

## **The Interplay of Relational Capital and the Ease of Monitoring Systems as BPO Safeguards: Evidence from the Large Banking Industry in Indonesia**



Wulan Permatasari<sup>\*</sup>, Dila Maghrifani<sup>1</sup>

Universitas Sebelas Maret, Economics and Business Faculty, Surakarta 57126, Indonesia

Corresponding Author Email: [wulan.permatasari@staff.uns.ac.id](mailto:wulan.permatasari@staff.uns.ac.id)

Copyright: ©2023 IETA. This article is published by IETA and is licensed under the CC BY 4.0 license  
(<http://creativecommons.org/licenses/by/4.0/>).

<https://doi.org/10.18280/ijstdp.181230>

### **ABSTRACT**

**Received:** 29 May 2023

**Revised:** 7 September 2023

**Accepted:** 21 September 2023

**Available online:** 29 December 2023

#### **Keywords:**

*buyer and supplier relationship, dyadic data, suppliers' opportunistic behavior, relational capital, ease of monitoring system, business process outsourcing*

Tier-two suppliers may engage in opportunistic behavior due to the preference of large buyers for short-term contracts or volatile demand patterns. This lack of long-term commitment may lead tier-two suppliers to prioritize short-term gains and engage in opportunistic behavior to maximize the current situation, particularly in the Business Process Outsourcing (BPO) setting between banks and their tier-two suppliers. In this setting, buyers wield greater influence due to their size, market dominance, or distinctive capabilities over suppliers. This power disparity might create an environment where tier-two suppliers feel obligated to engage in opportunistic behavior to protect their interests or acquire an advantage. The ease of a monitoring system plays a crucial role in ensuring the safety of buyers and establishing a more secure buyer-supplier relationship. However, relying solely on a monitoring system is not reliable. Supplementing the monitoring system with other safeguards, such as relational capital, is necessary to address supplier opportunistic behavior effectively. This can be achieved through the cultivation of trust, norms of reciprocity, and fostering a sense of friendship between the buyer and supplier. Nevertheless, a high level of easiness in monitoring systems, on the other hand, may foster distrust and destroy relational capital between buyers and suppliers, making suppliers more likely to engage in opportunistic behavior. Drawing on insights from transaction cost economics, social capital, and agency theory, it is argued that the interplay between relational capital and the ease of monitoring systems serves as an essential safeguard against supplier opportunistic behavior, especially when the tier-two supplier has made substantial investments in specific assets with its primary buyer. Data was gathered from 103 business process outsourcing dyads involved in BPO within the banking industry in Indonesia. These dyads consisted of four primary process suppliers: telemarketing, cash-in-transit, security, and contact center. The study revealed that relational capital is an important safeguard, particularly in situations where buyers have challenges effectively managing the BPO relationship.

## **1. INTRODUCTION**

Investment in specific assets is prominent in empirical research on buyer-supplier relationships. Based on transaction cost economics (TCE) theory, organizations will invest in specific assets to enhance the value and benefit from the relationship while simultaneously minimizing transaction costs [1]. Business process outsourcing between banks and their suppliers necessitates specific assets to achieve higher performance for both parties. These investments are committed to specific partners and have comparatively low or no value outside the relationship [2]. Banks may require their business process suppliers to invest in specialized services and procedures to meet their requirements [3]. Banks, as buyers, can select suitable suppliers and utilize their expertise as vital resources.

The Indonesian banking industry exhibits an intriguing phenomenon regarding the motivation of tier-two business process suppliers to mobilize specific investments to win

tenders with their targeted bank clients. Procurement regulation in the Indonesian banking industry is governed by the Presidential Regulation of the Republic of Indonesia number 54 of 2010. It was stated that the tender process for goods and services at the central bank, state-owned commercial/shariah banks, nationally-owned private commercial/shariah banks, and local government-owned commercial/shariah banks is centralized and administered through an electronic procurement system.

Despite the possibility for banks to renew their procurement contracts with current suppliers, they must adhere to government regulations that mandate disseminating public procurement announcements through various means. The public disclosure of outsourcing tenders presents prospects for small and medium-sized tier-two suppliers to become bank suppliers. For tier-two suppliers, outsourcing transactions with nationalized banks can enhance their capabilities and competitiveness. Moreover, the establishment of BPO relationships with large-scale banks serves as a crucial catalyst

for tier-two suppliers to secure larger value deals in the future [4-6].

Tier-two suppliers possess an equal opportunity as large-scale suppliers to become BPO suppliers, provided they allocate dedicated investments towards intangible assets. These assets encompass distinctive processes and procedures, and certified human resources possessing specialized skills and competencies. By doing so, tier-two suppliers can effectively secure BPO tenders with targeted bank clients. Furthermore, research in the banking industry, especially on the BPO setting between banks and their service providers, needs to be conducted in greater depth, as previous research has shown that the banking industry has a high level of asset specificity, as intangible specific assets play a crucial role in the achievement of organizational performance [3]. Specific assets are one of the factors that influence an organization's decision to internalize or outsource transactions to the market [7].

