Resource allocation:
the hidden power of cooperative exchange

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Abstract
The article examines how cooperative exchange optimises resource allocation in the Chinese construction industry. In advancing the theory of exchange, we develop a model to assess the link between the solidarity of bonds and choices under uncertainty. To conceptualize it, we propose that monopolistic control by the government over land and capital operates as the anchor of activation to construct trust and commitment formations for making cooperative value and behaviour coherent. Within the confined boundary, the conscious intuitions of interpersonal power explain choice adjustments to a defined input for reducing gaps between expectations and interests. The coordinated transactions through a recurring cycle of giving, receiving, and repaying reinforce trade-offs devoid of liability risks. We use the construction industry as our research site to capture critical challenges with direct relevance to firms in emerging markets. We find that the exchange costs of trust and commitment overweigh the benefits of allocation by setting up new impediments to firms' efficiency. Our study advocates an inquiry into the adverse effects of allocation for guiding future research on organisational responses to exchange desires, offerings, and ramifications.

Key Words: resource allocation, cooperative exchange, trust-commitment formations, choice adjustments, coordinated transactions

1. Introduction

The Chinese construction industry is resource-intensive. To remain competitive in the market, firms manage, rather than live with, market failures inherent in government control. The term misallocation refers to transferring resources from one party to another by the government to correct the unfocused distribution of goods and services (Hsieh & Klenow, 2009; Gilchrist *et al*, 2013). The rationale behind this policy sounds, but the resulting market imperfections deny access of marginalized firms to the resources they need. A growing body of research finds that the practice of preferential treatment by the government over capital and land distorts the market mechanism of fair competition, but also creates inefficiency across the industry (Lin, 2012; Acemoglu & Verdier, 2000; Banerjee & Moll, 2010).

With pervasive misallocation, the arrangements of shared value and cooperative behaviour affect the structure of engagement. By focusing on reciprocity as the core of social solidarity for benefits, the theory of exchange gains widespread attention (Cropanzano & Mitchell, 2005; Molm *et al*, 2007; Bolton & Ockenfels, 2000). The literature suggests that indirect exchange produces greater solidarity than direct exchange. In the end, the structure of exchange defines the solidarity of bonds, not the other way around (Levi-Strauss, 1969; Molm *et al*, 2007; Jones *et al*, 1997). Although insightful, it presents an intriguing puzzle that defies such an explanation. First, the market is challenging the traditional concept of utility maximization. The reciprocity

of trust and commitment that arises from interactions constructs the mechanism of cooperation, referred to as ethical and behavioural coordination, for affecting the structure of exchange. This cooperative orientation encourages firms to manage the adverse effects of the structural constraints on business sustainability (North, 1991; Smith-Crowe & Warrant, 2014; Yamagishi *et al*, 1998). The dynamic process explains ethics, choices, and a code of conduct to regulate the exchange of information, interests, and resources (Evans & Krueger, 2009; Kliger & Qadan, 2019; Bruni & Sugden, 2007). The coordinative tendencies foster horizontal integration, which inspires heterogenous partners (businessmen and bureaucrats) to work together on allocation (McKnight *et al*, 1998; Gallucci & Perugini, 2003; Nielsen & Kaszniak, 2006). Second, a desire for cooperation boosts the anticipated distribution of rewards that leads partners to adjust estimates of choices to the real business environment (Fehr & Gachter, 2000; Nowak & Sigmund, 2005). The course of action taken by partners optimizes their expectations and behaviours for paying benefits with benefits (Flynn, 2003; Guth *et al*, 2003). The convergence in aspiration levels justifies their choice adjustment. Third, enforcing pledges for fairness, the proactive interactions deepen a mutual understanding to achieve cooperative outcomes (Smith-Crowe & Warrant, 2014; Lin, 2012). The shared benefits reconfigure the structure of exchange to enhance firms' cost advantage (Bolton & Ockenfels, 2000; Fukuyama, 1995; Manion, 1996;). The tailored cost driver mitigates the frustration and resentment of intervention (Zak & Knack, 2000; Hsieh & Klenow, 2009). Despite the scale and prevalence of research, an academic inquiry has overlooked the construction industry. We lack an understanding as to what criteria we can use to measure cooperative exchange to tackle the distortions firms face in the market. Given its intuitive appeal of competitiveness and its analytical nature of homogeneity, there is scope to explore the cooperative fundamentals that the literature on exchange has not yet captured.

Building on the theory of exchange, we seek a new pathway to explain the link between the value of cooperation and choices under resource uncertainty. On the analytical level, our model focuses on three conceptual components that affect the overall level of firms' ability to perform in the industry. First, the anchor of activation we call reflects the adverse effects of misallocation on firms that attribute to institutionalising trust and commitment for ensuring internal consistency. Second, shared interests as a source of dynamic coordination regulate a selection of choices making it consistent with the market environment. Third, the coordinated transactions through a recurring cycle of giving, receiving, and repaying optimize value-based pay-offs. The central theme of our model is that the informal rules of trust and commitment are correlated with resources and markets for justifying cooperative exchange as a solution to misallocation. The expectations set in motion a specific milieu to affect choice coordination. The approach constructed over time sanctions transactions for mutual gains without considering legal and regulatory risks. The resulting impediments, in the end, frustrate firms in meeting the new challenges their business faces in the market. Our model is important not only for the efforts to show the root cause of

cooperation from the institutional perspective but also for the further development of choice coordination as a tool to bridge our knowledge gap between misallocation and sustainability.

Our study makes three theoretical contributions to the existing literature. First, we introduce a construct of liability to cooperative exchange, which receives limited attention despite the importance of incurring risks and costs to the construction industry (Lin, 2012; McDonald, 2011; Peerenboom, 2002). As firms experience the turbulence of market failure, we use the term liability to describe the probability of regulatory and legal risks imposed on value-based cooperation. Embedded in the solidarity of trust and commitment, the literature considers the social structure as a form of open-ended exchange within the institutional boundary. This linear pattern fails to explore sequences of ethical risks and costs set off by a chain reaction to government intervention (Hsieh & Klenow, 2009; Gold *et al*, 2002; Jones *et al*, 1997). Our objective is to capture the confined formation of trust and commitment as the eliciting stimuli of liability to counter the structural barriers to business sustainability. The analysis of trust risks and commitment costs offers insights into the value of reciprocity, which becomes a liability, rather than an asset partners face in the scope of personal ties, dedication, and rewards (Lin, 2012; Baer *et al*, 2018). By pinpointing the constraints, we contextualize the alegal routine that governs the interactions among partners leading to destructing the formal rules and regulations.

Second, we define subtleness as a delicate choice adjustment for explaining awareness, insight, and action (Gunia *et al*, 2012; Nielsen & Kaszniak, 2006). Under uncertainty, expectations influence the estimates of choices (Margolis & Molinsky, 2008; Bulz, 2009). To shift a direction of social interactions, an amount of power and influence inspires partners to rationalise choices for identifying at which point they could make a further move contingent on information and knowledge sharing (At-Najjar & Weinstein, 2009; Gilboa & Schmeidler, 2001). But the literature falls short of elucidating the effects of power and influence entrenched in the institutional and cultural context (Molm *et al*, 2007; Acemoglu & Verdier, 2000). Considering this limitation, we extend the literature by showing a discourse as a process to adjust the judgements on choices relevant to a prediction (Nowak & Sigmund, 2005; Frisch & Baron, 1988). As fine-tuning the aspiration levels of options articulates with competition, the mechanism of coordination shapes the cognitive and behavioural pattern of partners for choice selections. Given the heterogeneity in knowledge, skills, and abilities, convergence in the attributes nurtures an optimal choice to boost cooperative fit and sustainability.

