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Does opportunism always reduce stakeholder satisfaction in Public-Private Partnership (PPP) projects? A theory of Benign opportunism

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Abstract

Regarded as a troublesome source of "behavioral" uncertainty in transactions, opportunism has drawn wide scholarly attention with an almost unanimous argument that opportunism is detrimental to performance outcomes. However, recent advancements also highlight the bright side of opportunism and especially when combined with the particularities of project context, which further request a critical revisiting of the role of opportunism for project-related outcomes. With an aim of addressing the nuanced understanding of opportunism in projects, we conduct survey-based quantitative research to investigate the relationship between opportunism and stakeholder satisfaction in public-private partnerships (PPP). The research findings suggest that *passive opportunism under new circumstances by a private party* (OPNP) is positively related to stakeholder satisfaction. Our research findings sheds light on the project governance literature by challenging the conventional wisdom on opportunism outcomes in PPP projects.

Keywords: Passive Opportunism; Forms of Opportunism; Opportunism Outcome; PPP projects.

1. Introduction

"If the water is too clear, there will be no fish"---Chinese Proverbs.

Defined as self-interest seeking with guile, opportunism as a form of behavioral hazard is widely considered as having negative consequences on performance outcomes (Li et al., 2017) and should be at the central of inter-organizational relationships (Kelly et al., 2018). Therefore, extant research tended to overlook or simplify the outcome of opportunism (Wathne & Heide, 2000), with a considerable amount of research validating these arguments with empirical findings (Um & Kim, 2018). These findings show that opportunism inhibits exporter-importer

relationships (Barnes et al., 2010), hinders owner-contractor relationships, and undermine buyer-supplier relationships (P. Lu et al., 2015). Despite of the different bilateral parties involved, theses finding show a consensus in argument that the transaction cost explodes as the number of opportunistic behaviors increase (Haaskjold et al., 2023). The high risk of opportunism, the considerable resources must be spent on the control and monitoring (Tang et al., 2023), resulting in high transaction cost (Wathne & Heide, 2000), which further undermines exchange relationship.

However, "*human behavior is too complicated to be adequately summarized by opportunism alone*" (Moschandreas, 1997, p. 43). Recent development on the opportunistic behaviors also reveals opposite arguments implicitly challenge the taken-for-granted negative image of opportunism. That is, opportunism may have a positive impact on supply chain collaboration by arguing that opportunistic behaviors allow audited parties to align their underreported profit to be aligned with supply chain profits (Heese & Kemahlioglu-Ziya, 2014). So despite the generic theorem that opportunistic behaviors exert exchanged uncertainties, the misplaced profit between transactional parties may play a role in sustaining the relationships with benefits for the both parties. This counterintuitive insight triggers a motivation to revisit the effect of opportunism on stakeholder satisfaction.

Extant literature has offered a limited understanding of the complication between opportunism and stakeholder satisfaction. This knowledge gap has been further complicated due to project context, where temporality prevails (Lundin & Söderholm, 1995) as the nature of the projects. The public-private partnership (PPP) projects typically involve the public and private sectors, including local government, contractors, and suppliers. The involvement of both the public and private sectors complicates the relationships by incorporating public interests (Qiu et al., 2019), including regulatory pressures and public welfare. However, these complexities have not been theorized together with the relationship between opportunism and stakeholder satisfaction.

Following a dynamic view of opportunism (Seggie et al., 2013), passive opportunism is evident in generating more complicated effects on relationships and might be tolerated or even leveraged by opponent firms. This offers a theoretical complexity to revisit opportunism in project context where exchanges are inherently different from those repetitive transactions. The empirical validation of the relationship between opportunism and stakeholder satisfaction is scarce and those limited research is typically based on mathematical models and conceptual

theorizing (Zahra, 2007). The hypotheses that challenge the negative effect of opportunism have not yet been examined in empirical studies using quantitative methods. Therefore, we ask:

RQ1: How does passive opportunism affect stakeholder satisfaction in PPP projects?

This research aims to address the research through a quantitative approach. We collect survey responses from 141 project managers from PPP projects. We argue that a specific form of opportunism might have a positive impact on stakeholder satisfaction in PPP projects. By taking a more nuanced perspective, we further categorize opportunism into four different categories with different stakeholder and circumstances orientation, including passive opportunism under existing circumstances by private party (OPEP), Passive opportunism under new circumstances by private party (OPNP), Passive opportunism under existing circumstances by public party (OPEG), Passive opportunism under new circumstances by public party(OPNG). Complicated as these might appear, in essence, the circumstances and strategic orientation of the involved parties can be deterministic in understanding the complexity of passive opportunism.

Our findings contribute to an improved understanding of the theoretical complication of opportunism by empirically validating the positive effect of passive opportunism under new circumstances by private party on stakeholder satisfaction. In addition, we also contribute to stakeholder theory in project management literature by identifying the positive facilitating mechanisms brought by benign opportunism.

In practice, the investigation of opportunism outcomes is meaningful to resource saving. Take the investigation of opportunism outcomes in PPP projects as an example. A PPP project is the cooperation between public and private parties aiming to construct and operate an infrastructure project. The governance of PPP project can be costly considering the risk of potential opportunism (Yao et al., 2023). Part of the investment of PPP governance has been spent on managing opportunism. Compared with eliminating all opportunism, which is practically impossible, leaving room for some benign opportunism may motivate private parties to share the risks and eventually contribute to the sustainable development of stakeholder relationships. And this will further shed light on the design of governance mechanism.

The following of the paper is structured as follows. We first review the relevant literature on opportunism, and stakeholder satisfaction to develop hypotheses to constitute the main theoretical model. Then we present our methodological approach to design research, collect data, and validations. Then followed by data analysis and results. Theoretical and practical implications are developed in the discussion section. We conclude our paper with limitations and suggestions for future research.

2. Literature review and Hypothesis

2.1 Opportunism and its different forms

With the assumption that human beings are only "weakly moral" (Wathne & Heide, 2000), the existence of opportunism has been not only frequently observed in practice, but also widely discussed in exchange-oriented research settings. The topic of opportunism has received extensive scholarly attention across different types of bilateral transactional contexts and various subfields of business and management, including PPPs, inter-firm relationships (Luo, 2006), buyer-supplier relationships (Carson et al., 2006; Jap & Anderson, 2003; Lumineau & Oliveira, 2020), etc.

Opportunism unsurprisingly occurs when at least one of the involved parties choose to pursue its own profits and goals without considering or even sacrificing the other party's loss (Zalata et al., 2019). Opportunism is defined as self-interest seeking with guile (Williamson, 1985). Williamson (1985, p. 47) describes guile as "lying, stealing, cheating, and calculated efforts to mislead, distort, disguise, obfuscate, or otherwise confuse". As guile can be invisible to the eye and merely a motive, it is difficult to measure opportunism (Seggie et al., 2013). Opportunism, as a construct, is still poorly understood (Wathne & Heide, 2000), which can take different forms. Prior research has failed to recognize these different types of behaviors that are hidden behind the general opportunism label (Wathne & Heide, 2000, p. 36).

The basic tenet of transaction costs theory (TCT), is that organizational actors will "assign transactions (which differ in their attributes) to governance structures (the adaptive capacities and associated costs of which differ) in a discriminating way" with an aim to optimize the benefits of interdependence (Williamson, 1985). As one of the core assumptions of TCT, opportunism implies that actors do not always execute economic exchanges in a cooperative manner, disclose all relevant information, or offer unbiased assessments of the anticipated consequences due to bounded rationality. These exchange hazards can have a pervasive

impact on economic organizations and their inter-organizational business relationships. With the embedded risk of opportunism, no company can easily collaborate with others without spending efforts and resources to safeguard exchanges, either through investment in relationships or trying to perfect incomplete contracts. Hence, formal or informal governance measures are frequently warranted to mitigate these behavioral hazards. So, for a long term, the academic beliefs on the nature of people, is that they are prepared to lie, cheat, and steal most or all of the time (Perrow, 1986).

However, the different forms of opportunism are capable of producing different outcomes (Wathne & Heide, 2000, p. 42). We argue that this is not the case if we further anatomize opportunism into more granular elements. Existing literature mainly shows the positive impact of opportunism on most of the organizational performance outcomes (Seggie et al., 2013; Wu et al., 2017) (also see Table 1 for a summarized info on relevant empirical findings in recent decades). There are several studies suggesting the positive impact of opportunism behaviors (Liu, 2022), and some have empirically validated the non-existence of negative relationships between opportunism and project performance (P. Lu et al., 2015). Liu (2022) argued that opportunistic practices diminish the transaction cost of cooperation by distinguishing subtle and deceitful practices from opportunistic behavior by incorporating the cognitive dissonance perspective. The opportunism is deemed as a strategic response to the perception of partners' opportunism rather than an assumption of behavior. The reciprocity of opportunisms allows bilateral parties to continue their collaborations without ending their relationships, which can be difficult to replace due to a lack of alternative options.

Enlightened by these non-negative aspects of opportunism, we theorize that opportunism behaviors need to be further categorized to gain nuanced insights into the complex impact on performance outcomes. Given that opportunism stems from bilateral exchanges occurring between organizations in certain market environments, we first propose that the actors (who), the context (when), and the means (how) matter for opportunism in understanding the particularities of different types of opportunism. More specifically (figure 1), we outline these three dimensions and argue that opportunism can be further divided into different forms by applying these dimensions. We discuss these three dimensions in detail for PPP projects.