According to the theory of transaction cost economics, it is proposed that transactions with a high degree of asset specificity should be carried out in the hierarchical organizational structure [6]. Despite the requirement for banks to possess highly specific assets, it is noteworthy that the banking industry is the largest buyer of outsourcing services other than the manufacturing industry [8]. Therefore, understanding how tier-two suppliers, as small suppliers, simultaneously attempt to secure their specific asset investments while also engaging in opportunistic behavior towards their large buyers is crucial for BPO relationships, specifically in the Indonesian banking industry.

Collaborative business process outsourcing between banks and their suppliers enables both parties to strengthen their market position and increase their customer base by combining respective resources and knowledge [9]. Both banks and their BPO suppliers seek to benefit from their collaboration. Nevertheless, opportunistic behavior, commonly referred to as self-interest seeking with guile [6], is pervasive in the BPO setting [10] due to the absence of a standard set of norms and institutions governing exchange partner behaviors [11]. For instance, buyers can unilaterally expand the scope of work for suppliers against prior agreements or unilaterally terminate contracts [10].

On the other hand, suppliers can act opportunistically by shirking responsibilities, underperforming on their promises, and providing poor-quality work to buyers [11]. However, a unique feature of opportunistic behavior by highly invested suppliers in the BPO setting is that it frequently involves actions that are not readily visible or easily detectable by buyers, such as cutting corners in service delivery, lowering quality standards, or manipulating performance metrics while appearing to meet contractual obligations [12]. A recent study found that tier-two suppliers may have few other potential buyers, mainly if their products are highly specialized or tailored to a specific industry; this limited market may encourage suppliers to act opportunistically without the fear of losing business [13]. Another study also revealed that tier-two suppliers may possess information that the bank does not, such as knowledge about the actual costs of providing the services or the quality, giving them an advantage in negotiations to obtain better terms or pricing [14]. Furthermore, in many cases, tier-two suppliers rely significantly on large buyers like banks for a substantial portion of their business. This power disparity can result in opportunistic behavior, as the supplier may feel compelled to extract more favorable terms or

concessions from the bank [15].

To solve these challenges, the bank may create rigorous monitoring and performance measurement systems to guarantee that their suppliers satisfy contractual obligations, deliver quality products or services, and maintain a professional and ethical business relationship [16]. This monitoring system assists buyers in identifying and resolving any issues that may arise during their business relationship with suppliers [14]. So that buyers can establish specific performance metrics and key performance indicators (KPIs) that suppliers must satisfy. These metrics may include on-time delivery, product quality, lead times, and response times [11]. Buyers can objectively evaluate supplier performance by regularly tracking and measuring these metrics [16]. Furthermore, implementing a monitoring system also benefits suppliers by enabling them to assess and measure the quality and quantity of work they deliver, and adhere to agreed-upon timelines and contractual terms [16]. In addition to providing visibility into the buyer's actions, the monitoring mechanism enables both parties to observe each other's behaviors and decisions [14].

Despite the fact that monitoring can be a valuable tool for measuring performance, only some scholars have emphasized the limitations of monitoring system implementation as contractual governance. First, monitoring mechanisms rely on the availability of accurate and comprehensive data. Nevertheless, certain circumstances could arise where the data is missing, incomplete, or unreliable. The issue above can potentially restrict the monitoring effectiveness and result in incomplete or erroneous findings [14]. Second, monitoring mechanisms generate data and metrics, but human analysis is required for interpretation. Interpreting the data correctly and drawing meaningful conclusions can be challenging, mainly when dealing with complex or ambiguous situations. Misinterpretation or interpretative bias may result in erroneous conclusions or ineffective decision-making [11]. Third, monitoring mechanisms can occasionally have unintended consequences. For instance, people being monitored may alter their behavior to fit the norm, which may not accurately represent their true performance or behavior. As a result, this can lead to distortions and reduce the accuracy and efficacy of monitoring efforts [11, 17].

In light of the constraints associated with the monitoring mechanism, some researchers have suggested the adoption of a combined approach involving both monitoring mechanisms and relational governance within a BPO setting [4, 5, 18]. Relational governance, through the cultivation of trust and the exchange of shared values and norms, facilitates the recognition of the potential value in resource integration among partners. Thus, partners are inclined to prioritize the benefits of sustained collaboration over opportunistic actions aimed at immediate individual gains [16]. Furthermore, previous research has also identified several relational mechanisms, such as trust and norms of reciprocity, that secure certain asset investments [19]. However, trust primarily focuses only on the act of placing belief in the character and intentions of the other party, as well as depending on their ability to exhibit a trustworthy manner and fulfill their obligations. It has a narrower focus because it excludes other factors that contribute to the strength and value of a relationship [5, 20]. In addition to trust, Nahapiet and Ghoshal [21] argue that relational capital incorporates a broader array of resources and factors that contribute to the value and efficacy of a relationship. It provides a foundation for long-

term partnerships, knowledge sharing, and collaborative advantage [4, 5].