Third, we highlight the effects of cooperative exchange on partners in the industry. Despite the extensive literature, the link between value and structure remains unexplained (Molm *et al*, 2007; Pillutla & Murnighan, 1995; Takahashi, 2000). By solving this frustrating puzzle, we focus on the dynamics of coordinated transactions through a recurring cycle of giving, receiving, and repaying for increasing returns. This cycle shows that stronger trust produces a stronger commitment to mutual interests,

which reshape the structure of allocation. As togetherness reduces conflict potentials, asymmetric power complements their expertise that strengthens the willingness to cooperative exchange (Gunia *et al*, 2012; McKnight *et al*, 1998). Given the value-based practices, social and industrial embeddedness substantiates the alegal cycle as a benefit swap to weaken transparency, fair competition, and the rule of law. The choices of influence partners use and the transaction cycles they enter perpetuate in the construction industry (Lin, 2012; Buss, 1987; Simmons *et al*, 2010). Focusing on trade-offs, we uncover the underlying risks and costs of pay-offs beyond the scope of misallocation firms encountered in the market.

In this article, we first present our inquiry into misallocation in the construction industry. Second, we conduct a qualitative analysis of the representative samples based on our semi-structured interviews to assess the dynamic mechanisms affecting intentions, beliefs, and actions. Third, with the consistency of reliability and validity measuring, we offer insights into the link between value and choices to orchestrate expected transactions. Finally, after showing the findings, we return to our research question to explain the implications of our model for the industry and future research on cooperative exchange.

2. Conceptual background

2.1 Misallocation as the anchor to activate trust and commitment formations

Misallocation, by definition, is monopolistic control by the government over capital and land designed to correct market failures (Hsieh & Klenow, 2009; Acemoglu & Verdier, 2000). At the heart of this policy practice are the institutional arrangements to regulate priority projects for increasing returns (Lin, 2012; Naughton, 2007). The formal constraints reflect the pattern of how capital and land are allocated in the industry to optimize efficiency. Although rational, the pattern distorts market mechanisms by inflicting costs on marginalized firms, who are deprived of access to the scarce resources they need. When facing the structural barriers, partners reprioritize operations in building trust and commitment formations to foster internal consistency for countering misallocation (Restuccia & Rogerson, 2017; McDonald, 2011).

In the market, as the literature on trust and commitment acknowledges, social solidarity rests on a calculation of advantages to promote a sense of security within the boundary of interactions (Evans & Krueger, 2009; Kramer, 1999; McKnight & Cummings, 1998). The incentive echoes an appreciation of the informal code of conduct constructed over time for dealing with uncertainty (Tallman *et al*, 2004; Yamagishi *et al*, 1998; McKnight *et al*, 1998). Confidence in the ethical solutions to misallocation lies in the assumption that the reciprocal effects of capability arise when partners are motivated to strive for shared gains. The ideal of trust is about expectations for ethically justifiable choices to ensure certainty (Morgan & Hunt, 1994; Hosmer,1995). Commitment by contrast is about the behavioural constraints to

enrich the persistence of relationship, involvement, and attachment (Baer *et al*, 2018; Gounaris, 2005). Acceptance of the arrangements shapes intentions, beliefs, and actions to make value and behaviour predictable.

The outcome of this internally consistent system addresses in detail the principle and structure of benefit inflows about access to capital and land (Lin, 2012; Yamagishi *et al*, 1998; Hosmer, 1995). The synergy of intentions and beliefs plays a critical role in fulfilling obligations. With strong intentions and beliefs comes the expectation that the value of the stake will rise further for reducing coordination costs. It becomes a reference point to preserve the structure of exchange behaviour for the resources one controls and other values (Molm *et al*, 2007; Liu & Colman, 2009). The anticipated returns flow bilaterally in a well-defined boundary, but they do not necessarily mean that they have equal values (Standifird & Marshall, 2000; Fehr & Gachter, 2000).

The trust-commitment formations as the source of value-based competitive advantage present a viable navigation chart to tackle misallocation (McKnight *et al*, 1998; Alvesson, 2001; Kramer, 1999). This conviction however pays no attention to strict liability for partners' behaviours in the market. The probability of legal and regulatory risks emerges from efforts to build cost-efficient capabilities when partners enter into the specific environment of social solidarity (Lin, 2012; Evans & Krueger, 2009). The straitjackets of cost and scope prevent them from moving beyond the boundary of bonds. As a tool to counter misallocation, the value of trust and commitment now is in question. There is no doubt that the construction of destruction capitalizes on certainty in uncertainties to deliver the land and capital they expect. But the paradox of trust and commitment poses legal and regulatory challenges to partners' intentions, beliefs, and actions (Jones *et al*, 1997; Takahashi, 2000). In the end, uncertainty amplifies opportunities and risks, while raising the questions of who they are and what choices they should look for (Bearman, 1997; Molm *et al*, 2007; Liu & Colman, 2009). The effects of value activation entrenched in the social and institutional context make allocation ethically sound but legally liable.

2.2 Subtleness as contextualization for adjusting choices

Subtleness refers to the contemplation that has direct effects on choices, decisions, and actions (Gunia *et al*, 2012; Baldwin *et al*, 2009; Nielsen & Kaszniak, 2006). In the market, resource pressures arise, when organizational routines constrain partners' choices (Bulz, 2009; Corley & Gioia, 2003). Ensuing from the complication of intractability, specificity, and tacitness, value-based interactions offer partners a setting of what information and knowledge they choose to gather and share to influence their engagement. In this regard, shared information and knowledge become a source of cooperative power to determine their perceptions of and approaches to land and capital in ways guided by their expectations (Baldwin *et al*, 2009; Pillutla & Murnighan, 1995). During the process of interactions, the subtle signalling of expectations helps decode and capture the rich meanings in choices for allocation (Margolis &

Molinsky, 2008; Simmons *et al*, 2010). Adjusting the attitudes to project potentials calls attention to or away from certain decisions and actions for anticipated cooperation. Given the incentives of increasing returns, partners are keen to modify their judgements on choices to the real business context (Al-Najjar & Weinstein, 2009; Reed & Defillippi, 1990).

The attempts to rationalize information and knowledge-based expectations boost operational fit, as fine-tuning the estimates of choices demystifies a guess about exchange potentials (Molm *et al*, 2007; Corley & Gioia, 2004). This operational fit makes the choices contextual and incremental. By nature, subtleness is not a weakness, but a form of conscious calculations to explore choices to engage with the allocation (Nowak & Sigmund, 2005; Pulford & Colman, 2007). With this objective in mind, a subtle assessment of cooperation potential becomes crucial to shape the judgements on choices (Gunia *et al*, 2012; Einhorn & Hogarth, 1986; Acemoglu & Verdier, 2000). The reconfiguration of arrangements paves the way for cooperative cognition and behaviour in response to expectations, offerings, and exchange, thereby justifying the rationale of adjustment for choice selection (Baldwin *et al*, 2009; Lin, 2012; Alvesson, 2001).