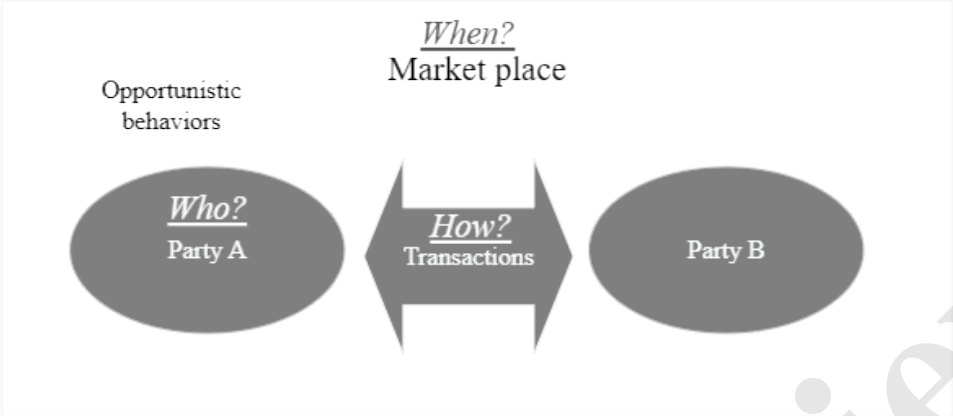

Figure 1 contingent dimensions for opportunism

2.1.1 Actor dimension (Who?)

The actors were typically firms in TCT studies for general management realm (Cuypers et al., 2021). The actor dimension of opportunism refers to different involved parties in a given transaction. The case is different in PPP settings, where public sector can also be contractually involved. In PPP projects, both public and private parties are involved throughout the projects, and their opportunistic behaviors are not scarcely observed (Ye et al., 2018). The non-financial concerns of public sector may complicate the transaction and add another layer of uncertainty. The heterogeneity of involved party implies that the involved public sectors not solely concerned with profitability, but also focusing on the social value attached to the PPP projects.

Recent advancement has identified that for investors for PPP projects, there is an optimal level of opportunism in order to maximize their benefits, and contrary to the intuitive argument that a higher level of opportunistic behaviors would be beneficial to themselves (Liu, Gao, et al., 2016). In PPP projects, the public sectors participate with vested interests in public welfare (Qiu et al., 2019). Such distinctive characteristics of actors challenges the underlying assumptions on transaction-centred perspectives of TCT studies. This is mainly due to the extra rigidity of public-private contracts (Beuve et al., 2019), which undermines the value that can be created (Bruce et al., 2019). In this research, we categorize actors into public and private parties, to allow a further differentiation of involved actors.

2.1.2 Circumstance dimension (When?)

The circumstances dimension of opportunism was initially proposed by Wathne and Heide in 2000. The differentiate two circumstances, including the existing circumstances and new circumstances. As the term implies, the circumstances dimension discusses that opportunism takes place where events unfold (MACNEIL, 1978). The existing circumstance refers to a situation which has been planned, and a new circumstance refers to a situation which has been changed as a result of exogenous events (Wathne & Heide, 2000). The existing circumstances imply that transaction occurs when the context is business as usual, and risks and uncertainties are not high. Whereas, the new circumstances indicate that unprecedented events occurs and uncertainties surrounding the transactions are high.

The circumstance characterizes the transactions between public and private sectors in a given PPP projects. Risk and uncertainties are typically at the heart of the management of PPP projects, where excessive risk and uncertainty mitigation increases the government financial burdens, and an insufficient risk and uncertainty mitigation decreases the confidence of investors (Y. Wang et al., 2018). Such a dilemma shapes the overall dynamic relationship between public and private sectors, how to play along with new circumstances where risks and uncertainties materialize, including project change request (Lopez del Puerto & Shane, 2014), clash of interests (Williams et al., 2012), market forecast failure (Flyvbjerg et al., 2005), etc. The emergence of new circumstances provides extra opportunity window or legitimized reason for acting differently than parties are morally or contractually expected. Extant research has qualitatively compared opportunism under the existing and new circumstances dimension (Wathne & Heide, 2000). However, a quantitative investigation is warranted to gain an empirical validation.

2.1.3 Behavior dimension (How?)

Along with the circumstances dimension, there is a behavior dimension characterized by existing literature (Wathne & Heide, 2000), which defines the intentionality of motivation. Actors may make acts of omission or commission that tilt payoffs in their favor, with omission being passive and commission being active (Crosno et al., 2013). Therefore, the behavior dimension is further categorized as active and passive forms (Wathne & Heide, 2000). Active opportunism refers to actors engaging in a behavior that is expressly forbidden, whereas passive opportunism implies that actors fail to fulfil their expected obligation (Das & Kumar, 2011).

The importance of differentiating active and passive opportunism lies in the fact that active opportunism and passive opportunism may systematically influence the process and performance of exchange relationships differently (Seggie et al., 2013) . Active opportunism generates more evident impact, since it involves a company acting in a way that serves its own interests while breaking some stated or unstated rules in the partnership, or when it forces renegotiation in order to benefit itself in reaction to changing circumstances. The active opportunism is more discernible and traceable to the other party, typically taking forms of lying, breaching agreements, altering facts, making false accusations (Jap & Anderson, 2003), etc.

Passive opportunism is more pervasive and undetectable, which typically occurs by not following previously agreed-upon promises, telling partly the truth, deliberately neglecting obligations, etc. The behaviors of passive opportunism can be disguised as not knowingly conducting wrong deeds. Hence, such innocent or invisible behavioral hazards can be weakly detected, and their impact can be different from active opportunism since the immediate notice of the other party is not secured. Moreover, the actors of passive opportunism do not proactively cause or seek harmful behaviors, and sometimes may acquiescently and conservatively allow the detrimental events to occur.

Passive opportunism puts actors in a less morally evil position. Acts of commission are regarded as intentional attempts to further one's own benefits at the expense of another since they are perceived to contain more effort (hence are considered to be a sign of more intentional action.) than acts of omission. People therefore judge and consider actions of commission more severely than acts of omission, which suggests that the former will suffer greater consequences (Seggie et al., 2013). Passive opportunism is morally more benign since passive means unintentional breaching the contract, and more often than not, the action party show that their “hands are tied”.

The impact of active and passive opportunism on performance outcomes remains understudied. Recent developments discovered that both active and passive have a negative impact on satisfaction with performance, but with a differentiating degree. Especially, when the level of opportunism is low, mitigation strategies, such as trust, can enhance performance outcomes (Jap & Anderson, 2003). Seggie et al. (2013) argued that these differences stem from the omission bias. The destructive acts increase the effort and engagement of the bilateral parties in the contractual exchanges. These extra endeavors might bring about extra costs that

eventually have a negative impact on performance outcomes. So balancing the extra governance cost and minor sacrifice caused by benign opportunism are evidently questioning the necessity of governing towards the last mile.

In addition, the ex-post existence of opportunism challenges the assumptions that the firms are always antagonizing the relational hazard. We argue that given the high uncertainties of PPP projects, the very existence of opportunism can be particularly persistent, and resulting in a morally grey area that might not be legally acceptable for parties, but with a compromise between governance effort and comparable losses. Das & Kumar (2011) highlight the very existence of ex-post opportunism, indicating that despite this, ex-post opportunism will persist in exchange despite the involved parties being persistent in trying to eliminate it. This further stresses the non-equal impact on the maintenance of order, be it active or passive opportunism.

Along with this argument, we theorize that passive opportunism does not necessarily be reduced through governance measures by the other party, but alternatively accepted and mitigated through reciprocal measures. Therefore, it is imperative to dig into different forms of passive opportunism and explore their potential impact on performance outcomes. In the next section of this study, we review and hypothesize the effect of various forms of passive opportunism on stakeholder satisfaction in PPP projects. According to the dimensions listed there are four forms of passive opportunism. They are passive opportunism under existing circumstance by public party (OPEG), passive opportunism under existing circumstance by private party (OPEP), passive opportunism under new circumstance by public party (OPNG), and passive opportunism under new circumstance by private party (OPNP).

	Public	***Private***
New circumstances	Passive opportunism under new circumstances by public party (OPNG)	Passive opportunism under new circumstances by private party (OPNP)
Existing circumstances	Passive opportunism under existing circumstances by public party (OPEG)	Passive opportunism under existing circumstances by private party (OPEP)

2.2 Passive opportunism and stakeholder satisfaction

To thoroughly review the relationship between opportunism and its ex-antes and ex-post, we have both systematically review the existing empirical validations (See Appendix 1) and hypothesizing from contextual understanding of PPP projects. The relationship between different forms of opportunism and stakeholder satisfaction requires further discussion as there are a few contradictory arguments among existing findings. Heese & Kemahlioglu-Ziya (2014) argued that not all opportunism results in negative consequences, and retailer's opportunistic behavior can increase the value of total supply chain. When project runs smoothly, or at least no experiencing huge external disruptions, passive opportunism of private party can be easily observable and causing detrimental effect. That is, passive opportunism under existing circumstances can cause disputes which lead to time and cost overruns (J. Liu, Love, et al., 2016) and reduce stakeholder satisfaction (Zhang & Qian, 2017). With a focus on opportunism in construction projects, (P. Lu et al., 2015) showed that opportunism under existing circumstances is negatively related to stakeholder satisfaction. Both public and private party should commit to their earlier contractual promises, and function as expected. We argue that existing circumstances shape the "business as usual" status, and prevent exchange parties to exert non-compliance or non-corporate behaviors Therefore, it is hypothesised that:

H_1: Passive opportunism of the private party under existing circumstances (OPEP) is negatively connected to stakeholder satisfaction (SS).

H_2: Passive opportunism of the public party under existing circumstances (OPEG) is negatively connected to stakeholder satisfaction (SS).

Passive opportunism under new circumstances could be tricky, since new circumstances means that the previous conditions and terms might no longer hold. New circumstances typically bring about novel challenges that complicate the transaction, the affected party can make claims of their pre-determined contractual benefits, or alternatively to passively leaning towards their own benefits. Since its fairly impossible to rule out all uncertainties and risks, the governance measures become costly if parties don't trust each other. The involved party can typically leverage the new circumstance and argue for more benefits. For example, in a PPP project for road renovation, the private sector may encounter a sudden weather hazards which makes the project implementation difficult. The private party might demand a project deadline extension or extra funding from the government to compensate for the additional

costs caused by the weather. This extra cost can exceed the reasonable need for private party, and public sector may be overcharged. However, this passive opportunistic behavior does not necessarily sabotage their relationships, because private party is thusly put in a moral ground that is inferior to public sector by gaining this extra benefit. Hence, the moral advantage of public sector will give them power to ask private party to pay back in future. Alternatively, if public sector tries to avoid paying for the extra costs in the first place due to limit of a fiscal year, the private party is then put in a higher moral ground, by telling public party "you owe me one this time". Such a moral advantage, acknowledged by the default party, keeps the relationship going.