Relational capital is one of three dimensions of social capital that refers to the trust, commitment, respect, and friendship that actors have developed with each other through a history of interactions [4, 21]. Through repeated transactions, buyers and suppliers have established and confirmed trustworthiness, friendship, and reciprocity norms. Once relational capital has been accumulated, decision-makers typically exhibit reduced anxiety regarding the potential occurrence of opportunistic behavior from their exchange partners. Thus, it is postulated that both firms will endeavor to engage in open communication and exhibit increased transparency in their behavior as an indication of solid trust in the outsourcing partnership [5].

The concept of relational capital refers to the favorable emotional reactions of both consumers and suppliers toward outsourcing contracts, which are established via trust, personal relationships, and recurrent interactions [20]. Thus, both firms have less incentive to engage in opportunistic behaviors, such as lying, cheating, and stealing, due to the potential negative impact on their reputation and the subsequent decrease in future repeat transactions [12]. Hence, a significant contribution of this study to the literature on strategic management is identifying relational capital as a potential safeguard against opportunistic behavior in highly specific investment settings.

Furthermore, the study proposed that the efficacy of relational capital in safeguarding will be enhanced in situations where the convenience of the buyers' monitoring system is diminished. The ease of monitoring system has the potential to alter the moderating impact of relational capital on the relationship between suppliers' specific investment and suppliers' opportunistic behavior. It refers to the ease and difficulty with which a partner's behavior and performance can be measured and evaluated systematically by its exchange partners [22]. When monitoring system ease is high, buyers are more likely to evaluate their relationship intensely [23]. Consequently, suppliers who possess significant levels of relational capital and invest in specific assets may exhibit an increase in opportunistic behavior due to a lack of independence from a highly accessible monitoring system. In contrast, when monitoring system ease is low, suppliers with high levels of relational capital may decrease their opportunistic behavior, as outsourcing relationships are valued for their return and their independence. Thus, another contribution of this research to the literature is to deepen one's understanding of the ease of the buyer's monitoring system, which is a crucial factor in establishing relational capital as a beneficial means of safeguarding against suppliers' opportunistic behavior.

## 2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

This section elucidates the relationship between suppliers' specific asset investments and suppliers' opportunistic behavior using transaction cost, economic, social capital, and agency theories. Furthermore, this section also examines how relational capital and the ease of monitoring systems moderate the relationship between the dependent and independent variables.

### 2.1 Suppliers' specific investments and suppliers' opportunistic behavior

The term "specific asset investments" refers to distinct assets dedicated to a particular relationship such that these assets have little or no value beyond the relationship [6]. The types of specific asset investments can be categorized into two main categories: physical assets (e.g., hardware and equipment) and intangible assets (e.g., idiosyncratic knowledge, information, specific skills, and routines) [10, 24]. Allocating investments towards specific rather than general assets is widely seen as a more efficient and effective strategy because it generates more value and may lead to more competitive advantages [1].

In the banking industry, tier-two suppliers make specific investments to enhance their capabilities, processes, or technologies to effectively fulfill the bank's requirements through technology upgrades, employee training, and process optimization [25]. Tier-two suppliers invest in specific capabilities and technologies to enhance their ability to provide high-quality services to the primary supplier, aligning with the bank's needs [26]. This proactive and specific investment strategy can strengthen the relationship between the tier-two supplier and the bank, cultivating trust and promoting collaborative efforts [25]. The tier-two suppliers' investments align with the long-term objectives of the bank, leading to a more seamless and efficient BPO relationship.

Despite these potential returns, specific asset investments result in a locked-in situation; suppliers who invest in specific asset investments are at risk of being opportunistically misused by their key buyers [2]. Williamson [6] defines opportunistic behavior as "self-interest seeking with guile," including behaviors such as lying, stealing, or cheating, and presenting incomplete or distorted information to mislead, distort, or conceal. Buyers can avoid or reduce supplier opportunistic behavior through various safeguards (e.g., contracts, monitoring, dependency). Several empirical studies suggested that suppliers may indeed behave opportunistically [10, 24]. In a meta-analysis study conducted by Ketokivi and Mahoney [1], it was found that investing firms may engage in opportunistic behavior as a preventive strategy to compensate their incurred costs.

Opportunistic behavior by tier-two suppliers refers to situations in which these suppliers take advantage of the situation for their benefit at the expense of the bank [27]. This behavior can manifest in various ways, such as failing to meet agreed-upon quality standards, demanding higher prices after initial agreements, or deliberately withholding critical information [24]. Tier-two suppliers may engage in opportunistic behavior if they perceive an opportunity to extract more value from the primary buyer [27]. This behavior could include compromising on quality, increasing prices unexpectedly, or engaging in other strategies that undermine the cooperation and trust between the parties [6]. Consequently, it can lead to disruptions across the supply chain, resulting lower-quality services, increased costs, and potential reputational damage to both the tier-two supplier and the bank [27]. Therefore, suppliers are anticipated to pursue supplementary returns on their specific assets to safeguard against higher risk. Based on the preceding elucidation, it can be proposed that:

**H1:** Suppliers' specific asset investments are positively related to suppliers' opportunistic behavior.

## 2.2 The moderating role of relational capital

Relational capital, alternatively referred to as relational social capital, constitutes one of the three dimensions of social capital. The concept encompasses elements such as trust, obligations, respect, and friendship. Relational capital pertains to the firm's economic benefits from the outsourcing relationship. The parties have demonstrated trustworthiness and affirmed norms of friendship and reciprocity within the relationship through repeated transactions [4]. In this regard, relational capital refers to the robustness of the relationship built over time [28]. When there is a buildup of relational capital resulting from repeated transactions, decision-makers tend to be less concerned about the potential occurrence of opportunistic behavior by their exchange partners [20]. Firms will endeavor to foster open communication, and exhibit increased behavioral transparency as a manifestation of robust trust in their counterparts in the exchange process. Relational capital serves as a safeguard mechanism against opportunistic behavior in situations where a supplier has made specific investments in the relationship. Hence, the stronger the suppliers' relational capital, the more likely they will engage in cooperative behaviors and avoid exploiting the buyers' vulnerabilities.

Tier-two suppliers frequently make specific investments in their BPO relationship with the bank, these investments can include technology, equipment, specialized training, or tailored processes that are designed to meet the unique needs of the buyers; however, these investments can also increase the suppliers' dependence and create challenges to easily switching to other customers [18]. Specifically, in situations where the buyers' level of relational capital is low, and suppliers lack pre-existing relationships and have a lack of confidence in their buyers, they may engage in opportunistic behavior as a means of safeguarding their interests and maintaining a favorable balance between input and output ratios [29].

Meanwhile, suppose a bank has a high level of trust and a history of positive interactions with its tier-two suppliers (high relational capital). In that case, the suppliers may be less likely to engage in opportunistic behavior because they value the long-term relationship and do not want to jeopardize it. The buyers' relational capital level may influence the impact of suppliers' specific asset investment on supplier opportunistic behavior. In situations where relational capital is strong, even modest investments in suppliers' specific assets may deter opportunistic behavior more effectively. On the other hand, in situations where relational capital is weak, the potential impact of these investments may be constrained. Therefore, it is proposed:

**H2:** Buyers' relational capital will weaken the positive relationship between suppliers' specific asset investments and suppliers' opportunistic behavior.

## 2.3 The moderating effect of the ease of monitoring systems

Previous research studies have demonstrated that high levels of monitoring can result in the occurrence of crowding effects and an increase in opportunistic behavior [30-32]. This crowding effect describes a situation in which a shared resource is overused and depleted due to the lack of property rights or regulations [33]. When there is no individual ownership or oversight, individuals are incentivized to exploit the resource for their immediate benefit, resulting in its

degradation and eventual collapse [34]. In such situations, intensive monitoring may be implemented to regulate and manage the resource, but this may have unintended consequences [33]. At the same time, intensive monitoring can inadvertently result in a new set of challenges [35]. As more monitoring and regulations are implemented, people may feel closely monitored and controlled [34]. This may erode a sense of personal responsibility and stewardship over the shared resource [27].

In other words, when people believe they are being constantly monitored, they may assume that someone else will take care of the resource and engage in opportunistic behavior if they believe they can get away with it [35]. In the BPO setting between banks and tier-two suppliers, crowding effects arise when the ease of the monitoring system diminishes the suppliers' incentives to deliver satisfactory performance on behalf of the buyers [17]. Hence, close and tight monitoring systems will likely undermine relational capital in the relationship. It is contended that the impact of the ease of the monitoring system on crowding effects is enhanced in cases where buyers have high levels of relational capital.

According to Hypothesis 2, high buyers' relational capital levels moderate the positive relationship between suppliers' specific asset investment and their opportunistic behavior. Nevertheless, the higher the buyers' trust, friendship, respect, and commitment, the stronger the negative reactions when buyers can also easily monitor suppliers [36]. The ease of the monitoring system enables buyers to monitor suppliers with minimal effort, which indicates the lack of supplier trust and autonomy [37]. Suppliers may have increased concerns since buyers have the potential to acquire additional economic rents from investments made by suppliers [33]. Consequently, suppliers may experience a shift from trust to mistrust due to their belief that they have contributed significantly to outsourcing performance, only to discover that buyers disrespect them with extensive monitoring efforts [3]. Accordingly, the researchers proposed to hypothesize that the weakening of the moderating effects of buyers' high levels of relational capital in the presence of ease in the buyers' monitoring system.

**H3a:** The moderating role of high levels of buyers' relational capital on the relationship between suppliers' specific investment and suppliers' opportunistic behavior will be diminished when the level of ease in the buyers' monitoring system is high.

The study also investigated the impact of low levels of easiness in the monitoring system on the ability of buyers to monitor suppliers effectively, hence making it challenging to identify opportunistic behavior [34]. In situations where suppliers encounter few or absent restraints on their behavior, they tend to engage in actions that maximize their potential for attaining optimal returns. The following arguments posit that suppliers will refrain from engaging in opportunistic behavior to maintain a stable relationship and safeguard the returns derived from their specific investments.