By decreasing the expectation-estimate gaps, agreed-upon choices define the terms of reference and the forms of transactions at a given place and time. The resulting consensus on mutual interests characterizes exchange as information-specific and knowledge-oriented reciprocity. Although unequal, a gradual shift from uncertainty to a shared course of action produces the value of images, reputations, and expectations to safeguard trade-offs between short-term and long-term interests (Nielsen & Kaszniak, 2006; Bearman, 1997). The culmination of exchange appears as a cost for one or a gain for another, but repeated interactions help increase returns over time (Nowak & Sigmund, 2005; Gibbons, 1992). Therefore, subtleness is a rational way to adapt aspiration levels to the expected allocation. This approach explains a link between the powerful effects of information and knowledge and the serious consideration of choices for an acceptable solution (Molm *et al*, 2007; Baldwin *et al*, 2009).

2.3 A recurring cycle as the pattern of coordinated transactions

Central to coordinated transactions is the structure of reciprocity that strengthens value-based choices arising from uncertainty. A recurring cycle of giving, receiving, and repaying suggests that cooperative trade-offs provide mutual benefits to satisfy the needs of partners (Colman, 2003; Frisch & Baron, 1988; Buss, 1987). In the real business environment, the different strategic positioning and performance of firms require different forms of exchange to echo different value configurations. As a reaction to competing choices, the coordination of expected exchange places emphasis on firms' unique capacity, expertise, and experiences that make the projects cost-efficient (Molm *et al*, 2007; Bearman, 1997). The concerted efforts to create this competitive advantage justify the moral principles held by partners, rather than liability for anticipated pay-offs (Lin, 2012; Buss, 1987).

As shared value affects transactions, the recurring cycle of exchange choices constrains partners leaving them little room to think of liability imperative to the arrangements (Spahn, 2009; Simmons *et al*, 2010). In the end, the ethical code of conduct pursued by one enables the attainment of another's goal. Within this scope and context, partners play different roles of a giver, a receiver, and a repayer (Bearman, 1997; Gibbons, 1992). Cooperative transactions generate temptations to reciprocate, but also commitments to them (Baldwin *et al*, 2009; Jones *et al*, 1997). A blurry boundary between value and liability creates a setting for partners to pursue mutual benefits since the shared obligations to give, receive, and repay institutionalize the practices to seek out informal routes, detours, and shortcuts for trade-offs (Fehr & Gachter, 2000; Colman, 2003). Taking this exchange cycle into consideration, value defines an integrated set of choices for increasing returns, thereby ignoring liability for breach of rules and regulations.

Trade-offs suggest that partners' willingness to cooperate deepens interdependence for shared interests. The tendency of the recurring interplay reflects the dynamics of reciprocity that exchange is mutually beneficial for the valued outcomes, which consolidate the integrative bonds for bolstering competitiveness in the market (Nowak & Sigmund, 2005; Buss, 1987). Inspired by the reciprocal gains, the value-based exchange practices amplify the anticipated results allowing partners to enjoy resource advantages over rivals. Regarding the informal arrangements, the expectations are correlated with the actions (Molm *et al*, 2007; Pulford & Colman, 2007). The ideal of reciprocity regulates the exchange relations, in which partners orchestrate the interests they value positively while decreasing the results they value negatively (Bearman, 1997; Jones *et al*, 1997). This rationale presents solid evidence of how partners select a course of action from a set of choices to reinforce the transactions. The preferred action by nature is situationally specific and discriminative concerning other choices (Kramer, 1999; Molm *et al*, 2007). The pay-offs they made correspond to the solutions for allocation, to explain benefits, not costs and risks.

2.4 The process model of cooperative exchange

In this study, we propose a process model of cooperative exchange (Figure 1) to assess the practice of managing resource allocation in the construction industry. We assume that market failures legitimise the informal arrangements for trade-offs between interests and resources. Within the value boundary, the contextual effects of influence sanction the efforts to adjust the estimates of choices for increasing returns. The incentives of coordinated transactions optimize the pay-offs to boost the competitiveness of firms. After all, our model shows that under resource pressure, the mechanism of the exchange value and choices offers the incentives, which go beyond the boundary of formal structures, hierarchies, and regulations.

[Insert Figure 1 about here]

First, the trust and commitment formations operate as the anchor to nurture cooperation that emerges from interactions (Epley & Gilovich, 2001; Lin, 2012). The ethical arrangement of togetherness explains cooperative intentions, beliefs, and actions to make exchange value and behaviour predictable within a competitive setting (Kramer, 1999; Gounaris, 2005). The predictability of internally consistent systems amplifies efforts to reconcile different interests by articulating situational factors inherent in reciprocity (Liu & Colman, 2009; Evans & Krueger, 2009). The capacity, expertise, and experiences of partners are bounded by togetherness to reinforce the ideal of solidarity while offsetting coordination costs. The rationale of this contextualization endorses value-based cooperation highlighting dynamic incentives for working together.

Second, subtleness influences the estimate of choices for a cooperative fit (Gunia *et al*, 2012; Frisch & Baron, 1988). As expectations are related to actions, contemplation of ethical and behavioural orientations has effects on a course of action. During the process of engagement, shared information and knowledge define the choice arrangements that offer a guide for partners to rethink their intentions and actions (Baldwin *et al*, 2009; Nielsen & Kaszniak, 2006). The ability to adjust aspiration levels based on situational awareness reduces the expectation-market gaps by incorporating the partner's interests to ensure an operational fit (Simmons *et al*, 2010; Nowak & Sigmund, 2005). The choice configurations suggest the necessity for a conscious calculation of costs and benefits to optimise mutual benefits.

Third, coordinated transactions address the cooperative pattern of trade-offs for allocation. The recurring cycle of giving, receiving, and repaying strengthens the rationale of exchange for mutual gains (Buss, 1987; Manion, 1996). The exchange practice partners favour is multifaceted, but the nature of projects, loans, and land is dyadic (Molm *et al*, 2007; Lin, 2012). Despite differences in interests and priorities, ethically justifiable behaviour orchestrates cooperative exchange moves (Simmons *et al*, 2010; Kramer, 1999). The contextual effects of transactions go beyond the structural boundary for the anticipated pay-offs with legal and regulatory costs.