When new circumstance occur, the act of passive opportunism could increase the cost effect of project (Wathne & Heide, 2000). This is especially the fact for long-term cooperation (Zahra, 2007). For example, in PPP projects, the cooperation between public and private party could last around 15 years or even longer including design, build and operation phases. During the period of cooperation, the presence of unexpected circumstance is unavoidable. The passive forms of opportunism might help with the cost saving and could be a way of partnership balancing. This is further explained through the effect of benign opportunism, which means the opportunistic behaviors are not seen selfish in the short run but a buffering mechanism to complement the incomplete contracts. Given the long-term relationship between involved parties, the losses and gains do not have to be accurately settled as stated in the contract or with full information symmetry. As long as both parties can keep the project going, short-term gains from one side become a relational voucher. This voucher allows morally grey area to achieve long term collective goals, with a slight sacrifice of short-term benefits of one side.

This research hypothesizes a positive relationship between passive opportunism under new circumstance and stakeholder satisfaction. Therefore, it is hypothesized that:

H_3: Passive opportunism of the private party under new circumstances (OPNP) is positively connected to stakeholder satisfaction (SS).

H_4: Passive opportunism of the public party under new circumstances (OPNG) is positively connected to stakeholder satisfaction (SS).

The research model of this study is summarised in Figure 1 respectively.

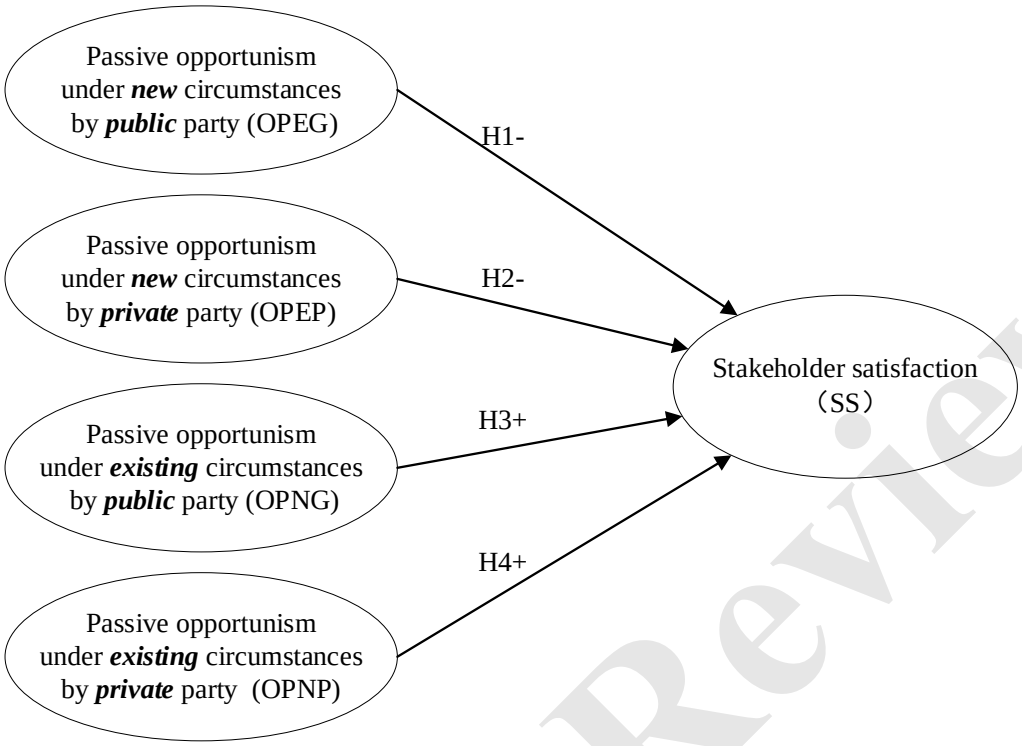

Figure 1 Research model

3. Research Method

3.1 Sampling and data collection

The unit of analysis of this study is PPP projects where both public and private sectors are involved and where opportunism among different actors occurs. With the aim of testing these hypotheses and gain an empirical validation of the hypothesized model. The measurement were adapted from extant literature, especially seminal works addressing opportunism.

The intended population of this research is all PPP projects in China that have finished their build phase. PPPs in their planning, procurement or built phase are excluded from the population, as the opportunism outcome may vary during different phases of PPP projects. The focus on PPPs that have finished their built phase allows for a comprehensive and fair analysis of opportunism outcome and reduces the interference caused by the time frame (Saunders et al., 2016). The sample frame of this research is Public-Private Partnerships Map

in China (CPPPC)[1], which includes PPPs in China that conform to national regulations and industrial standards. As a web-based survey, a hyperlink and a QR (quick response) code were both generated to facilitate data collection.

The initial response rate does not apply to online data collection process. We collect 151 responses and proceed with data cleaning processes. According to Hair et al. (2017, p. 56), this research examined missing data, suspicious response patterns, outliers, and data distribution before the process of model estimation (Hair et al., 2017). Suspicious responses: #35 and #81 were deleted. For response #81, the answers were all 3 (the middle option on the Likert scale) for the initial 70% of the questions in a row. Similarly, for response #35, only 3 (the middle option) was selected for all 51 measurement questions. Seven of the Eight responses (response #130, response #133, response #134, response #148, response #149, response #150 and response #151) were deleted as their amount of missing data exceeded 15%. Value replacement was applied on response #132, considering its relative complete response with only two missing values out of the total 51 measurement questions in the questionnaire. According to the process of data examination steps above, 142 responses were potentially retained for further analysis from the 151 responses collected.

Table 1 Demographics of the Full Sample

Role of organization		Public		Private		Third_party	Missing	Total
	Frequency	82		37		34	1	151
	Percent	54.3		24.5		20.5	0.7	100
Investment of project (Unit: AUD)		less than1billion		1billion-10billion		10billion and more	Missing	Total
	Frequency	50		66		29	6	151
	Percent	33.1		43.7		19.2	4	100
Type of project payment		VGF		User pay		Government pay	Missing	Total
	Frequency	90		14		43	4	151
	Percent	59.6		9.3		28.5	2.6	100
Industry of project		Public	Transport	Environmental protection	Town development	Water conservancy	Others	Missing	Total

[1] CPPPC is responsible for promoting and managing public-private partnerships (PPPs) in China, aiming to facilitate cooperation between the government and private sector to deliver public services and infrastructure projects.

Frequency	38	44	22	19	5	27	1	151
Percent	25.2	29.1	14.6	12.6	3.3	17.9	0.7	100

As illustrated in Table 1, in regard to the sample project info, a majority of them were from public sectors (54.3%), followed by those from private sectors (24.5%), and third parties (20.5%). Regarding the investment of projects in Australian dollars, 33.1% of the projects were valued at less than 1 billion AUD, 43.7% ranged between 1 billion and 10 billion AUD, and 19.2% exceeded 10 billion AUD, with 4% missing data. The type of project payment was predominantly VGF (Viability Gap Funding) at 59.6%, followed by government pay at 28.5%, and user pay at 9.3%, with 2.6% missing. The industry of the projects varied, with 25.2% in public works, 29.1% in transport, 14.6% in environmental protection, 12.6% in town development, 3.3% in water conservancy, and 17.9% in other industries, with 0.7% missing data. In regard to the respondents' info, A significant portion of the respondents (69%) possessed between one and five years of experience in a related field. Approximately 46% of the respondents were employed as consultants, while 23% held positions as project managers or senior project managers. Among the projects, 29% were related to municipal works and 25% to transportation works. The majority of these projects were based in Shandong province (33%), with Henan province (13%) and Hebei province (11%) following.

3.2 Measurement

Since measurement for opportunism is at the core of the research, we thoroughly searched for all available measurement for opportunism (Appendix 2). 117 items were collected from 17 extant scales of opportunism. These items were gathered into 11 general indicator groups according to their semantic meanings. Based on the item pool, semi-structured interviews were conducted with 24 practitioners from PPP projects. During these interviews, we asked the practitioners mainly two questions: (1) suggestions on improving extant scales of opportunism and (2) examples of opportunism in practice to complete extant scales of opportunism. Then, based on data collected and a further review of the relevant literatures, we developed a measurement for passive opportunism (See Table 2).

Table 2 The Measurement for Passive Opportunism

Construct	Indicator	Content
Passive opportunism under existing circumstances by private party (OPEP)	OPEP1	The private party sometimes evades obligations expected based on the formal/informal agreements.
	OPEP2	The private party sometimes withholds effort expected based on the informal agreements.
	OPEP3	The private party sometimes takes advantage of the clauses (in the contract) which have not been paid attention to or have not been clearly understood.
Passive opportunism under new circumstances by private party (OPNP)	OPNP1	When a new situation arises, the private party sometimes refuses to accept more responsibility to protect their own interest.
	OPNP2	When a new situation arises, the private party sometimes fails to provide proper notification.
	OPNP3	When a new situation arises, the private party sometimes conceals unfavourable information.
	OPNP4	When a new situation arises, the private party sometimes refuses to adapt (to the new situation) to protect their own interest.
Passive opportunism under existing circumstances by public party (OPEG)	OPEG1	The public party sometimes evades obligations expected based on the formal/informal agreements.
	OPEG2	The public party sometimes withholds effort expected based on the informal agreements.
	OPEG3	The public party sometimes takes advantage of the clauses (in the contract) which have not been paid attention to or have not been clearly understood.
Passive opportunism under new circumstances by public party (OPNG)	OPNG1	When a new situation arises, the public party sometimes refuses to accept more responsibility to protect their own interest.
	OPNG2	When a new situation arises, the public party sometimes fail to provide proper notification.
	OPNG3	When a new situation arises, the public party sometimes conceals unfavourable information.
	OPNG4	When a new situation arises, the public party sometimes refuses to adapt (to the new situation) to protect their own interest.
Stakeholder Satisfaction (SS)	SS1	This project achieved public satisfaction.
	SS2	This project achieved private satisfaction.
	SS3	This project achieved end-user satisfaction (the people using the PPP projects).

