probability that the individual's corruption latency time is longer than "t". The hazard function refers to the conditional probability that an individual will be caught for corruption within a unit time (t, t+Δt) in the future under the condition that the individual is lurking for corruption at time "t".

First, set "T" as the corruption incubation time. "T" is a discrete random variable, and takes the value t_i $i=1,2,\dots,n$. Then set S(t) as the survival function of "T", which means the probability that the corruption incubation time is "t". S(t) is:

$$S(t) = P(T \geq t) = \frac{\text{The number of people in incubation period in time "t"}}{\text{total number of corrupt people at the beginning}} \quad (1)$$

In addition, set h(t) as the risk function, which means the probability limit of corruption being investigated for an observed object with a corruption latency of "t" from "t" to "t+Δt". The calculation formula is:

$$h(t_i) = \Pr \left(t = \frac{t_i}{T} \geq t_i \right) = \frac{p(t_i)}{S(t_{i-1})}, i = 1, 2, \dots, n \quad (2)$$

In terms of analysis methods, the Cox regression model is used to evaluate the effect of covariates on the risk function without making assumptions about the specific analysis of survival time. For convenience, the transformation form of the Cox model is used:

$$S(t|Z) = S_0(t) \exp \exp (\beta') \quad (3)$$

The $S_0(t)$ is the basic survival function. The main purpose of the Cox model is to determine the value of β , which can be regarded as the weight of "Z" influence

on the hazard function. If $\beta > 0$, it means that “Z” is positively correlated with the hazard rate, and Z is a risk factor. If $\beta < 0$, it means that “Z” is negatively correlated with the hazard rate, and Z is a protective factor. If $\beta = 0$, it means that “Z” is zero correlated with the hazard rate, and Z is an irrelevant factor.

4. Case Analysis

The empirical cases were selected legally from the official website named China Judgements Online, which were open access without private and confidential aspects. By inputting the keywords "criminal case" and "PPP" and "construction" and "corruption" into searching, 46 relevant judgments were obtained. According to investigation on the characteristics of the corruption in the cases, 46 cases are collected for further research and analysis. The research analyses the legal empirical cases during 2014 to 2022. Based on the research needs, the information of corruption crime cases is standardized following Table 1.

Table 1. The list of variables.

Type	Variables	The definition of variables
Incubation time	Time	incubation time of corruption
Individual characters	Money	Amount class of corruption: less than 0.5 million=1, 0.5-1 million =2, 1-5 million =3, 5-10 million =4, more than 10 million =5
	Age	Age while arrest
B2G characters	Forms	Fors: acquaintance=1, stranger=2
	Length	Length: temporary=1, Long-term =2
Other characters	Post	Post level: Grassroots (Section Level)=1, Middle level (department level)-2, Senior level (department level and above)-3
	Dept	Dept type: owner=1, administrative-2

It will conduct a survival analysis on the incubation time of corruption. Considering the comprehensive and common characteristics of corruption in PPP projects, it concentrates on the factors that represent mostly and analyse conveniently. First, the influencing variable indicators are limited in Table 1. This article focuses on the influencing factors of the incubation time of corruption of officials in B2G relationships, including individual characteristics of officials, relationship characteristics and other characteristics, as shown in Table 1.

The indicators selected from the individual characteristics are the level of corruption amount and the age at the time of the incident. The indicators selected are post level and department category. In terms of relationship characteristics, the B2G relationship of the same official can exist in multiple forms, or two types of relationship time limits can exist at the same time. This paper uses 0-1 variables for the different relationship forms and relationship time length in Table 1. If this type of relationship exists in the case, the value is set to "1", otherwise it is "0"; the variables are specifically set as: acquaintance relationship, stranger relationship, long-term relationship and temporary relationship.

In summary, the dependent variable is the corruption incubation time, and the independent variables are 3 categories and 7 indicators. The minimum requirement

of survival analysis is that the number of variables is 5-10 times the sample size. This paper meets the requirements. The following will use SPSS 26.0 to analyse and study the relevant data.

This uses the Cox regression analysis model to conduct a significance analysis of the influencing factors of the corruption incubation time, based on the Wald statistic and tests the results at a significance level of 0.05. The test results show that there is a significant regression relationship between the corruption incubation time and other factors, and the model has good fit. In order to test the selected indicators that can significantly affect the corruption incubation time, the significance level of the exit model set 0.10, and the variables with no significant effect on the dependent variable are eliminated. After calculation, the variables and their related parameter indicators are shown in Table 2.

Table 2. The incubation time of corruption in the Cox regression.