3. Methodology

3.1 Research Setting

The empirical setting of our research is the construction industry known as the playground of trust and commitment for cooperative exchange to counter government control. In China, property rights have a controversial history frustrating industries and consumers, as land under heaven belonged to the Emperor. Given this sole ownership of land, the Middle Kingdom failed to develop the proper concept of property rights. Private ownership thus was unable to reach the level of legal protection (Garnaut &

Huang, 2001; Zhang, 2008). As Table 1 shows, after the communist revolution, the new regime started to abolish the arrangements of private ownership put in place by the previous authorities (Naughton, 2007; Lin, 2012). The Constitution of 1954 provided the framework for the state ownership of land and the means of production to ensure the value of stability, accountability, and credibility (Jefferson, 2002; Weingast, 1995). With the introduction of economic reform in 1978, the term private property received attention to allow individuals to exercise their legitimate rights to gain the value of tangibles and intangibles (Naughton, 2007; Peerenboom, 2002; Garnaut & Huang, 2001). Of particular importance in this evolving process were incremental changes in legislation. The Amendment of the 1982 Constitution laid out the foundation for the development of the private housing industry, although the government retained the sole ownership of land (Lin, 2012; Qu & Liu, 2012). The urban real estate law of 1994 and the property law of 2007 further codified the rules by allowing individuals to make business choices (Weingast, 1995; Zhang, 2008). Despite the new legislation, the state ownership of land remains unchanged. With the emerging industry of property development, the local authorities become heavily dependent on land leases to developers for off-budget revenues. To secure and finish projects, on the other hand, firms need access to capital. But the state-controlled banks are reluctant to offer the loans because they are not SOEs and have poor default records.

[Insert Table 1 about here]

The literature overlooks government control over land and capital as the driver of market imperfections (Hsieh & Klenow, 2009; Naughton, 2007). Consequently, the occurrence of the formal arrangements magnifies market impediments to marginalized firms' operations. The drawbacks to the practice house a set of expectations and actions initiated by partners to foster value-based exchange. We feel that this focus is suited to our research to understand the repercussions of cooperative exchange on pay-offs.

We adopt a qualitative research design to apprehend cooperative exchange, which enables us to develop insights into the informal arrangements of interactions (Valsiner, 2000; Brannen, 2005). To increase explanatory power, our empirical enquiry emphasizes misallocation in the industry. Our focus suggests that the nuances associated with adjustments are observable to identify the choices of interests to create a competitive advantage. This process is critical to determining a recurring cycle of giving, receiving, and repaying for exchange (Molm *et al*, 2007; Einhorn & Hogarth, 1986). The pattern of pay-offs shows how the informal mechanisms facilitate a course of action under uncertainty. The data we collected add value together to produce a unitary reality of transactions (Brannen, 2005; O'Reilly & Parker, 2012). In conceptualizing it, we put our proposed model to the test which develops a rich set of theoretical insights.

3.2 Data Collection

With the timeline in place, the firms we study are private in a medium size city. To gather data, we follow the guidelines of purposive sampling to choose informants (Gioia et, 2012; Lincoln & Guba, 1985). In making the samples valid, we develop a set of criteria to assess exchange value, structures, and behaviours. They include a need for 10-year experience in the industry, exposure to multiple levels of intimate interactions, and the ability to conduct an in-depth analysis of actions and outcomes in response to allocation. Our sample-gathering period occurs over two years (Table 2). During this period, we conducted 14 semi-structured interviews in 2018 and follow-up interviews with all the informants in 2019 to offer the base for reassessment (Brannen, 2005; Corley & Gioia, 2003). We adopt a holistic approach to highlighting the construction of trust and commitment formations inherent in social interactions (Goulding, 2004; Valsiner, 2000). With this objective in mind, we look beyond what people say and do to understand the meanings of cooperative exchange. As a fact, our sample data reveals the pattern of how exchange norms and practices shape engagement culminating in legal and regulatory risks ignored in the literature. In showing sufficient traces and evidence of transactions, our sampling strategy involves three stages.

[Insert Table 2 about here]

The first stage defines the sample selection criteria. As the total population of the information-rich cases is small, it is imperative to make sure that intentions and beliefs are consistent with efforts of allocation. The key is that the semi-structured interviews are represented by comparable management positions, networking styles, and exchange items (Lincoln & Guba, 1985; Brannen, 2005). Given the time and financial constraints, we target management as a rich information group to develop the criteria for explaining the anchor effects of morally justifiable mechanisms on partners.

The second stage is to generate representative samples devoted to eliminating biases from a random selection of samples (Buchanan & Bryman, 2007; Gioia *et al*, 2012). We feel that the nuances of adjusting the judgements on choices should be measurable to reflect access to reciprocity-consistent information and knowledge. Thus, we take the adjustments to choices as the selection benchmark for trade-offs. As the cases we selected are complex in the local environment, our representative samples further reveal the perspectives of multiple interviewees in the field of enquiry. The analysis of the perspectives shows adjustment efforts by and effects on partners in seeking a satisfactory choice.

In the final stage, our semi-structured interviews with informants emphasize the exchange process with partners. We aim to develop an interpretative mechanism of a recurrent cycle of giving, receiving, and repaying devoid of liability, but not to determine whether they are guilty (Brannen, 2005;

Valsiner, 2000). The pay-offs establish a superior wedge between costs and benefits by giving firms advantages over their competitors.

Each interview lasts on average 60 minutes. The interviews are non-recorded, but we take notes immediately after the interviews. Each begins with a promise of confidentiality, followed by the questions related to the ethical and behavioural arrangements of cooperative exchange, the adjustment of estimates, and the coordinated transactions. In maintaining consistency in measuring, the lead author conducts the interviews and asks the interviewees to speak as a representative voice of each case. The questions give attention to expectations and behaviours to elucidate regularities and anomalies of adjustments and pay-offs. Certainly, there has been a change in the business environment since 2018, but there is nothing new about the pattern of cooperative exchange as our samples show.

3.3 Data Analysis

In enhancing accuracy, we pay attention to the critical junctures that shape values and practices in the industry. The analyse of our dataset adheres to the guidelines for the methods of comparison techniques in a process known as matching to generate a model for replacing the existing models (Gioia *et al*, 2012; Glaser & Strauss, 2017). This approach allows us to rigorously collect and examine qualitative data in juxtaposing differences between samples and research. The differences explain whether the assessment of concepts reflects the ideas that are supposed to denote specific information (Bryman & Bell, 2011; Goulding, 2004). As they are the building blocks of our model, specific information represents the points around which we conduct our research on cooperative exchange.

In evaluating our model, we engage in the empirical setting to investigate two context-related assumptions: perceived consensus on trust and commitment formations and competitive business ventures. The perceived consensus indicates that the mechanisms of norms justify the swap of favours and make it predictable and manageable within the boundary of ethics. Competitive business ventures, by contrast, suggest that value-based bonds and interests inspire partners to cross a grey boundary for pursuing mutual interests. Our examination ensures that the conceptual meanings of data, analysis, and the eventual model stand in a close relationship to one another (Corley & Gioia, 2003; Valsiner, 2000). Analyzing them, we posit that sample data as a time-lagged semiotic representation is adequate while using the abstracted nature of the data-as-signs to extrapolate an understanding of exchange through qualitative context analysis (Glaser & Strauss, 2017; Brannen, 2005). The results of transactions across the dataset corroborate our generalization of choice adjustments for a cooperative fit. Our investigation promises the consistency of data evaluations in our research setting. The full data analysis follows three steps.