In the questionnaire, developed to test the hypotheses, all questions are closed questions to enable further quantitative analysis (Fink, 2012) Typical five-point Likert scales were used regarding opportunism and stakeholder satisfaction, in which the respondent is asked how

strongly she or he agrees with the statement (1=Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Strongly agree). The demographics questions covers: details of respondents, and details of PPP projects. Key information on demographics is shown in Table 3.1.

Control variables are also included to minimize omitted variable bias concerns (Becker et al., 2016). Therefore, three variables are included which has the potentially correlated with stakeholder satisfaction. These control variables are the features of PPP projects, encompassing the payment method, industry, and modalities of PPP projects. As for payment method, which refers to how the partners of PPP projects are remunerated, it includes viable gap funding (VGF), user pay, and government pay. As for industry, the following industrial sectors are listed, including Energy Transport water, conservancy, Environmental protection, Agriculture, Technology, Municipal works, Sanitation, Sports, Town development, and Culture. The industrial factors are controls due to the inherent difference in risk nature across industries. As for modalities of PPP projects, we include Build-operate-transfer (BOT), Transfer-operate-transfer (TOT), Operations and Maintenance (O&M), and others. The payment method and modalities of PPP projects are included since these control variables involve the distribution of risks among public and private partners (Chan et al., 2011).

Pilot testing was carried out after designing the questionnaire to ensure the face and content validity of the questionnaire. During the pilot testing, a group of experts (both practitioners and scholars) were asked to comment on the expression and the structure of the questionnaire to ensure neutral, clear and systematic questions are presented in the questionnaire. Six pilot tests were conducted based on the suggestion by Fink (2012), and the questionnaire was subsequently adjusted according to comments gathered from pilot testing.

3.3 Common method variance

A sequence of procedures was taken to minimize the risk of common method variance (CMV). (1) Since we are testing sensitive matters, it is imperative that we get the data collected with full assurance of anonymity of respondents. Therefore, our data collection strategies are inherently less susceptible to common method variance issues due to pre-test control (Podsakoff et al., 2003). The pre-test control is launched by ensuring anonymity and confidentiality via data collection processes. Hence, the CMV risks caused by social desirability and evaluation apprehension are reduced. (2) Furthermore, given the nature that we are testing the relationship between an occurred event (opportunism behaviors) associated with

the specific project and the occurred outcome (stakeholder satisfaction) pertaining to the specific project, the reverse causality is highly unlikely. More specifically, since we are assessing the stakeholder relationship after the project completion and the independent variables are in-process opportunism, the risk of reverse causality is minimized. (3) As for post-test control, we have run Harman's single-factor analysis results indicate that the first factor only takes up 22.58% of the variance, which does not cover the majority of the variance (Podsakoff et al., 2003). (4) Furthermore, taking into account the potential constraints of Harman's one-factor test, we utilized the marker variable assessment technique developed by Lindell and Whitney (2001). This strategy entails using a marker variable (years of experience) beyond the variables of interest and comprises partialling out this method variation among our focal variables. Then, we compare these partialled results to their unadjusted results. Since education is not logically related to variables of interest, we choose to utilize it as our marker variable in this research (0 = less than one year of experience; 5 = 20 years of experience or more). All of the paths stays statistically significant after partialling out method variance at the concept level using PLS (Liang et al., 2007), and no path between marker variable and variables of interest becomes significant at $p<0.05$. To sum up, the above-mentioned technique indicates that the CMV is unlikely to be a serious concern.

4. Findings

We follow Hair et al (2017) recommendations on systematic evaluation of PLS-SEM results. We present our analysis processes and findings as following two sections, including measurement models assessment and structural model assessment.

4.1 Measurement model assessment

PLS-SEM was adopted as the main analysis approach, considering the nuanced understanding of this research is new and theory related is less developed (Hair et al., 2017). Moreover, PLS-SEM is also suitable for data that are not normally distributed given the difficulties of gaining data related with opportunism and PPP projects. However, to sure that data is not seriously biased (Hair et al., 2017), prior to the measurement model assessment, data collected was examined for skewness and kurtosis. All constructs were examined for normality and found to be within the range of ±2 standard deviations in skewness, and ±3 in kurtosis, hence they can be assumed to be normally distributed. Table 3 shows the constructs of this research.

Table 3 Construct Descriptions

Construct	N	Minimum	Maximum	Mean	Std. Deviation

OPEP	142	-2.0729	1.94022	0	1
OPNP	141	-2.4107	1.83777	0	1
OPEG	142	-1.8959	2.25665	0	1
OPNG	142	-2.3025	2.10192	0	1
SS	142	-2.3898	2.08038	0	1
Valid N (listwise)	141				

The measurement model assessment follows a three-step process (Hair et al., 2017). Step1, internal consistency reliability was evaluated. Both Cronbach's alpha values and composite reliability (CR) values are located between 0.70 and 0.90 in this research (see Table 4). According to Hair et al., (2017), the value exceeding 0.95 is not considered as desirable. Therefore, the internal consistency reliability test exerts ideal results for subsequent analysis. Step 2, convergent validity includes examination of indicator reliability and average variance extracted (AVE)(Hair et al., 2017). Both outer loadings of the indicators and average variance extracted (AVE) were calculated and they all meet the threshold suggested by Hair et al., (2017), see Table 4 for details. The outer loading exceeds the minimum desirable threshold of 0.708, which indicates a good reliability. In addition, the AVE should be over 0.50 for the assessment of the commonality of a construct (Hair et al., 2017). Step 3, testing cross-loading for assessing discriminant validity. This step is typically realized via cross-loading (Appendix 3) and Heterotrait-Monotrait Ratio (Table 5). The cross-loading results indicate that the divergent validity is acceptable. Furthermore, the HTMT results also validate the discriminant validity of measurement model, that is, all the values are less than 0.9 (Henseler et al., 2015).

Table 4 Table of Construct Reliability and Validity

Construct	Indicator	Outer Loading	Cronbach's Alpha	CR	AVE
OPEG	OPEG1	0.86			
	OPEG2	0.87	0.82	0.89	0.73
	OPEG3	0.84			
OPEP	OPEP1	0.87			
	OPEP2	0.83	0.88	0.9	0.75
	OPEP3	0.90			
OPNG	OPNG1	0.82			
	OPNG2	0.84			
	OPNG3	0.83	0.82	0.91	0.71
	OPNG4	0.88			
OPNP	OPNP1	0.79			
	OPNP2	0.86			
	OPNP3	0.89	0.86	0.92	0.73
	OPNP4	0.88			

SS	SS1	0.79			
	SS2	0.83	0.77	0.86	0.68
	SS3	0.85			

Table 5 Heterotrait-Monotrait Ratio

	OPEG	OPEP	OPNG	OPNP	SS	industry	modalities	Payment method
OPEG								
OPEP	0.845							
OPNG	0.820	0.715						
OPNP	0.629	0.872	0.865					
SS	0.382	0.438	0.352	0.247				
industry	0.045	0.085	0.097	0.045	0.061			
operation	0.122	0.035	0.231	0.133	0.047	0.253		
Payment method	0.086	0.125	0.066	0.106	0.060	0.056	0.168	

4.2 Structural model assessment.

The structural model assessment includes seven steps. The first step is the assessment of collinearity, where we assess standardized root mean square residual (SRMR) and the SRMR is 0.06, which is lower than the standards of 0.08, which indicating a good fit(Hu & Bentler, 1998; Shi et al., 2018). In addition, the VIF values are all lower than 5, which also indicate a good result in terms of collinearity.

The second step is to test structural model path coefficients. The hypothesized relationships are examined in this step. We followed Hair et al. (2017) process for structural model path assessment (See Table 6 for more details). (1) Path OPEG->SS: The path coefficient is β=0.013, with a t-value of 0.103. The p-value of 0.918 exceeds the conventional significance level (α = 0.05), suggesting that the relationship between OPEG and SS is not statistically significant. The confidence interval, ranging from -0.204 to 0.203, includes zero, further supporting the non-significance of this path. Therefore, H1 is rejected. (2) Path OPEP->SS: This path has a coefficient of β=-0.426, a significantly negative relationship, with a t-value of 3.252. The p-value of 0.001 is well below the 0.05 threshold, indicating a statistically significant negative relationship. The 95% confidence interval from -0.633 to -0.201 does not include zero, reinforcing the significance of this relationship. Therefore, H2 is supported. (3) Path OPNG->SS: The path coefficient here is β=-0.286, with a t-value of 2.097. The p-value of 0.036 suggests a statistically significant negative relationship at the 0.05. The confidence interval from -0.477 to -0.300 excludes zero, affirming the significance. This is inconsistent with our H3. Hence, H3 is rejected. (4) Path OPNP->SS: The coefficient is β=0.319 with a t-

value of 2.415, and a p-value of 0.016, indicating a statistically significant positive relationship. The confidence interval ranges from 0.065 to 0.497, not encompassing zero, which supports the significance of this path. Hence, H4 is supported. The supported and unsupported hypotheses are listed in Table 7.