Variable	B	SE	Wald	Sig.	Exp(B)
money	-0.116	0.190	0.375		0.890
forms	-1.470	0.456	10.411	0.540	0.230
length	-0.575	0.470	1.495	0.001	0.563
Post			2.255	0.221	
Post(1)	-0.349	0.912	0.147	0.324	0.705
Post(2)	0.832	0.816	1.040	0.702	0.435
Dept	0.487	0.410	1.413	0.308	1.628

Table 2 shows the variables that were finally included in the Cox model analysis and the corresponding test results. It can be seen that 5 indicators among the selected variables finally entered the model and met the significance requirements of the model. In Table 2, $\exp(\beta)$ is the relative risk size. If it is less than 1, it means a protective factor, and if greater than 1, it means a risk factor. In this paper, it is less than 1, it means that the variable has a reverse impact on the corruption incubation time. The analysis results show that if the $\exp(\beta)$ values of 4 indicators are less than 1, then all these 4 variables are protective factors. To sum up, the survival function expression of the Cox model is:

$$S(t) = S_0(t)e^{-0.116\text{money}-1.470\text{forms}-0.575\text{length}-0.349\text{post1}-0.832\text{post2}+0.487\text{dept}}$$

Through the Cox regression analysis of the corruption incubation time, it is found that the corruption incubation time is longer, and the influencing factors are diverse in the PPP project stage. Other types of relationships, such as temporary relationships and long-term relationships, are more manifested as the relationship strategies adopted by both parties when engaging in corruption. These relationship methods facilitate each other's corruption and are "mediating" factors in corruption and cannot affect the corruption incubation time.

5. Conclusion

Taking B2G relationship in PPP project corruption as the research object, this paper constructs a corruption relationship analysis model to explore the B2G relationship involved in corruption. The empirical cases show that many PPP project

corruptions are induced by B2G relationships and have been carried out before the PPP project starts, which allows both parties to have time to formally ensure that the PPP project complies with legal provisions.

In order to carry out corruption, the perpetrators establish B2G relationships to achieve the transfer of corruption benefits. It reveals that the essence of B2G relationships is power-for-money transactions, and that corruption is covered up by covert means. When it comes to relationship development, corrupt actors are better to establish B2G relationships with acquaintances. Since corruption in PPP projects faces the risk of being punished, B2G is prone to choose acquaintances and establish relationships with core officials in important departments.

In view of this, when governing corruption in PPP projects, it should improve the supervision and management of power, update the effectiveness of information to establish a sound project supervision and governance system. Removing the soil on which B2G relationships depend, it can truly eliminate the impact of "relationships" on PPP projects. It should also make great efforts to address the negative effects of informal systems and various "hidden rules" in the management of PPP projects, pay more attention to prevent relevant actors using "relationships" as a "cover" to carry out various corrupt activities.

References

1. Hu, Z.; Li, Q.; Liu, T.; Wang, L.; and Cheng, Z. (2021). Government equity investment, effective communication and public private partnership (PPP) performance: Evidence from China. *Engineering, construction and architectural management*, 28(9), 2811-2827.
2. Wei, B.-L.; Guo, X.; and Wang, Z.-J. (2021). *PPP mode and coordinated regional development-empirical evidence from China*. In Li, M.; Bohács, G.; Hua, G.; Gong, D.; and Shang, X. (Eds.), *IEIS 2020*. Springer Singapore, 115-127.
3. Tan, J.; and Zhao, Z.J. (2024). Cost-saving or cream-skimming? Partner ownership and the project returns of public-private partnerships in China. *Journal of Chinese Political Science*, 1-21.
4. Cuadrado-Ballesteros, B.; and Peña-Miguel, N. (2022). Analysing the link between corruption and PPPs in infrastructure projects: An empirical assessment in developing countries. *Journal of Economic Policy Reform*, 25(2), 136-155.
5. Teichmann, F.; Falker, M.C.; Boticiu, S.; and Sergi, B.S. (2023). Business to government (B2G) corruption and resource misallocation. The case of China at the municipal level. *Journal of Economic Criminology*, 1, 100005.
6. Jia, X.; Wang, J.; and Liu, T. (2024). The impact of business-to-government relationship emphasis on green innovation: An empirical analysis. *Technovation*, 129, 102919.
7. Aidinlis, S. (2022). *Government-to-Business (G2B) research data sharing and the GDPR: Reconciling the public with the private?* In Kosta, E.; Leenes, R.; Kamara, I. (Eds.), *Research handbook on EU data protection law*. Edward Elgar Publishing.
8. Krah, B.A. (2020). The different approaches for the market segment B2G (B2A) compared to B2B and B2C, based on a case study for infrastructure in the Philippines. *Knowledge Based Sustainable Development*, 95.