[Insert Figure 2 about here]

As Figure 2 shows, first, we use the open coding of our interview data to gain an understanding of values embedded in the construction industry. Our textual analysis labels quotes from informants to extract initial concepts in data and groups them into the category of the first order (Gioia, 2012; Valsiner, 2000). In the dynamic process, the concepts illustrate the cultural meanings of reciprocal intentions, beliefs, and actions to construct trust and commitment formations. The assessment of our raw data reveals that the distorted market produces the cognitive orientations of sanctioned behaviour, which justify the integrative bonds of partners (Nielsen & Kaszniak, 2006; Kramer, 1999).

Second, we engage in axial coding, wherein we try to uncover the pattern of choice adjustments and assemble them into high-order themes (Lincoln & Guba, 1985; Valsiner, 2000). Given the market uncertainty over allocation, sharing information and knowledge converges in the expectations leading to the common themes for lowering coordination costs. The analysis of the themes indicates that the juncture of mismatching capacity shapes the estimates of choices. The effects of adjustments on partners fuel the efforts to seek a consensus on plausible solutions.

Finally, we aggregate the themes into the overarching dimensions that make up the theoretical foundation of our model (Bryman & Bell, 2011; Corley & Gioia, 2003). In applying the dimensions to our entire dataset, we grasp the conjectural attributes to explain the recurring cycle for changing the exchange context, in which partners engage. The systematic comparison of the dimensions enables us to understand a larger structural and ethical context of transactions. In generalizing the underlying values, structures, and effects, we deem it critical to confirm our model of cooperative exchange, thereby exploring the nature of pay-offs in the construction industry.

4. Findings

In this section, we report the findings of our study. The starting point of our empirical enquiry is to assess the link between misallocation and allocation, which is evident in our data. Our analysis suggests that resource uncertainty acts as the anchor of reciprocity to institutionalize trust and commitment formations for anticipated exchange. The dynamics of values and behaviours create a synergy between partners in the confines of networks, rather than a liability. Within this juxtaposition, we focus on the anchoring effects of intentions, beliefs, and actions on partners, which shape the conscious calculation of capacity, expertise, and experiences for mutual gains. Following this logic, our evaluation indicates that expectations occur when partners share complementary information and knowledge for an operational fit. During interactions, information and knowledge become a source of interpersonal power to influence choice selections by adapting them to the business environment. Given a recurring cycle of giving, receiving, and repaying, we observe that coordinated transactions amplify the effects of pay-offs by reinforcing values and actions. In the end, cooperative exchange is a form of rationality under uncertainty, which gives partners room to trade off interests. We categorize our data around

three specific lines of attention: trust and commitment formations, choice adjustments, and coordinated transactions. By highlighting their interactions at each stage, our analysis presents the fine details of the findings.

4.1 Trust and Commitment Formations

Figure 2 presents that monopolistic control by the government over land and capital acts as the anchor of activation to institutionalize trust and commitment formations to tackle the structural constraints. In this context, we find that in gaining the resource certainty they expect, marginalized firms seek same-minded partners for constructing a proactive ethical and behavioural system. As shown in the first-order concepts, interactions nurture the bonds of trust and commitment to enhance a sense of solidarity and security. As firms' daily experience of operations reflects their strategic positioning in the industry, the interactive forces affect their competitiveness for increasing returns. To improve their competitive advantage, partners strive for a synergy to render their values and behaviours consistent. The arrangements elucidate the expected outcomes imperative to mitigate coordination costs. Our data highlight representative quotations in first-order concepts to define and regulate context-dependent trust and commitment.

A theme throughout our data is a link between connections and allocation developed over time. The formal practices aggregated in the concepts underscore the focus of differential treatments on state-owned firms. Table 1 confirms that when control is put into action, state-owned firms enjoy priority in allocation. As one manager describes,

> Private developers can bid for the infrastructure projects launched by the government. But our frustration is that the land is state-owned, while the state-owned banks prefer to give loans to their cousins of SOEs. With the embeddedness of business practices, resource control legitimizes the values and behaviours of entitlement to award SOEs whatever projects and amounts of capital they want. Given the lack of access to the resources, the lucrative projects automatically exclude private firms. (Interview I, 2018 & V, 2019).

The resource pressures prompt efforts to construct the ethical and behavioural counters that offer viable solutions to the problems private firms face. Our dataset reveals the criteria to assess cooperation potential. As one interviewee explains,

> The purpose of partying is not to eat or drink. It is a process of socialization to identify potential partners to build a bridge of trust and commitment for reducing coordination costs. Although the selection criteria are vague, a consensus on possible cooperation rests on intentions, beliefs, and actions related to estimates of land and capital costs, project designs, technical requirements, engineering skills, and quality control. Taking benefits and costs into consideration, partners conduct a critical assessment of cooperation scenarios, if both are keen on working together. In the end, trust and commitment determine mutual interests (Interview III, 2018).

The anchoring effects of trust and commitment formations produce a feeling of closeness and compatibility. Our data samples indicate that a stronger feeling of closeness and compatibility leads to greater solidarity reinforcing shared intentions, beliefs, and behaviours. As one interviewee explains,

> Partners know exactly who they are and what they are doing. In the construction industry, the quality of a project is crucial, but hard to judge. The quality can be known, only after the project has been finished. Ultimately, reputations and experiences are vital indicators to build trust and commitment. The value configuration of closeness and compatibility generates solidarity for cooperation, thereby amplifying positive effects on resource allocation (Interview VII, 2018 & II, 2019).

Our findings demonstrate that SOEs take advantage of monopolistic control, which allows the government to make and implement decisions quickly in hopes of finishing the projects rapidly. These structural constraints boost efforts made by partners to institutionalize the solidarity of bonds as the choice to offset the adverse effects of misallocation. The dynamic interactions among partners facilitate the development of trust and commitment regarding reputations, project designs, quality control, and cost management. Given the scope of contextual conditions, social solidarity is stronger when the level of uncertainty is high. The resulting tendency of temptations for cooperation contributes to building a new form of competitive advantage to counter the formal rules of misallocation. The aggregated concepts in Table 2 reveal that without misallocation, there is no need to form the bonds of trust and commitment in the construction industry.

4.2 Choice under Uncertainty

Table 2 displays the details of our observation that uncover interpersonal power as the subtle source of interactions to influence the estimates of choices. Our findings underline the significance of expectations that shape the ethical and behavioural patterns of partners for fitting into the new environment. As value-based interdependence defines cooperation prospects, interactions refine what information and knowledge can be gathered and shared to determine the estimates of choices. Our evidence shows that information and knowledge give partners a feeling of power, which enables them to assess potential solutions. As a result, adjusting choices has rich meanings open to a great expanse of space that offers insights into an operational fit. In this respect, both accept uncertainty over the prospective actions of others, on whom they depend for pay-offs. Cooperation potential in turn justifies adapting to the real business. This subtleness of shifting the power dynamics found in our dataset captures a pattern of the judgements on choices. As one manager puts it,

> The adjustment of choices under uncertainty is frustrating, as interests are unknown. The most annoying part is how to identify mutual benefits without embarrassing our partners. Although partners are trusted friends, they are reluctant to share their true feelings and intentions about mutual gains. The culture of subtleness makes exchange uncertain because benefits remain vague and hard to define. The good news is that subtleness stays away from hard bargaining, which would ruin their reputations, connections, and future in the industry. The incremental

> approach to processing information and knowledge works well, as it signifies the crucial steps of decoding, selecting, and finalizing a choice (Interview V, 2018).