Table 6 Significance Testing Results of the Main Path

Path	Path Coefficients	t values	p values	95% Confidence Intervals	Significance
opeg_ -> ss	0.013	0.103	0.918	[-0.204, 0.203]	No
opep_ -> ss	-0.426***	3.252	0.001	[-0.633, -0.201]	Yes
opng -> ss	-0.286*	2.097	0.036	[-0.477,-0.300]	Yes
opnp -> ss	0.319*	2.415	0.016	[0.065, 0.497]	Yes

The meaning of simple * are: * means P ≤ 0.05, and *** means P ≤ 0.001

The third step is the R^2 value, which is the coefficient of determination. The R^2 is 0.17, which indicates a moderate level of predictive accuracy (Cohen, 1988). The fourth step involves the assessment of the effect size of f^2. The results indicate that f^2 for three independent variables are OPEP (0.088), OPNG (0.041), and OPNP (0.038). These results indicate that a minimum level (0.015) of exogenous latent variable is achieved (Cohen, 1988). The results indicate that the effect size of the construct of OPEP, OPNG, and OPNP on SS is above acceptable level. Furthermore, as for the fifth step, we further test blindfolding and predictive relevance Q^2. The Q2 value is 0.082>0 (minimum threshold) further indicating that the model has predictive relevance for independent variables on SS. The sixth step is q^2, which assess the effect size of q^2, which further reveals the predictive relevance for each independent variable. The q^2 for OPEP is 0.046, q^2 for OPNG is 0.023, q^2 for OPNP is 0.022. These are all above the moderate level of predictive relevance.

The last step, we further check Q2 predict, which reveals the predictive quality of the PLS-SEM analysis for this specific study (Shmueli et al., 2019). The predictive quality is assessed for the structural model by examining whether RMSE of PLS-SEM is lower than RMSE of LM. The results reveal that the RMSE value for all dependent variable indicators is lower than that of LM, that is, for SS 1(0.720<0.797), SS2 (0.684<0.714), and SS3 (0.707<0.756). The further validate the predictive power of our hypothesized model. After the thorough processes of measurement and structural model analysis. We conclude with listed results (Table 7), and highlight the ***positive*** impact of Passive opportunism of the private party under new circumstances (OPNP) on stakeholder satisfaction. (Figure 2)

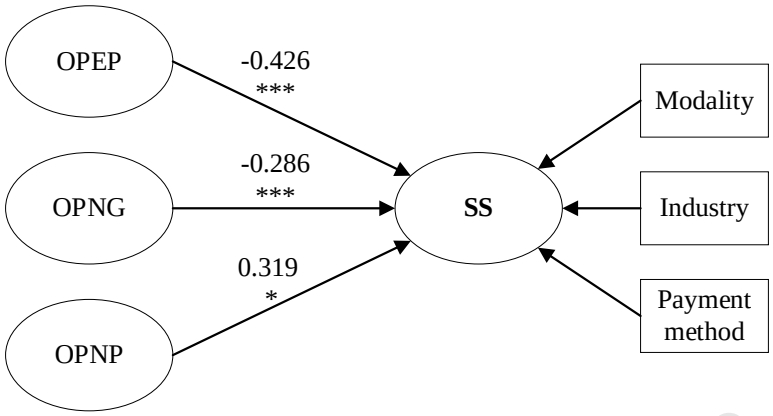

Figure 2 Validated model

Table 7 Result list of Hypothesis

Hypothesis	Result
H1: Passive opportunism of the public party under existing circumstances (OPEG) is ***negatively*** connected to stakeholder satisfaction (SS).	Not Supported
H2: Passive opportunism of the private party under existing circumstances (OPEP) is ***negatively*** connected to stakeholder satisfaction (SS).	Supported
H3: Passive opportunism of the public party under new circumstances (OPNG) is ***positively*** connected to stakeholder satisfaction (SS).	Not Supported
H4: Passive opportunism of the private party under new circumstances (OPNP) is ***positively*** connected to stakeholder satisfaction (SS).	Supported

4.3 Robustness Check

As for robustness, we conducted an additional analysis for validation. We have run the regression analysis to further validate our findings. An additional analysis based on regression was conducted to assess the impact of various predictors on stakeholder satisfaction. The regression analysis revealed significant relationships for several predictors. Specifically, it was found that the presence of a certain element (OPEP) negatively influences SS ($\beta = -0.2608$, $p = 0.003$), while another predictor (OPNP) has a positive impact ($\beta = 0.2142$, $p = 0.030$) on SS. Conversely, another element (OPNG) was found to negatively affect SS ($\beta = -0.1978$, $p = 0.044$). However, other variables such as OPEG, industry, payment method, and modality did not show significant effects. The overall model accounted for approximately 16.49% of the variance in SS, as indicated by the R-squared value. This analysis further supports the complex interplay of various factors influencing stakeholder satisfaction, thus corroborating the hypotheses using an alternative analysis procedure.

5. Discussion

This study found that public and private opportunism results in different consequences under new circumstances. This is a step further from extant understanding on the ongoing call for in-depth understanding of active and passive opportunism (Seggie et al., 2013). By using survey-based data, we have identified that only passive opportunism by private party under new circumstances is positive related with stakeholder satisfaction. However, passive opportunism of the public party under new circumstances is negatively related to stakeholder satisfaction.

What we know about the difference between public and private opportunism is rare and largely based on studies in the field of game theory. Normally these studies focus on when and why public and private opportunism converge or diverge (Mohamed et al., 2011). Meanwhile, extant research tended to discuss the consequences of public and private opportunism separately. For example, research by Liu et al. (2017) is representative of most of the existing PPP research that focused solely on private opportunism. There are also a small number of studies that also measured public opportunism (Wagner, 2019). There is a lack of comparing public and private opportunism in existing research, as limited research was found that focused on both public and private opportunism at the same time. To explain the opposite outcome caused by public and private opportunism under new circumstances, it is necessary to compare public and private parties.

5.1 Benign passive opportunism by private party under new circumstances

By identifying the passive opportunism by private party, we propose a new theoretical perspective of understanding opportunism. That is, Benign opportunism, which refers to the passive practice of leveraging opportunities in a way that is considered non-harmful or even beneficial to others. This is in align with the overt-opportunism perspective in buyer-supplier relationships (Kelly et al., 2018), which is not unfamiliar to the involved parties. Unlike traditional opportunism, which often carries a negative connotation of exploiting situations selfishly or unethically, benign opportunism suggests a positive or neutral impact. This benign opportunism typically characterized when private party is passively failed to do things based on the informal agreement, ignore action or evade obligations expected based on their formal contract. Non-action by private party under new circumstances becomes a protection mechanism that may eventually benefits stakeholder satisfaction. Existing literature has

pointed out the long existence of passive opportunism (Liu, 2022), which can be a compromised relational choices that resolves the conflict between rules or situational dilemma.

Passive opportunism for Avoiding worsening the situation. New circumstances might mean that the old rules based on existing contract may no longer hold. One possible explanation can be that the passive opportunism by private party which typically knows better about the PPP projects, is able to see the harm that immediate contract-based action can bring about. Private party using non-action, as may regarded as passive opportunism, can reversely become a protection mechanism from both parties to be drawn into a worse scenario. Analysing the situation and coming up with a better solution than the contract-based routine move can definitely be a customized coping strategy. In this case, private party, as a knowledge and experience-intensive party, can leverage its advantage to generate the best judgment and solutions for PPP projects and all other stakeholders. This is also a validation of a failed contract, which highlights the harm of incompleteness or binding, especially when contracts are dogmatically followed rather than flexibly leveraged. So, avoiding blindly following the contract under unprecedented circumstances, does not necessarily harm others and may, in fact, lead to mutually beneficial outcomes. This especially true for emerging countries (Almeile et al., 2024), when informal rules may in conflict with formal rules. The private party has to make a compromise in between.

Illustrative case: By consulting with practitioners, we have identified when passively breaking the informal rules can be beneficial for not worsening the situation. That is, when the road projects are in very tight schedule due to local government instructions for certain events. The private sector has to break the rules of "no working overtime, and no working during the quite hours, etc", which might seem to be causing trouble for local communities or employees. The project has been delivered on time by breaking some informal safety standards, causing temporary additional noises and reducing employee welfares. Eventually the on-time delivery of the projects satisfies the key stakeholders.

Passive opportunism for avoiding escalating the inter-organizational conflict. New circumstances can be salient source for task and interorganizational conflicts. If involved parties are wrongfully caught up into a fight or blaming each other for causing the changes or unable of avoiding the uncertainties, the harmonious scene can turn ugly. A gesture of passive opportunism by private party, typically taking form of non-action against existing contract, can be a good move to calm involved parties down. We argue that when unexpected

misunderstanding is escalated and become relational clashes, no body could easily walk out without loss or harm. Hence, given the nature that public party may typically have moral duties to follow rules obligatorily, the private party may take a beneficial role of saving relationship by taking non-actions against contracts. In other words, when circumstances rises, it is not wise to focusing losses or pointing fingers, but better choose to maintain calm and friendly to show care and breed reciprocity.

Illustrative case: A construction company (Company A) was contracted by a client (Client B) to build a new facility in an environmentally sensitive area, requiring the use of specific, but scarce and expensive, environmentally friendly materials. Client B expected strict adherence to these specifications, per an informal agreement on environmental stewardship. Facing supply chain disruptions that threatened project delays, Company A chose an equally sustainable, more available, and cost-effective alternative material without initially consulting Client B. This decision wasn't explicitly authorized by the formal contract. Company A documented the alternative material's environmental benefits and cost savings in detail. When Client B reviewed the project progress and discovered the deviation, Company A provided a comprehensive report with expert validations, showing that the alternative maintained the schedule and offered similar environmental benefits at a lower cost. This proactive approach ultimately satisfied all stakeholders, demonstrating effective management when formal and informal rules conflicted.

5.2 Typical passive opportunisms

Two types of passive opportunisms are validating as negative predictor for stakeholder satisfactions, which are Passive opportunism of the private party under existing circumstances and Passive opportunism of the public party under new circumstances. The findings are consistent with traditional wisdom that opportunisms are generally negatively associated with stakeholder satisfaction. In this case, the former indicate the negative role of passive opportunism of the private party under existing circumstances, which highlight that any opportunism occurring at a business as usual will triggers unwanted destructions or devastation among stakeholders. Breaking deal, even via inconspicuous ways, with partners, can leads to conflicts or failure of partnerships.