Moreover, when the ease of the buyers' monitoring system is low, the supplier is more likely to experience a higher level of autonomy because the buyer is unlikely to engage in extensive monitoring due to the increased complexity associated with monitoring [31, 33]. Suppliers may exhibit less opportunistic behavior if they perceive autonomy as a reward, which should generate feelings of reciprocity. Additionally, since autonomy indicates trust [38], buyers with high levels of trust, commitment, obligation, and friendship

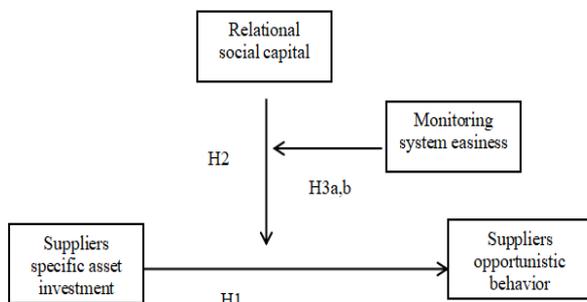
will be less concerned about their suppliers' exploitation [5]. Consequently, the effect of buyers' high levels of relational capital will more than surmount the temptation to behave opportunistically when the ease of the monitoring system is complex.

**H3b:** The moderating role of high levels of relational capital on the relationship between suppliers' specific asset investment and suppliers' opportunistic behavior will be stronger when the ease of the monitoring system is low.

### 3. METHODS

#### 3.1 Sample and data collection

An empirical examination was conducted to assess the BPO setting in the banking sector, specifically focusing on the relationship between banks as buyers and their suppliers (contact center, security, telemarketing, cash in transit) in Indonesia. The study aimed to validate the hypotheses outlined in Figure 1. The selection of the BPO in the Indonesian banking industry as the research context was based on two main reasons. First, business process suppliers tend to invest in intangible specific assets (e.g., skilled and experienced workers, knowledge, know-how, and routines) to support their outsourcing relationship with banks [3, 39]. Previous studies have also discovered that business process suppliers can and do engage in opportunistic behavior [1, 10]. Therefore, examining conceptual propositions presented in the hypotheses is appropriate for analyzing business process outsourcing in the banking industry.



**Figure 1.** The safeguarding role of relational capital: the ease of monitoring system as a boundary condition

Second, the decision was made to build a BPO setting with large-scale banks in Indonesia. These supply chains were sufficiently substantial to provide us with high statistical power [3, 9]. This empirical study examined the relationship between banks and their business process suppliers including contact centers, telemarketing, security, and cash in transit. Bank outsourcing managers or area managers were identified as the most suitable bank-level informants to provide information about a bank's relationship with its business process suppliers. Moreover, the operational manager or division manager would be best suited to provide a report on the relationship between business process suppliers and banks. Additionally, two online surveys were conducted to match bank managers with business process suppliers.

For the survey of bank managers in Indonesia, questionnaires were sent to 482 bank outsourcing managers and bank area managers. A team of survey enumerators was employed to facilitate bank management's completion and

submission of the questionnaire. In addition, the enumerators requested that bank managers record their business process suppliers' names, phone numbers, and addresses, including contact centers, telemarketing, security, and cash in transit. Furthermore, the banks' managers expressed their conviction that only aggregate outcomes would be presented and emphasized the need to maintain the confidentiality of all collected data. In the end, from 482 bank managers, 103 valid questionnaires were received (21.3%).

A questionnaire was mailed to 713 operational and division managers employed at four business process firms that bank managers had previously referenced. In addition, each bank mandated that supplier managers complete a separate questionnaire. A total of 103 buyer-supplier pairs were obtained by aligning each survey with its respective outsourcing manager survey. Out of the 103 dyads examined, it was found that 5 banks were classified as state-owned companies, 39 were local government banks, 53 were national private banks, and 6 were joint venture banks.

Regarding the suppliers, there were 18 telemarketing service providers, 40 security service providers, 22 cash-in-transit service providers, and 23 contact center service providers. The dyadic data revealed that two participants contributed data for four variables, and an opportunity was available to validate the responses supplied. Harman's one-factor test [40] was performed, wherein all variables were included in an exploratory factor analysis model. The issue of the common method bias did not emerge in this study, as the first factor accounted for 22% of the variance. Table 1 depicts a summary of the business process outsourcing relationships investigated. Additionally, the data indicates that the mean duration of the relationships between banks and business process suppliers was 6.8 years.

**Table 1.** Summary of business process outsourcing arrangements

Types of Business Process Outsourcing	Count	Percent
Banks and contact center service suppliers	23	22.3
Banks and telemarketing service suppliers	18	17.4
Banks and security service suppliers	40	38.8
Banks and cash-in transit service suppliers	22	21.3
Total	103	100
	Mean	SD
Relationship duration (years)	6.8	17.2

#### 3.2 Measures

An extensive literature review was conducted to facilitate the development of measures, and a structured questionnaire was utilized to assess the four constructs examined in our hypothesis. Additionally, the questionnaire was subjected to a pretest with banking practitioners and business process suppliers to enhance its content validity. Both banking practitioners and business process suppliers were given the same questionnaire to gather information regarding the specific asset investments made by business process suppliers. Furthermore, this study also assesses provider opportunism towards banks, the level of relational capital between the parties, perceptions about the ease of monitoring system, and performance.