The mechanism of subtleness indicates that without alienating from the topic, the dynamics of attentional channels focus on a firm's reputation, project management, quality control systems, and schedule performance as the stimuli of engagement. The issues set a foundation to assess the ability of the firm which conversely boosts its potential for cooperation. The signal it sends suggests that the firm enjoys its competitive advantage deriving from its unique way to manage projects. This competitive advantage becomes the power of influence to manage engagement. Given the nature of the property business, the dispersal of political power allows local bureaucrats to distribute resources across the local construction industry. With this power, dedicated engagement with them and access to advice on what a firm can get and how to get it to improve its competitiveness. Although ambivalent about mutual benefits, partners understand that drawing attention to a firm's capacity ultimately leads to pinpointing a choice potential. As one interviewee says,

> The quality of projects defines the life and death of firms in the market. Although there are different ways to evaluate it, quality control systems and engineering skills are the critical indicators to measure it. With solid performance, there is a pervasive tendency towards cooperation. Targeting this attentional channel helps gain the momentum of engagement that explores boundary conditions for modifying choices, thereby producing positive effects on the prospects of reciprocal benefits (Interview II, 2018 & VII, 2019).

The influence of project quality over choices is evident. Yet, the process is delicate to trade-off interests in a setting that excludes the formal steps of negotiation: making offers, countering offers, and accepting offers. As shown in our data, partners prefer an informal procedure reflecting their business culture. As a manager says,

> At a party, I met a friend of mine in charge of urban projects. We were drinking and chatting about sports and hobbies, during which he mentioned his girlfriend 'walking to work' as her trendy lifestyle. I quickly picked up this signal. A couple of days later, I gave her a brand-new SUV as a small gift that matched her sporty taste. Although we never talked about deals, I assumed that there would be something serious about deepening our friendship (Interview V, 2019).

Our findings confirm the ramifications of the subtle patterns in the search for an operational fit. Under uncertainty, access to information and knowledge about costs, benefits, and the probability of cooperation affects the process of interactions to work together on the anticipated projects. The rationale of engaging, decoding, and selecting requires a subtle mind to grasp the choice by adapting attitudes to the business context, thereby reducing the expectation-reality gaps. Our dataset uncovers that partners accept this subtleness as the mechanism of engagement to explore a possible option.

4.3 Coordinated Transactions

Table 2 expounds on a pattern of trade-offs through a recurring cycle of giving, receiving, and repaying. The cycle reveals that the ethical constraints lead partners to develop self-reinforcing routines for mutual gains. As rewards are tempting, partners strive to detour existential risk exposures to rules and regulations. Although circumventing the rules and regulations is a typical practice of management, crossing the red line set by the government jeopardizes the ventures of allocation. As one interviewee explains,

> Political power is an asset, with which bureaucrats can redefine infrastructure priorities at will to allocate resources. The challenge they face is not how to reset the targets, but how to ensure the quality of the projects for their legacy. On the other hand, the problem with developers is that intimate relations with bureaucrats might not be translated into expected returns, because the government regularly reshuffles them. Confronted with this dilemma, partners spare no effort to outmanoeuvre liable issues, since moral bonds provide a cushion to protect them (Interview IV, 2018; II, 2019).

Resource deployment decisions are interest-based with a variety of possible outcomes. Shared interests are heterogeneous, not homogeneous. Because of different value systems, the benefits are not as reciprocal as anticipated. One manager describes,

> Partners endeavour to develop the mechanisms of synergy between them. Taking the nature of asymmetric exchange on favours into consideration, returns often fall short of anticipations. As higher demand for resources prompts fierce competition, the different measurements of giving affect the perceptions of repaying. It is a challenge for both to predict future gains from the perspectives of giving and repaying. But they understand that their cooperation will go on, as long as bureaucrats are in power (Interview VII, 2019).

The forms of coordination arise from informal arrangements. Our dataset suggests that intentions shape expectations and behaviours to reflect the local environment. Pay-offs depend on a combination of choices, assuming that partners behave in the same ways to enhance the outcomes they value positively and to avoid the outcomes they value negatively. Although it is vital to make the choices enforceable, the derivatives of transactions call expected returns into question. As one interviewee explains,

> Subtleness is a smart approach to tackling exchange, as face value is crucial for partners. The predicament posed by uncertainty is that if one feels coerced into a transaction, it will ruin personal ties built over years. If one ignores the signal of reluctance due to changes in priorities, on the other hand, one will not get what one wants. Worse, one will be seen as an insincere and immature person. The subtle attitude allows both to lower their expectations of transactions so as to end up getting more. This practice balances expectations and rewards that make everyone happy (Interview II, 2018; Interview IV, 2019)

The principles of cooperation fine-tune expectations and behaviours for finding ways to ensure a flow of benefits. Although partners use different methods to measure pay-offs, the recurring cycle of giving, receiving, and repaying operates as a rational model to smooth trade-offs. Our findings show that exchange satisfaction requires dynamic engagement aimed at strengthening interdependence that

brings all together for acceptable gains. In this respect, the value-based bonds and behaviours justify the efforts to avoid legal and regulatory risks and costs, since trust and commitment are expectation-focused and result-oriented. Exchange on rewards remains dyadic, but the value of returns differs. As long as misallocation remains, the effects of allocation encourage partners to pursue reciprocal interests.

5. Discussions

Our findings offer evidence to endorse our model embedded in the cooperative exchange on favours in response to misallocation. Our evidence shows insights into anticipated cooperation that has a subtle influence on the estimates of choices. During the process of interactions, ethically justifiable norms and behaviours are correlated with mutual gains to legitimize pay-offs. The results indicate the challenges emerging from a powerful interplay of market imperfections, choice adjustment, and the recurring cycle of exchange that previous studies fail to take seriously. Our research by contrast presents a suite of input into the literature on indirect exchange calling for further research in this area.

5.1 Anchor of Activation

Our research highlights the link between misallocation and trust and commitment formations as the area, where the literature falls short. The impediments of misallocation to marginalized firms operate as the anchor of activation to develop a set of value-based norms and behaviours for managing market failures (Baer *et al*, 2018; Hsieh & Klenow, 2009). The rationale of the countermeasures prompts the bulk of stimuli about misallocation, ethics, and behaviours at play. With dynamic interactions, the choice of the formations identifies the boundary condition, in which partners follow their own rules to deal with resource constraints and market demand. The boundary discourages any trust and commitment beyond what the formations proposed. The informal rules destruct the formal structure of misallocation while fostering the relative power of allocation (Kramer, 1999; McKnight *et al*, 1998). This social capital adds value to the process of institution-building but also challenges the notion of simple cognitive attachments, which ignores misallocation as the source of the formations. As a key to interactions, the formations affect the interplay of unequal power, constructively, as a different social structure offers a different form of capacity for institution-building. This capacity is complementary and reproduces the orientation of togetherness to shape partners' behaviours (Baer *et al*, 2018; Jones *et al*, 1997). The effects of activation on the other hand run counter to legal and regulatory risks by blending the normative and behavioural ideals of reciprocity into the institutional platform (Evans & Krueger, 2009; Chapman & Johnson, 2002). In the marketplace, the unconditional acceptance of reciprocity increases management costs, because illicit benefits weaken the principles of transparency, fair competition, and the rule of law. The ethical constraints become the new barriers to frustrate partners and firms, who are not part of the loop but fight for allocation.