The latter, which is passive opportunism of the public party under new circumstances, is different from what has been hypothesized. We argue that public party's passive opportunism is inherently detrimental. Even though new circumstances can complicate the situation,

private parties are typically the victims of these opportunisms. We propose that given the nature of institutional voids in emerging countries (Mair & Marti, 2009), where markets or regulations are absent, weak, or fail to fulfill their expected role. These institutional voids safeguards public sector from being affected by uncertainties, and making them less likely to caring for other affected parties. More specifically, we argue that public sectors are inherently more immune to the disastrous impact of uncertainties than private sectors, which leaves public sectors with a comparative advantage to act with less caution. Institutional voids allow the powerful party, in this case, the public sector, to possess resources and opportunities, and passive opportunisms of public party will exert detrimental impact on stakeholder satisfaction.

5.3 Insignificant role of Passive opportunism of the public party under existing circumstances

The unvalidated impact of passive opportunism of the public party under existing circumstances can be further explained also with institutional voids theory (Dieleman et al., 2022). That is, the dominant role of governments in PPP projects often allows themselves to become authority, due to the absence or weakness of formal institutions (Kraatz et al., 2008). Therefore, the passive opportunism under existing circumstances by public party can be easily absorbed or legitimized as informal institutions (Rugman, 2009), so that fewer disagreement occurs, and stakeholders may take it for granted. Similarly, Wang & Yang (2013) found that there is no direct association between opportunism and stakeholder satisfaction and their relationship was mediated by commitment. Moreover, Barnes et al. (2010) also found that conflict as a behavioral factor mediated the relationship between opportunism and stakeholder satisfaction in both international and Chinese contexts. These findings validate the absence of direct impact of passive opportunism of the public party under existing circumstances on stakeholder satisfaction.

6 Conclusion

6.1 Theoretical contributions

Our findings contribute to an improved understanding of the theoretical complication of opportunism (Wathne & Heide, 2000) by empirically validating the positive effect of passive opportunism under new circumstances by private party on stakeholder satisfaction (Heese & Kemahlioglu-Ziya, 2014). We explore a nuanced understanding that opportunism, especially passive by private sector, can be a neutral or even beneficial factor for stakeholder satisfaction under new circumstances. By suggesting that these non-action against contractual binding as

a way to avoiding conflicts or prevention of deterioration from the status quo, we claim that contractual agreement is not always the *golden bible* to follow, but the best expertise-based judgment of private parties should be the source of coping strategies. This finding further elaborates how passive mechanisms is not always detrimental and there is no point in maximizing efforts to eliminate all possible opportunism. We propose a benign opportunism concept that not all opportunism is harmful at all times by all parties. The heterogeneous parties may reshape the impact of passive opportunism on stakeholder satisfaction. A reasonable room for benign opportunism can protect involved parties suffering from unintended losses due to being blinded following contract terms.

In addition, we also contribute to stakeholder theory in project management literature by identifying the positive facilitating mechanisms brought by benign opportunism. The research findings suggest the design of PPP governance should be less focused on reducing opportunism, but rather leverage a limited yet reasonable room for relational flexibility to allow the vested interests of involved parties to be realized and fairly distributed. This is particularly useful in emerging countries, where institutional voids prevails. Our finding adds to the existing dynamic understanding of stakeholder engagement (Yang et al., 2022). That is, the stakeholders need to form a dynamic engagement mode with relative loosen control on following specific rules, especially when adversities and uncertainties prevails. Furthermore, stakeholder satisfaction is at the core of inter-organizational projects, where understanding the nuanced role of opportunisms offers a novel perspective in promoting stakeholder satisfaction.

6.2 Practical implications

In the practice of PPP projects, the design of governance mechanisms has a tendency to add extra clauses to control and reduce opportunism. However, through the investigation of opportunism consequence, it has been found that the negative consequence of opportunism is not always true. There are even situations when opportunism has positive consequences. With an adequate understanding of opportunism consequence, this research suggests a rational focus on opportunism reduction in PPP projects.

This study further suggested a focus shift from opportunism reduction to opportunism discrimination in practice. Unlike other forms of opportunism, private opportunism under new circumstances has no negative impact on stakeholder satisfaction. Active opportunism under new circumstances by a private party can even increase stakeholder satisfaction in PPP

projects. As the consequences vary from the forms of opportunism, this research suggests that practitioners should not simply be against opportunism without differentiating the forms of opportunism.

6.3 Limitation and future research

Our research also has several limitations, which might suggest future directions. The first limitation is the contextual limitation which due to choice of research context in China, where institutional voids prevails due to its nature of emerging countries. This might indicate that different nuanced insights might be available for other developed countries.

Secondly, this study identifies the positive and negative roles of different opportunism but has not provided governance mechanisms to mitigate it. Further studies need to be carried out in order to validate opportunism categories with an aim to design corresponding governance mechanisms. Distinguishing opportunism into various forms is also critical to governance design in practice. According to Wathne & Heide (2000), although the extant literature has identified a range of possible strategies for governance, the strategies have not always been linked with particular forms of opportunism.

Thirdly, there is a need for further study of active and passive opportunism. As one of the most widely-accepted classifications of opportunism, active and passive opportunism share less similar consequences than what is believed from existing research. In particular, their direct consequence on partnership has been proved to be similar in a few studies (Seggie et al., 2013; Wathne & Heide, 2000). However, research on the distinction between active and passive opportunism is still essential as active and passive opportunism may require different ways of governance (W. Lu et al., 2016; Luo, 2006). The exploration of the similarity and distinction between active and passive opportunism should help us to better understand partnerships, leading to a more efficient design of opportunism governance in partnerships.

References

Almeile, A. M., Chipulu, M., Ojiako, U., Vahidi, R., & Marshall, A. (2024). Project-focussed literature on public-private partnership (PPP) in developing countries: a critical review. *Production Planning & Control*, *35*(7), 683–710. https://doi.org/10.1080/09537287.2022.2123408

Barnes, B. R., Leonidou, L. C., Siu, N. Y. M., & Leonidou, C. N. (2010). Opportunism as the Inhibiting Trigger for Developing Long-Term-Oriented Western Exporter–Hong Kong Importer Relationships. *Journal of International Marketing*, *18*(2), 35–63. https://doi.org/10.1509/jimk.18.2.35

Becker, T. E., Atinc, G., Breaugh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior*, *37*(2), 157–167. https://doi.org/10.1002/job.2053

Beuve, J., Moszoro, M. W., & Saussier, S. (2019). Political contestability and public contract rigidity: An analysis of procurement contracts. *Journal of Economics & Management Strategy*, *28*(2), 316–335. https://doi.org/10.1111/jems.12268

Bruce, J. R., de Figueiredo, J. M., & Silverman, B. S. (2019). Public contracting for private innovation: Government capabilities, decision rights, and performance outcomes. *Strategic Management Journal*, *40*(4), 533–555. https://doi.org/10.1002/smj.2973

Carson, S. J., Madhok, A., & Wu, T. (2006). Uncertainty, opportunism, and governance: The effects of volatility and ambiguity on formal and relational contracting. *Academy of Management Journal*, *49*(5), 1058–1077.

Chan, A. P. C., Yeung, J. F. Y., Yu, C. C. P., Wang, S. Q., & Ke, Y. (2011). Empirical Study of Risk Assessment and Allocation of Public-Private Partnership Projects in China. *Journal of Management in Engineering*, *27*(3), 136–148. https://doi.org/10.1061/(ASCE)ME.1943-5479.0000049

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd Ed.). Routledge.

Crosno, J. L., Manolis, C., & Dahlstrom, R. (2013). Toward understanding passive opportunism in dedicated channel relationships. *Marketing Letters*, *24*(4), 353–368. https://doi.org/10.1007/s11002-012-9220-3

Cuypers, I. R. P., Hennart, J.-F., Silverman, B. S., & Ertug, G. (2021). Transaction Cost Theory: Past Progress, Current Challenges, and Suggestions for the Future. *Academy of Management Annals*, *15*(1), 111–150. https://doi.org/10.5465/annals.2019.0051

Das, T. K., & Kumar, R. (2011). Regulatory Focus and Opportunism in the Alliance Development Process. *Journal of Management*, *37*(3), 682–708. https://doi.org/10.1177/0149206309356325

Dieleman, M., Markus, S., Rajwani, T., & White, G. O. (2022). Revisiting Institutional Voids: Advancing the International Business Literature by Leveraging Social Sciences. *Journal of International Management*, *28*(3), 100935. https://doi.org/10.1016/j.intman.2022.100935

Fink, A. (2012). *How to conduct surveys: A step-by-step guide: A step-by-step guide*. Sage Publications.

Flyvbjerg, B., Skamris Holm, M. K., & Buhl, S. L. (2005). How (In)accurate Are Demand Forecasts in Public Works Projects?: The Case of Transportation. *Journal of the*

American Planning Association, *71*(2), 131–146. https://doi.org/10.1080/01944360508976688

Haaskjold, H., Andersen, B., & Langlo, J. A. (2023). Dissecting the project anatomy: Understanding the cost of managing construction projects. *Production Planning & Control*, *34*(2), 117–138. https://doi.org/10.1080/09537287.2021.1891480

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2 ed.). Sage Publications.

Heese, H. S., & Kemahlioglu-Ziya, E. (2014). Enabling Opportunism: Revenue Sharing when Sales Revenues are Unobservable. *Production and Operations Management*, *23*(9), 1634–1645. https://doi.org/10.1111/poms.12163

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, *3*(4), 424–453. https://doi.org/10.1037/1082-989X.3.4.424

Jap, S. D., & Anderson, E. (2003). Safeguarding Interorganizational Performance and Continuity Under Ex Post Opportunism. *Management Science*, *49*(12), 1684–1701. https://doi.org/10.1287/mnsc.49.12.1684.25112

Kelly, S., Wagner, B., & Ramsay, J. (2018). Opportunism in buyer–supplier exchange: a critical examination of the concept and its implications for theory and practice. *Production Planning & Control*, *29*(12), 992–1009. https://doi.org/10.1080/09537287.2018.1495772

Kraatz, M., Block, E., Davis, J., Glynn, M., Hoffman, A., Jones, C., Lounsbury, M., Oliver, C., Pratt, M., Phillips, N., Schneiberg, M., Spicer, A., Thornton, P., Ven, A., & Zajac, E. (2008). *Organizational implications of institutional pluralism*.