The questionnaire items are included in Table 2. Existing scales were adapted to the present study context. Some were multi-item constructs measured on five-point Likert scales, whereas others consisted of single, open-ended objective

questions requiring a simple numerical response. Furthermore, the data collection process employed a dyadic approach, wherein parallel questions were asked to both buyers and suppliers for each business process outsourcing relationship [6].

Six five-point Likert-type items were used to measure a supplier's investment in intangible assets, such as employee training routines and technical skills [41]. The present study employed a set of eight indicators consisting of Likert-type items with a five-point scale to measure self-interest-seeking behavior [10]. Additionally, this study utilized three indicators consisting of five-point Likert-type items to evaluate the banks'

ability to effectively monitor each of their business process suppliers [42].

The study incorporated two covariate variables to investigate the possibility that other variables could explain the variance in business process suppliers' opportunistic behavior. Furthermore, the duration of the relationships between banks and the business process suppliers were restricted. Finally, the size of the business process arrangement was measured. This is determined using the natural logarithm of the total number of outsourcing contracts signed between banks and their business process suppliers.

**Table 2.** Construct characteristics

Variables	Degree-Symmetric Items	Range	Mean	SD	Factor 1	Factor 2	Factor 3	Factor 4
Suppliers' opportunistic behavior (SOB)	1. In your opinion, it is fine to do whatever will further your interests within your way.	0-0.81	0.248	0.227	0.486			
	2. In some situations, the facts must be altered slightly to achieve your goals.	0-0.74	0.287	0.276	0.853			
	3. There have been times when you promised to do something but didn't follow through with it.	0-0.85	0.275	0.268	0.691			
	4. When dealing with your buyer, complete honesty does not pay off.	0-0.63	0.178	0.164	0.533			
	5. The facts can sometimes be presented in a way that makes you look good to your buyer.	0-0.72	0.321	0.308	0.657			
	6. It is sometimes necessary to lie with a buyer in order to protect your interests.	0-0.51	0.077	0.109	0.566			
	7. As the buyer isn't always truthful, you aren't always completely honest.	0-0.67	0.088	0.174	0.422			
	8. In order to get what you really need from a buyer, sometimes you have to exaggerate your requirements.	0-0.81	0.235	0.249	0.713			
Suppliers' specific asset investment (SSI)	1. In order to meet the buyers' requirements, we have adapted the workflows, stages, and routines of their business processes.	0.07-0.91	0.655	0.207		0.774		
	2. To satisfy the bank's wishes, we have adjusted the standards and other manuals of the bank business processes.	0.34-1	0.688	0.133		0.833		
	3. Our business processes are tailored to meet the expectations of banks in order to comply with their requirements.	0.16-1	0.784	0.268		0.632		
	4. Banks have benefited from our well-trained and skilled employees.	0.33-1	0.579	0.178		0.711		
	5. To meet the needs of the bank, we have invested heavily in employee training.	0.09-0.97	0.638	0.288		0.689		
	6. Our employees have been trained specifically to meet the needs of banks.	0.03-0.88	0.611	0.311		0.631		
Relational social capital (RSC)	1. We have close, personal interactions at multiple levels with our business process outsourcing partner.	0.48-1	0.746	0.297			0.764	
	2. A key characteristic of our business process outsourcing is the mutual respect between the parties at multiple levels.	0.32-1	0.688	0.316			0.677	
	3. There is mutual trust between the parties at multiple levels in our business process outsourcing.	0.46-1	0.797	0.276			0.787	
	4. There is a high level of personal friendship between parties in the business process outsourcing.	0.37-1	0.722	0.319			0.739	
	5. There is a high level of reciprocity among the parties in the business process outsourcing.	0.27-1	0.628	0.364			0.621	
Monitoring system easiness (MSE)	1. It is always possible to get accurate reports on the activities of suppliers regarding to this outsourcing arrangement.	0.53-1	0.763	0.341				0.784
	2. The evaluation of supplier performance is always based on quite accurate information.	0.49-1	0.698	0.288				0.684
	3. Buyers can easily evaluate whether this supplier follows their recommended operating procedures.	0.51-1	0.704	0.359				0.729
Relationship duration (RD)	The number of years the suppliers have been affiliated with the buyers (natural log)	0.81-5.91	1.93	0.873	-	-	-	-
Arrangement size (AS)	What is the total annual expenditure for this business process outsourcing in your organization? (natural log)	0.16-7.31	1.74	0.971	-	-	-	-