Our research pinpoints presumptive assurance as the core in the institutional context (McKnight *et al*, 1998; Kramer, 1999; Simmons *et al*, 2010). From the moment to enter the formations, the true faith in trust and commitment construct a sense of security, a solution to uncertainty (Yang, 1994; Park & Lou, 2001). As trust promotes commitment formations, the incentives of exchange relationships require partners to fulfil their responsibility to carry the mission out of tackling misallocation. The prospects of allocation determine the orientations and behaviours of partners towards cooperation. By extension, we show that institution-based trust and commitment restrict partners' ability to handle uncertainty in a different environment. The effects of trust and commitment would be stronger when the level of uncertainty is high. It is also crucial to think about what would happen to partners when the level of uncertainty goes with the flow of supply and demand. Taken to the scenarios of market fluctuations, we present the case that it is imperative to safeguard the long-term stability of interpersonal relationships, on which a sense of security rests. Given the nature of interdependence in the industry, the costs of disengagement are high, while short-term profit-maximizing behaviour is unprofitable.

Our findings are capable of replication for other studies on resource management. Central to the trust and commitment formations is that there is no need to institutionalize the bonds if the distribution of resources is fair, competitive, and market-based. But monopolistic control by the government distorts the market mechanisms by forcing partners to twist values and behaviours for improving their competitive advantage. The routine of misallocation dominates business practices. Within this context, the predictability of values and behaviours cultivates internal consistency between partners to offer a special solution to the misallocation firms face across industries.

5.2 Choice Adjustment

Our study presents that the value of subtleness affects the estimates of choices that go unnoticed in the literature (Nielsen & Kaszniak, 2006; Frisch & Baron, 1988). Under uncertainty, expectations signal prospects to influence dynamic interactions for cooperation on choices. In this respect, information and knowledge about costs and benefits provide a guide that sets forth the indicators to assess cooperation scenarios and the choices to trade off interests (Baldwin *et al*, 2009; Colman, 2003). Access to information and knowledge becomes a source of power to shape the process of choice selections. Although a resulting choice legitimizes expected cooperation, the dilemma is that partners are not entirely clear as to what to expect from others. In decreasing the gaps between anticipations and estimates, subtle influences bring a reassuring sense of what is acceptable and how to make it consistent with ethically justifiable norms and behaviours. As interpersonal power and expectations are related, the possession of power by a partner can influence choice selections by optimizing interests (Jones *et al*, 1997; Pulford & Colman, 2007). Our findings reveal that subtle conversations, rather than hard bargains, have a

substantial impact on the estimates of choices. When a cooperation potential emerges, partners make a further move to limit, restrict, or rule out risky choices.

Our research confirms that choice adjustment is a slow process to identify, decode, and interpret available information and knowledge to explore shared interests (Gunia *et al*, 2012; Lin,2012). For partners, frank discussions often produce misjudgements on intentions and, worse, hurt their feelings for cooperation. A subtle approach to mutual understanding, by contrast, confers an ability to regulate interactions to uncover desirable choices (Molm *et al*, 2007; Baer *et al*, 2018). In this context, subtleness is the symbol of matureness vital to management. What is the key to the adjustment of choices is not about the simple exchange of interests, but how to build a bridge for long-term cooperation on allocation. An ideal choice is the indirect one that makes them comfortable and happy.

Evidence our research found suggests that central to the estimates of choices is influence, which creates and gains a momentum of cooperation in a private setting (Baldwin *et al*, 2009; Nielsen & Kaszniak, 2006). Our claim to this novelty lies in the fact that a subtle approach to promises and rewards is effective to achieve cooperative targets. As a response to allocation, cooperation occurs when partners share information and knowledge to modify their anticipations and behaviours. This rationale has explanatory power about the probability of allocation while reducing the risks of opportunism. The conscious intuitions of interpersonal power are reflective to offer ample scope to understand the adjustment of choices for deconstructing the structural constraints of misallocation.

5.3 Shared Benefits

Our research demonstrates the routine of coordinated transactions through a recurring cycle of giving, receiving, and repaying. The cycle highlights the structure of cooperation in explaining the flows of benefits that vary across the process of exchange (Colman, 2003; Simmons *et al*, 2010). The structure provides support for our findings that the solidarity of bonds amplifies cooperative exchange to offset the adverse effects of misallocation. The flaw of the literature is its failure to consider the link between misallocation and value as a catalyst for partners to exploit the loopholes of rules and regulations while ignoring liable risks and costs (Lin, 2012; Molm *et al*, 2007). In this respect, there are strong contextual effects of exchange on the outcomes of allocation. The tempting rewards define the efforts made by partners for resources. The arrangements of exchange are project specific to turn the choice into benefits. But the gains are unevenly distributed.

Our research focuses on the exchange format that strengthens the flows of benefits as the source of power to regulate the transactions independent of liability. Given mutual gains, the recurring cycle of cooperative exchange justifies the dynamic process through which firms foster their competitiveness in the market, while bureaucrats earn their legacy locally (Takahashi, 2000; Standifird & Marshall, 2000). The process suggests that the return of favours remains at the heart of this reciprocity. Although the

value of exchange differs, a trade-off matters most to explicate who gets what. The coordinated transactions make cooperation measurable and sustainable.

The reciprocal benefits give the exchange a new meaning in swapping resources for gifts. Our findings show the logic of cooperation that a partner's predicted transaction is a proactive response by considering a choice of the other (Feher & Gachter, 2000; Gibbons, 1992). Working together reinforces this logic, as it is in the interest of both to cooperate for allocation. Our results prove the prediction that partners make real efforts to manage allocation designed to orchestrate the gains. Their pay-offs destruct the structure of misallocation. In the end, cooperation rationalizes the rewards by making exchange less costly within the boundary of trust and commitment formations.

6. Conclusion

In this study, we offer insights into and evidence of a connection between misallocation and cooperative exchange in the Chinese construction industry. Given a dynamic setting for value-based reciprocity, we integrate a variety of literature to investigate how firms manage resource sustainability. We believe that the critical source of firms' competitive advantage arises from a self-reinforcing trinity of trust and commitment, choice adjustments, and a recurring cycle of exchange. Under uncertainty of allocation, the trust and commitment formations give assurances to make intentions and behaviours predictable in a well-defined boundary. Converging information and knowledge into a system of interdependence, the conscious intuitions of interpersonal power influence partners' behaviours to adapt their choices to the business environment. The coordinated transactions through a recurring cycle of giving, receiving, and repaying justify trade-offs for mutual interests. Our model provides concepts useful to understand how the institutional mechanisms determine the choices but also highlights that the legal and regulatory costs overweigh the benefits devoted to correcting the market distortions. The barriers created by trust and commitment undercut firms' competitiveness. Cooperative exchange is fair to some firms and unfair to the rest.