Li, S., Kang, M., & Haney, M. H. (2017). The effect of supplier development on outsourcing performance: the mediating roles of opportunism and flexibility. *Production Planning & Control*, *28*(6–8), 599–609. https://doi.org/10.1080/09537287.2017.1309711

Liang, H. G., Saraf, N., Hu, Q., & Xue, Y. J. (2007). Assimilation of enterprise systems: The effect of institutional pressures and the mediating role of top management. *MIS QUARTERLY*, *31*(1), 59–87.

Liu, C.-Y. (2022). Opportunistic strategy under cooperation: Subtle, deceitful practices in Taiwan's agri-food supply chain. *Corporate Management Review*, *42*(1), 1–35.

Liu, J., Gao, R., Cheah, C. Y. J., & Luo, J. (2016). Incentive mechanism for inhibiting investors' opportunistic behavior in PPP projects. *International Journal of Project Management*, *34*(7), 1102–1111. https://doi.org/10.1016/j.ijproman.2016.05.013

Liu, J., Gao, R., Cheah, C. Y. J., & Luo, J. (2017). Evolutionary game of investors' opportunistic behaviour during the operational period in PPP projects. *Construction*

Management and Economics, *35*(3), 137–153. https://doi.org/10.1080/01446193.2016.1237033

Liu, J., Love, P. E. D., Smith, J., Matthews, J., & Sing, C.-P. (2016). Praxis of Performance Measurement in Public-Private Partnerships: Moving beyond the Iron Triangle. *Journal of Management in Engineering*, *32*(4). https://doi.org/10.1061/(ASCE)ME.1943-5479.0000433

Lopez del Puerto, C., & Shane, J. S. (2014). Keys to Success in Megaproject Management in Mexico and the United States: Case Study. *Journal of Construction Engineering and Management*, *140*(4). https://doi.org/10.1061/(ASCE)CO.1943-7862.0000476

Lu, P., Guo, S., Qian, L., He, P., & Xu, X. (2015). The effectiveness of contractual and relational governances in construction projects in China. *International Journal of Project Management*, *33*(1), 212–222. https://doi.org/10.1016/j.ijproman.2014.03.004

Lu, W., Zhang, L., & Zhang, L. (2016). Effect of Contract Completeness on Contractors' Opportunistic Behavior and the Moderating Role of Interdependence. *Journal of Construction Engineering and Management*, *142*(6). https://doi.org/10.1061/(ASCE)CO.1943-7862.0001110

Lumineau, F., & Oliveira, N. (2020). Reinvigorating the Study of Opportunism in Supply Chain Management. *Journal of Supply Chain Management*, *56*(1), 73–87. https://doi.org/10.1111/jscm.12215

Lundin, R. A., & Söderholm, A. (1995). A theory of the temporary organization. *Scandinavian Journal of Management*, *11*(4), 437–455. https://doi.org/https://doi.org/10.1016/0956-5221(95)00036-U

Luo, Y. (2006). Opportunism in Inter-firm Exchanges in Emerging Markets. *Management and Organization Review*, *2*(1), 121–147. https://doi.org/10.1111/j.1740-8784.2006.00032.x

MACNEIL, I. R. (1978). Contracts: Adjustment of Long-Term Economic Relations Under Classical, Neoclassical, and Relational Contracts. *Northwestern University Law Review*, *72*(6), 854–905.

Mair, J., & Marti, I. (2009). Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of Business Venturing*, *24*(5), 419–435. https://doi.org/10.1016/j.jbusvent.2008.04.006

Mohamed, K. A., Khoury, S. S., & Hafez, S. M. (2011). Contractor's decision for bid profit reduction within opportunistic bidding behavior of claims recovery. *International Journal of Project Management*, *29*(1), 93–107. https://doi.org/10.1016/j.ijproman.2009.12.003

Moschandreas, M. (1997). The Role of Opportunism in Transaction Cost Economics. *Journal of Economic Issues*, *31*(1), 39–58. https://doi.org/10.1080/00213624.1997.11505890

Perrow, C. (1986). Economic theories of organization. *Theory and Society*, *15*(1–2), 11–45. https://doi.org/10.1007/BF00156926

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Qiu, Y., Chen, H., Sheng, Z., & Cheng, S. (2019). Governance of institutional complexity in megaproject organizations. *International Journal of Project Management*, *37*(3), 425–443. https://doi.org/10.1016/j.ijproman.2019.02.001

Rugman, A. M. (Ed.). (2009). *The Oxford Handbook of International Business*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199234257.001.0001

Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research methods for business students* (7 ed.). Pearson education.

Seggie, S. H., Griffith, D. A., & Jap, S. D. (2013). Passive and Active Opportunism in Interorganizational Exchange. *Journal of Marketing*, *77*(6), 73–90. https://doi.org/10.1509/jm.11.0529

Shi, D., Maydeu-Olivares, A., & DiStefano, C. (2018). The Relationship Between the Standardized Root Mean Square Residual and Model Misspecification in Factor Analysis Models. *Multivariate Behavioral Research*, *53*(5), 676–694. https://doi.org/10.1080/00273171.2018.1476221

Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J.-H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: guidelines for using PLSpredict. *European Journal of Marketing*, *53*(11), 2322–2347. https://doi.org/10.1108/EJM-02-2019-0189

Tang, Y., Chen, Y., Yao, H., & Chen, Y. (2023). When does control curb opportunistic behaviour: evidence from the construction industry. *Production Planning & Control*, 1–15. https://doi.org/10.1080/09537287.2023.2166882

Um, K.-H., & Kim, S.-M. (2018). Collaboration and opportunism as mediators of the relationship between NPD project uncertainty and NPD project performance. *International Journal of Project Management*, *36*(4), 659–672. https://doi.org/10.1016/j.ijproman.2018.01.006

Wagner, D. N. (2019). The Opportunistic Principal. *Kyklos*, *72*(4), 637–657. https://doi.org/10.1111/kykl.12213

Wang, X., & Yang, Z. (2013). Inter-firm opportunism: a meta-analytic review and assessment of its antecedents and effect on performance. *Journal of Business & Industrial Marketing*, *28*(2), 137–146. https://doi.org/10.1108/08858621311295272

Wang, Y., Cui, P., & Liu, J. (2018). Analysis of the risk-sharing ratio in PPP projects based on government minimum revenue guarantees. *International Journal of Project Management*, *36*(6), 899–909. https://doi.org/10.1016/j.ijproman.2018.01.007

Wathne, K. H., & Heide, J. B. (2000). Opportunism in Interfirm Relationships: Forms, Outcomes, and Solutions. *Journal of Marketing*, *64*(4), 36–51. https://doi.org/10.1509/jmkg.64.4.36.18070

Williams, T., Klakegg, O. J., Walker, D. H. T., Andersen, B., & Magnussen, O. M. (2012). Identifying and Acting on Early Warning Signs in Complex Projects. *Project Management Journal*, *43*(2), 37–53. https://doi.org/10.1002/pmj.21259

Williamson, O. E. F. P. (1985). *The economic institutions of capitalism: Firms, markets, relational contractiong*. Free Press.

Wu, A., Wang, Z., & Chen, S. (2017). Impact of specific investments, governance mechanisms and behaviors on the performance of cooperative innovation projects. *International Journal of Project Management*, *35*(3), 504–515. https://doi.org/10.1016/j.ijproman.2016.12.005

Yang, X., Wang, L., Zhu, F., & Müller, R. (2022). Prior and governed stakeholder relationships: The key to resilience of inter-organizational projects. *International Journal of Project Management*, *40*(1), 64–75. https://doi.org/10.1016/j.ijproman.2021.10.001

Yao, H., Chen, Y., Zhang, Y., Zhang, M., & Zhang, Y. (2023). Managing contract violations in construction projects: a moderated mediating model of enforcement decisions. *Production Planning & Control*, *34*(8), 677–688. https://doi.org/10.1080/09537287.2021.1951390

Ye, X., Shi, S., Chong, H.-Y., Fu, X., Liu, L., & He, Q. (2018). Empirical Analysis of Firms' Willingness to Participate in Infrastructure PPP Projects. *Journal of Construction Engineering and Management*, *144*(1). https://doi.org/10.1061/(ASCE)CO.1943-7862.0001404

Zahra, S. A. (2007). An embeddedness framing of governance and opportunism: towards a cross-nationally accommodating theory of agency—critique and extension. *Journal of Organizational Behavior*, *28*(1), 69–73. https://doi.org/10.1002/job.404

Zalata, A. M., Ntim, C. G., Choudhry, T., Hassanein, A., & Elzahar, H. (2019). Female directors and managerial opportunism: Monitoring versus advisory female directors. *The Leadership Quarterly*, *30*(5), 101309. https://doi.org/10.1016/j.leaqua.2019.101309

Zhang, L., & Qian, Q. (2017). How mediated power affects opportunism in owner–contractor relationships: The role of risk perceptions. *International Journal of Project Management*, *35*(3), 516–529. https://doi.org/10.1016/j.ijproman.2016.12.003