**Table 3.** Descriptive statistics, reliability, inter-correlations, and AVEs of variables (degree symmetric value)

Variables	Mean	SD	Composite Reliability	Correlation Coefficients						
				1.	2.	3.	4.	5.	6.	
1. Degree symmetric suppliers opportunistic behavior (SOB)	1.97	0.805	0.695	0.484						
2. Degree symmetric suppliers' specific asset investment (SSI)	2.53	0.462	0.688	0.078	0.589					
3. Degree symmetric relational social capital (RSC)	2.76	0.473	0.798	0.067	0.349	0.318				
4. Degree symmetric monitoring system easiness (MSE)	1.92	0.488	0.667	-0.092	0.347	0.478	0.490			
5. Relationship duration (RD)	1.93	0.873	-	0.459**	-0.078	-0.245	0.104	0.187		
6. Arrangement size (AS)	1.74	0.971	-	0.408	-0.034	-0.193	0.117	0.205	1	

**4. ANALYSIS AND RESULTS**

**4.1 Data analysis procedure**

The degree-symmetry approach [43] was utilized for the dependent and independent constructs. This approach integrates the magnitude and symmetry within the dyadic data into the composite scores. First, the scores for each item of the four constructs were converted into standardized ranging from 0 to 1 to determine the banks' value (BVX) and business process suppliers' value (SVX). Second, the researchers calculated the mean of the standardized values of both the buyer and the supplier in order to get the degree (magnitude) of the dyad (DVx) by using the formula  $DVx=(BVx+SVx)/2$ . Third, the smaller value between BVX and SVX was divided by the bigger value to derive the symmetry value of the construct (SymVx). Fourth, the researchers calculated the average of the DVx and SymVx variables to yield the degree-symmetric value DSVX for each item. The conventional purification led to eliminating some items based on their respective DSVX levels. Lastly, the researchers averaged the degree-symmetric value for each item (DSVX) to generate composite scores.

The degree-symmetry approach [43] generated composite scores for the four constructs, used in a regression analysis. Table 2 demonstrates the evidence of the discriminant validity of the constructs. The results indicate that all retained items

had significant factor loadings that exceeded the predetermined threshold level of 0.4. Table 3 represents the relevant descriptive, correlational, reliability, and validity-related statistics. The observed values of the Average Variance Extracted (AVE) exhibit a significant rise compared to the shared variance among variables, indicating discriminant validity. Meanwhile, the composite reliability ranges between 0.66 and 0.79.

**4.2 Hypotheses testing**

To test the conceptual framework in Figure 1, the researchers employed a moderated multiple regression analysis of the PROCESS Procedure [44] to examine the three-way interaction effects (SSI×RSC×MSe), where degree-symmetry composite values represented suppliers' opportunistic behavior. The moderated regression model used many factors, such as degree-symmetry composite values for suppliers' specific investments, relational capital, the ease of monitoring system, and natural log values of relationship duration, as well as the natural log values of the arrangement size as a control variable. Data on suppliers' specific asset investments, relational capital, opportunistic behavior, and the ease of the monitoring system were gathered from both bank and business process suppliers. The results of hypothesis testing H1-H3b are displayed in Table 4.

**Table 4.** The moderated multiple regression result for suppliers' opportunistic behavior

Independent Variable	Hypotheses	Parameter Estimate	Standardized Coefficient	Beta	t-value
Intercept		1.86	0.42		4.41
Independent variable					
Suppliers' specific asset investment (SSI)	1	0.16	0.08		2.14**
Relational social capital (RSC)		0.29	0.06		3.37**
(SSI) X (RSC)	2	0.14	0.08		1.83**
Monitoring system easiness (MSE)		0.02	0.07		0.18
(SSI) X (MSE)		0.01	0.06		0.24
(RSC) X (MSE)		0.03	0.06		1.95
(SSI) X (RSC) X (MSE)	3	0.13	0.07		1.86**
Control Variable					
Relationship duration (RD)		0.04	0.05		2.56**
Arrangement size (AS)		0.26	0.29		0.77
R-square		0.08			
F-ratio		2.68			
df		11.178			

It is argued that the greater the suppliers' specific asset investment, the more likely they are to engage in opportunistic behavior against the buyer [24, 29]. Based on the findings shown in Table 4, suppliers' specific asset investments significantly influence on their opportunistic behavior ( $\beta=0.16, p<.05$ ). This finding is consistent with the premises in Hypothesis 1. Meanwhile, Hypothesis 2 states that the high

level of relational capital weakens the effect of suppliers' specific investment on suppliers' opportunistic behavior. The findings presented in Table 3 indicate that relational capital weakens the positive relationship between suppliers' specific investment and suppliers' opportunistic behavior ( $\beta=0.14, p<.05$ ).

The ease of monitoring system serves as a moderator of

relational capital's moderation effect. Furthermore, the researchers managed to estimate Hypothesis 3 on the impact of the three-way interaction between suppliers' specific asset investment, relational capital, and the ease of monitoring system (SSI×RSC×MSE) on suppliers' opportunistic behavior. Table 4 shows that this effect is statistically significant ( $\beta=0.13, p<.05$ ). Following procedures in studies by Bolin [44] and Porter et al. [45], the researchers elaborated this significant three-way interaction to investigate the specific effects outlined in H3a-H3b.