Our findings have three major implications for understanding the solidarity of bonds in practice. First, our study makes a strong case for devoting greater attention to the issue of misallocation that current research on exchange falls short. The one-size-fits-all attitude tries to capture the effects of face values and relational patterns on partners, but it fails to assess how misallocation affects their perceptions of and approaches to networks in the industry (Molm *et al*, 2007; Lin, 2012). By challenging it, we open a new path to present evidence of how misallocation nurtures cooperative transactions. This overriding imperative destructs the mindset of social bonds that allows us to rethink the source of motivations. Second, our findings show the dynamics of subtleness for choice adjustments. The literature however confines exchange to bargaining (Baldwin *et al*, 2009; Frisch & Baron, 1988). Our study

goes beyond it to focus on influence by using it to rethink choice selections. Under uncertainty, subtleness becomes a delicate converter of transactions for higher pay-offs than bargaining would reach. Third, our research brings a physical setting into the literature to remind practitioners of legal and regulatory risks that the traditional approach ignored, thus mitigating management costs (Buss, 1987; Simmons *et al*, 2010). In so doing, we extend our understanding of how uncertainty and expectations co-determine each other to assess risks inherent in the market. In the end, our study advocates an inquiry into indirect exchange for guiding future research on organisational responses to desires, offerings, and effects.

There are several limitations associated with our approach to misallocation. First, by relying on interviewees' views and recollection of facts, there is a potential risk that some might revise, underestimate, or overstate the roles that partners played in the cases. We try to conduct follow-up interviews to minimize this possible risk. Therefore, our generalization reflects the balance between two sets of data. Second, given the industry-specific nature of the samples, it is hard for us to generalize our findings to other settings, although presumed effects suggest some validity. Future research should be to focus on the issue by using larger samples across multiple industries and regions to evaluate the generalization of our findings. Finally, another promising line of future research should explore the extent to that misallocation improves or simply disrupts the competitiveness of state-owned enterprises. Overall, we hope that our study acts as a catalyst for more work on the management of indirect exchange in different contexts.

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Figure 1 The Process Model of Cooperative Exchange

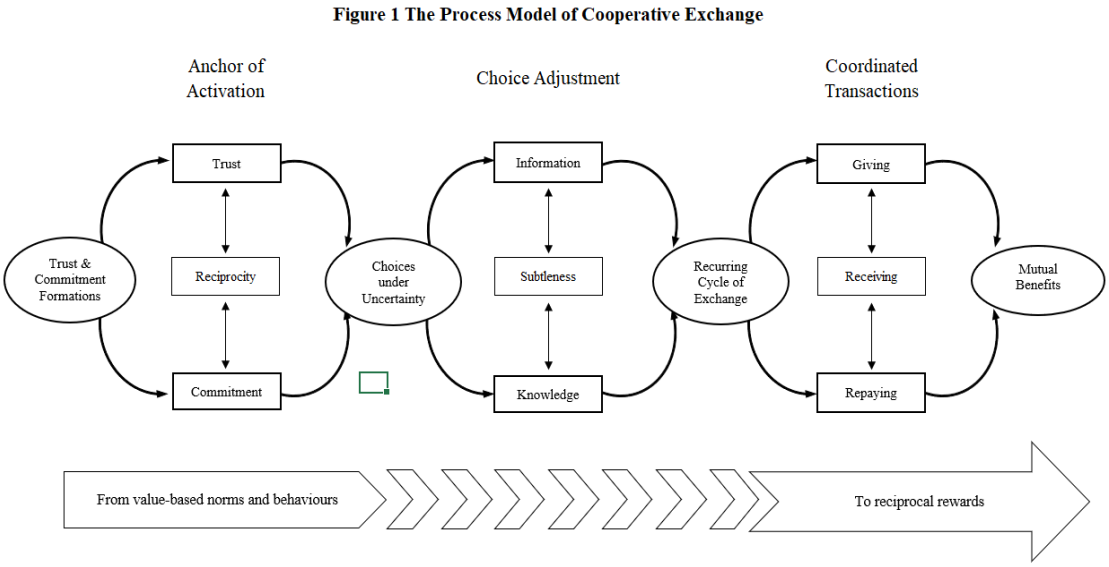

Table 1 A Brief Timeline of Property Development

Time Period	Events	Descriptions
1949	The founding of the People's Republic of China.	The new regime was established in Beijing, with the aim to replace private ownership with state ownership. However, some remote areas were still under control by different authorities.
1958	The Great Leap Forward	The state nationalized all the land and became the sole provider of urban housing based on the economic plan. It allocated flats built for each household with low rents.
1979	The pilot project of privatizing state-owned residential housing in coastal cities.	The purpose of housing reform was to reduce the government's financial burden of flat supply because of the higher demand for urban housing across the country. The initiatives encouraged different levels of government and their employees to invest in projects jointly. Yet, the ownership of flats built on state-owned land remained vague.
1982	The 1982 constitution Land lease	The constitution reconfirmed state and collective ownership. The lawful private property of citizens shall be inviolable. The city of Shenzhen introduced a land lease project, which allowed public and private developers to build commodity flats on the leased land and sold to consumers.
1987	Leased land auction	Shenzhen conducted the first lease land auction, before the 1988 constitution amendment. The auction was and is the most important revenue (off-budget income) source for local governments. As the monopoly supplier of land and loans, government policies and regulations affected the price and quantity of housing.
1988	The constitution amendment	The amendment provided the legal foundation for the development of the private housing industry. The government retained the ultimate ownership of land and banks.
1990	Ordinance of conveyance and transfer of land use rights	It allowed individuals to purchase the land lease right of 70 years for residential uses, 50 years for industrial or mixed uses, and 40 years for commercial uses.
1994	Urban real estate law	The law authorized land bureaus at the county and municipal levels to grant long-term land use rights to land users over state-owned land. The lease mechanisms included bidding, auction, listing, or negotiation. Land users would pay a substantial land grant fee.
1998	23rd Decree of the State Council	The decree formally prohibited SOEs and governmental agencies to develop new residential housing units for their staff in any form.
2002	Regulations on the listing of quotations, tender, and auction	The Ministry of Land and Resources stipulated the regulations regarding the market-driven mechanisms of the auction, tender, and listing of quotations as the standard process of land use rights transferring. The central government required that all urban land transactions must follow the norms of auction and bidding.
2007	Property law	The property law passed codifying property rights, not the state ownership of land.
2016	Guidelines of property rights	The Communist Party and the State Council adopted the new guidelines to protect property rights, although the law still defined the state-owned sector as the foundation of a socialist market economy and the private sector as its supplement.

Table 2 Interviewee descriptor

	Informant	Position	Interview	Follow-Up Interview
CASE ORGANIZATION ONE	1	Vice President	1	1
	2	Vice President	1	1
	3	Finance Manager	1	1
	4	Marketing Manager	1	1
	5	Sales Manager	1	1
	6	Purchasing Manager	1	1
	7	Chief Engineer	1	1
CASE ORGANIZATION TWO	1	Vice President	1	1
	2	Vice President	1	1
	3	Finance Manager	1	1
	4	Marketing Manager	1	1
	5	Sales Manager	1	1
	6	Purchasing Manager	1	1
	7	Chief Engineer	1	1

Figure 2 Analytical Coding Process