9. Bawole, J.N.; and Adjei-Bamfo, P. (2020). Public procurement and public financial management in Africa: Dynamics and influences. *Public Organization Review*, 20(2), 301-318.
10. Dikmen, S.; and Çiçek, H.G. (2023). Fighting against corruption and bribery in public procurements during the Covid-19 pandemic. In McGee, R.W.; and Benk, S. (Eds.), *The ethics of bribery: Theoretical and empirical studies*. Switzerland: Springer, Forthcoming, 309-328.
11. Nolan, J.; and Rowley, C. (2020). Whither guanxi and social networks in China? A review of theory and practice. *Asia Pacific business review*, 26(2), 113-123.
12. Clarke, S.; and Saiket, S.A. (2023). *China and Guanxi*. In Clarke, S.J. (Ed.), *Contemporary strategic Chinese American business negotiations and market entry*. Springer Nature Singapore, 301-310.
13. Li, Y.; Tian, G.G.; and Wang, X. (2021). The effect of Guanxi culture on the voting of independent directors: Evidence from China. *Pacific-Basin Finance Journal*, 67, 101524.
14. Bian, Y. (2022). *The persistent power of guanxi in transitional China*. In Horak, S. (Ed.), *Informal networks in international business*. Emerald Publishing Limited, 93-112.
15. Zhang, B.; Le, Y.; Wang, Y.; and Li, Y. (2021). Tendering and bidding corruption research based on B2G Guanxi-Based on 90 typical cases. *Journal of Engineering Management/Gongcheng Guanli Xuebao*, 35(3).
16. He, N.; Wu, W.; and Liu, S. (2021). Relationship between logistics firm size and business diversification: an empirical study of Chongqing, area in China. *Open Journal of Statistics*, 11(01), 1.
17. Herrmann, H.; and Cobo Martín, M.J. (2024). Bidding for B2B or B2G tenders: Toward the adoption of pricing models in practice. *Management Review Quarterly*, 1-39.
18. Cheng, Z.; Wang, H.; Xiong, W.; Zhu, D.; and Cheng, L. (2021). Public-private partnership as a driver of sustainable development: Toward a conceptual framework of sustainability-oriented PPP. *Environment, Development and Sustainability*, 23, 1043-1063.
19. Signorelli, S.; Fontana, M.; Vespe, M.; Gabrielli, L.; and Bertoni, E. (2024). Towards a taxonomy for Business-to-Government data sharing. *Statistical Journal of the IAOS*, (Preprint), 1-14.
20. Heitor, M.; e Cunha, M.P.; Clegg, S.; Sirage, E.; and Oliveira, P. (2024). Beyond new space: Changing organizational forms, collaborative innovation and public and semi-public domains. *Space Policy*, 68, 101609.
21. Yan, S.; Lee, J.Y.; and Josephson, B.W. (2024). The effect of customer asset strategies on acquisition performance in business-to-government markets. *Journal of the Academy of Marketing Science*, 52(3), 789-814.
22. Wu, J.; and Chen, Z. (2023). Corruption culture and corporate social responsibility: Evidence from China. *Asia-Pacific Journal of Accounting and Economics*, 30(5), 1286-1304.
23. Rong, R.; Qiqi, W.; Zhiyang, L.; and Shaobo, L. (2022). Does the government procurement market favor corporate social responsibility in a weak institution? Evidence from China. *Elem Sci Anth*, 10(1), 00016.

24. Bhagat, G.; and Jha, K.N. (2023). Corruption risks in public construction. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 15(2), 04522062.
25. Cao, F.; and Wang, C. (2023). Accountability, corruption and the attention paid to user satisfaction in PPP specifications: Evidence from China. *Buildings*, 13(2), 492.
26. Buzzetto, R.R.; and Monteiro de Carvalho, M. (2023). The Arm-wrestling between public and private partners: An investigation of critical success factors and risk allocation preference in PPP Projects. *Engineering Management Journal*, 35(4), 358-376.
27. Vyas, L.; and Wu, A.M. (2020). Features of corruption and anti-corruption work in China and India. *Handbook on Corruption, Ethics and Integrity in Public Administration*, 227-242.
28. Huss, O. (2020). *How corruption and anti-corruption policies sustain hybrid regimes*. BoD-Books on Demand.
29. Antonelli, G. (2020). *The concept of guanxi within the Chinese audit framework*. MSc dissertation, Department of Language and Management, Università Ca'Foscari Venezia.
30. Fan, Y. (2002). Ganxi's consequences: Personal gains at social cost. *Journal of business ethics*, 38, 371-380.
31. Chen, X.P.; and Chen, C.C. (2004). On the intricacies of the Chinese guanxi: A process model of guanxi development. *Asia Pacific Journal of Management*, 21, 305-324.
32. Turkson, A.J.; Ayiah-Mensah, F.; and Nimoh, V. (2021). Handling censoring and censored data in survival analysis: A standalone systematic literature review. *International journal of mathematics and mathematical sciences*, 2021(1), 9307475.