Appendix 1 summaries on empirical validations on topics of opportunism

Study	Post-ante	Ex-ante	Forms	Ontological level	Respondents
(John, 1984)		Formalization(+), Centralization(+), Surveillance (+)		Channel relationships	Retail dealers of an oil company
(Achrol & Gundlach, 1999)		Centralization (+), Relational norms (-)		Exchange relationship	Undergraduates from a marketing course.
(Brashear et al., 2003)	Trust (-)			Sales manager–salesperson relationships	Business-to-business salespeople from a variety of industries
(Barnes et al., 2010)	Conflict (+) Trust (-)			Exporter-importer relationships	Hong Kong Chinese importers
(Mysen et al., 2011)	Commitment (-) Trust (-)	Turbulence (+), Dependence (+)		Business relationships	Small- and medium-sized manufacturers and their suppliers in Norway
(Wu et al., 2017)	Performance (-)	Contracts (+,failed), Trust (-)		Cooperative innovation projects	Chinese high-tech enterprises
(Zhang & Qian, 2017)		Relational risk perception (+)	Contractor opportunism	Owner–contractor relationships	Employees and agents of contractors in managerial positions in construction projects
(Lu et al., 2015)	Project performance (-, failed)	Contractual governance (-, failed), relational governance (-)		Construction project	Construction projects in China
(Seggie et al., 2013)	Satisfaction (-)		Passive opportunism Active opportunism	Interorganizational relationships	Manufacturing industries
(Wang et al., 2016)		Contracts (-), Trust(-)	Supplier opportunism	Buyer-supplier relationships	Manufacturing firms in China
(Um & Kim, 2018)	Project performance (-)	Project complexity(+)		New product development projects	Korean manufacturing firms
(Kashyap et al., 2012)		Behaviour monitoring (-), Output monitoring (+), Enforcement(-)	Franchisee opportunism	Channel relationships	Automobile franchisees in United States
(Crosno & Dahlstrom, 2016)	Satisfaction(-), patterner opportunism(+), patterner commitment (-)	Investment (+)		Buyer-Supplier relationships	Managers of consumer electronics retail stores in Norway
(Paswan et al., 2017)	Participation(-), Formalization(-), Solidarity(--), Role Integrity(-), Mutuality(-)			Channel relationships	Pharmaceutical industry
(Wang et al., 2017)		Resource dependence (+), Policy uncertainty (+)		International joint ventures	International joint ventures in China
(Zhang et al., 2017)		Formalization(-)		Interfirm relationships	Manufacturing firms from ten industries in China

(Liu et al., 2014)		Investment (+)	Week form opportunism, Strong form opportunism	Channel relationships	Suppliers and distributors in the Chinese household appliances industry
(Lu et al., 2016)	Project performance(-, failed), Relationship satisfaction(-), Trust(-)	Uncertainty(+), Complexity(+,failed), Trust(-)		Construction projects	Construction projects in China

Achrol, R. S., & Gundlach, G. T. (1999). Legal and social safeguards against opportunism in exchange. *Journal of Retailing, 75*(1), 107-124. 10.1016/S0022-4359(99)80006-2

Barnes, B. R., Leonidou, L. C., Siu, N. Y., & Leonidou, C. (2010). Opportunism as the inhibiting trigger for developing long-term-oriented Western exporter–Hong Kong importer relationships. *Journal of International Marketing, 18*(2), 35-63.

Brashear, T. G., Boles, J. S., Bellenger, D. N., & Brooks, C. M. (2003). An empirical test of trust-building processes and outcomes in sales manager–salesperson relationships. *Journal of the Academy of Marketing Science, 31*(2), 189-200. 10.1177/0092070302250902

Crosno, J. L., & Dahlstrom, R. F. (2016). An empirical investigation of bilateral investments and opportunism in buyer-supplier relationships. *Journal of Marketing Channels, 23*(3), 146-156. 10.1080/1046669X.2016.1186473

John, G. (1984). An empirical investigation of some antecedents of opportunism in a marketing channel. *Journal of Marketing Research, 21*(3). 10.2307/3151604

Kashyap, V., Antia, K. D., & Frazier, G. L. (2012). Contracts, extracontractual incentives, and ex postbehavior in franchise channel relationships. *Journal of Marketing Research, 49*(2), 260-276. 10.1509/jmr.09.0337

Liu, Y., Liu, T., & Li, Y. (2014). How to inhibit a partner's strong and weak forms of opportunism: Impacts of network embeddedness and bilateral TSIs. *Industrial Marketing Management, 43*(2), 280-292. 10.1016/j.indmarman.2013.08.010

Lu, P., Guo, S., Qian, L., He, P., & Xu, X. (2015). The effectiveness of contractual and relational governances in construction projects in China. *International Journal of Project Management, 33*(1), 212-222. 10.1016/j.ijproman.2014.03.004

Lu, P., Qian, L., Chu, Z., & Xu, X. (2016). Role of opportunism and trust in construction projects: Empirical evidence from China. *Journal of Management in Engineering, 32*(2), 05015007.

Mysen, T., Svensson, G., & Payan, J. M. (2011). The key role of opportunism in business relationships. *Marketing Intelligence & Planning, 29*(4), 436-449. 10.1108/02634501111138581

Paswan, A. K., Hirunyawipada, T., & Iyer, P. (2017). Opportunism, governance structure and relational norms: An interactive perspective. *Journal of Business Research, 77*, 131-139. 10.1016/j.jbusres.2017.04.012

Seggie, S. H., Griffith, D. A., & Jap, S. D. (2013). Passive and active opportunism in interorganizational exchange. *Journal of Marketing, 77*(6), 73-90. 10.1509/jm.11.0529

Um, K.-H., & Kim, S.-M. (2018). Collaboration and opportunism as mediators of the relationship between NPD project uncertainty and NPD project performance. *International Journal of Project Management, 36*(4), 659-672. 10.1016/j.ijproman.2018.01.006

Wang, L., Sheng, S., Wu, S., & Zhou, K. Z. (2017). Government role, governance mechanisms, and foreign partner opportunism in IJVs. *Journal of Business Research, 76*, 98-107. 10.1016/j.jbusres.2017.03.009

Wang, M., Zhang, Q., Wang, Y., & Sheng, S. (2016). Governing local supplier opportunism in China: Moderating role of institutional forces. *Journal of Operations Management, 46*, 84-94. 10.1016/j.jom.2016.07.001

Wu, A., Wang, Z., & Chen, S. (2017). Impact of specific investments, governance mechanisms and behaviors on the performance of cooperative innovation projects. *International Journal of Project Management, 35*(3), 504-515. 10.1016/j.ijproman.2016.12.005

Zhang, C., Li, J. J., & Huang, Y. (2017). Sustaining relationships after opportunism and misunderstanding: the role of formalization and socialization. *Marketing Letters, 28*(2), 305-319. 10.1007/s11002-016-9414-1

Zhang, L., & Qian, Q. (2017). How mediated power affects opportunism in owner–contractor relationships: The role of risk perceptions. *International Journal of Project Management, 35*(3), 516-529. 10.1016/j.ijproman.2016.12.003

Appendix 2. Opportunism measurement from seminal works in extant literature.

No.	Reference	Context/No. Items	Construct	Exemplar items (for full scale please see the cited article)
1	(John 1984)	Marketing/2	Opportunism	Sometimes, I have to alter the facts slightly in order to get what I need.
2	(Brown et al. 2000; Kashyap et al. 2012)	Marketing/7	Opportunism	In order to maintain our goals, we occasionally find it necessary to neglect some of our obligations to our headquarters.
3	(Wu et al. 2017)	Innovation projects/6	Opportunism	The partner has always provided us a completely truthful picture of their abilities.
4	(Zhang & Qian 2017)	Construction/8	Opportunism	On occasion, we lie about certain things in order to protect our interests. Heide et al. (2007)
5	(Heide et al. 2007)	Marketing/6	Opportunism	On occasion, we lie about certain things in order to protect our interests.
6	(Wang et al. 2016)	Buyer-supplier relationships/3	Opportunism	This supplier sometimes promises to do things without actually doing them later.
7	(Um & Kim 2018)	Innovation projects/4	Opportunism	The partnering firm exaggerates needs to get what it desires
8	(Brashear et al. 2003)	Manager–Salesperson Relationships/4	Opportunism	Alters the facts slightly in order to get what he or she wants.
9	(Crosno 2007)	Marketing/24	Active/Passive opportunism	Engage in action that is implicitly forbidden.
10	(Seggie et al. 2013)	Interorganizational/6	Active /Passive opportunism	They make false accusations.
11	(Padma et al. 2017)	PPP/4	Opportunism	In order to get our support, our partner tends to conceal unfavorable information from us.
12	(You et al. 2018)	Construction/6	Opportunism	Our partner may incompletely disclose information to us in order to benefit at our expense.
13	(Carson et al. 2006)	R&D/8	Opportunism	The contractor sometimes exaggerated the necessity of changes it wanted to the development plan or budget.
14	(Provan & Skinner 1989)	Interorganizational/9	Opportunism	I have always provided my primary supplier a completely truthful picture of my business.
15	(Rokkan et al. 2003)	Interorganizational/6	Opportunism	On occasion, this supplier lies about certain things in order to protect their interests.
16	(Jap & Anderson 2003)	Interorganizational/8	expost	When a problem occur, they make hollow promises.
17	(Crosno et al. 2013)	Marketing/5	passive	Fail to do things that are expected based on their informal agreements.

Appendix 2. Cross-loading

	OPEG	*OPEP*	*OPNG*	*OPNP*	*SS*
OPEG1	**0.855**	0.655	0.602	0.461	-0.258
OPEG2	**0.868**	0.644	0.572	0.469	-0.269
OPEG3	**0.843**	0.485	0.582	0.435	-0.268
OPEP1	0.584	**0.871**	0.464	0.58	-0.306
OPEP2	0.625	**0.83**	0.539	0.62	-0.3
OPEP3	0.596	**0.895**	0.575	0.727	-0.315
OPNG1	0.548	0.542	**0.824**	0.631	-0.283
OPNG2	0.601	0.491	**0.841**	0.609	-0.237
OPNG3	0.62	0.504	**0.825**	0.651	-0.205
OPNG4	0.552	0.507	**0.878**	0.655	-0.261
OPNP1	0.39	0.632	0.593	**0.794**	-0.16
OPNP2	0.433	0.614	0.649	**0.859**	-0.187
OPNP3	0.53	0.682	0.663	**0.887**	-0.166
OPNP4	0.469	0.622	0.676	**0.88**	-0.194
SS1	-0.175	-0.242	-0.189	-0.129	**0.793**
SS2	-0.269	-0.29	-0.243	-0.168	**0.825**
SS3	-0.305	-0.334	-0.288	-0.205	**0.853**