Consistent with Hypothesis 3a, it is anticipated that high levels of ease in the monitoring system will diminish the moderating role of higher levels of relational capital on suppliers' specific asset investment and suppliers' opportunistic behavior. The blue line in Figure 2 indicates that the suppliers' opportunistic behavior increases as their specific asset investment rises. In this context, both firms have high levels of relational capital, enabling buyers to monitor suppliers effectively.

Meanwhile, Hypothesis 3b suggests that when the ease level of the monitoring system is low, the moderating role of high levels of relational capital on the relationship between suppliers' specific asset investment and suppliers' opportunistic behavior will be stronger. Based on the data presented in Figure 2, the black line indicates suppliers' opportunistic behavior decreases as their specific investments increase. This phenomenon can be attributed to the elevated amount of relational capital and the challenges buyers face in effectively monitoring suppliers. Additionally, Table 4 demonstrates that the sole significant controlling variable is the relationship duration. Therefore, as the number of outsourcing relationships increased, so did suppliers' opportunistic behavior ( $\beta=0.04, p<.05$ ). At the same time, the size of the arrangement did not yield a statistically significant impact. Hence, as the number of outsourcing contracts increased, suppliers' opportunistic behavior decreased ( $\beta=0.26, p<.05$ ).

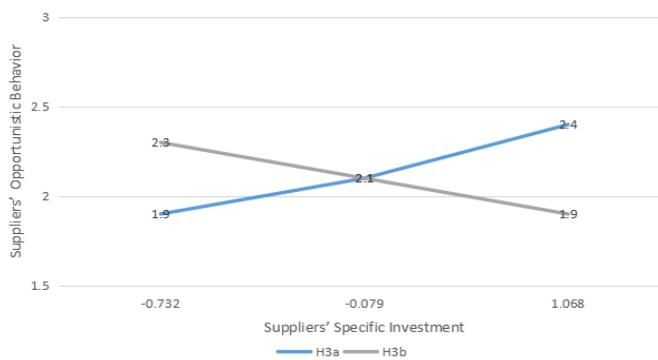


Figure 2. The decomposition of interaction effects

## 5. DISCUSSION

In this section, the major findings of the study, and the implications of the study are discussed to provide a valuable contribution to the future theoretical development and the management of business process outsourcing (BPO).

### 5.1 Major findings

Hypothesis 1 revealed a positive correlation between

suppliers' opportunistic behavior and their specific asset investments as seen in Table 4. Furthermore, in line with Hypothesis 2, it is suggested that the presence of buyers' relational capital reduces the impact of suppliers' specific asset investments on suppliers' opportunistic behavior. The presence of relational capital significantly hinders the suppliers from engaging in opportunistic behavior, particularly when the suppliers have made big investments in specific assets. Additionally, it is suggested that the relational capital possessed by buyers has a controlling impact on the behavior of suppliers. However, this safeguarding influence is contingent upon the ease with which buyers can systematically monitor the activities and outcomes of suppliers. The decomposition of the significant interaction among the SSI, RSC, and MSE variables is demonstrated in Table 4.

Based on the data presented in Figure 2, it can be observed that suppliers have limitations in engaging in opportunistic behavior when their buyers encounter challenges in effectively monitoring their activities. Typically, an inverse relationship exists between the complexity and cost of a monitoring system and the likelihood of a buyer engaging in extensive and intrusive monitoring [33]. Additionally, Figure 2 demonstrates that as the system facilitates the buyers' ability to monitor suppliers, there is an enhanced positive correlation between the suppliers' specific asset investment and their opportunistic behavior. Hence, buyers are more likely to engage in extensive monitoring of suppliers when the monitoring system is easier for them. This monitoring system's ease may diminish the relational capital's safeguarding effects.

### 5.2 Theoretical implications

This study has made significant theoretical contributions to the relevant field. First, this study suggests that the presence of relational capital among buyers safeguards against suppliers engaging in opportunistic behavior. This finding aligns with the concept of close and personal relationships among actors, which serve as a deterrent for firms to engage in opportunistic behavior towards their partners [5, 20, 38]. As a result, the previously untested concept is that firms should avoid opportunistic behavior if it affects an economically beneficial relationship. Second, this study also addresses a specific scenario in which the safeguarding role of relational capital enables establishing an easy monitoring system, allowing the buyers to monitor the suppliers' mobility and output efficiently.

Third, this study supports the concept that buyers' relational capital serves as a safeguard against suppliers' opportunistic behavior, but only in cases when buyers have limited ability to monitor their suppliers extensively. This conclusion provides further evidence that the ease of monitoring systems discourages opportunistic behavior by limiting the suppliers' autonomy in selecting the means to achieve its goals and sending a signal of distrust [33]. As a result of excessive monitoring, the suppliers may assert their independence in unfavorable ways and act unreliable, confirming the buyers' mistrust.

### 5.3 Practical implications

The research findings of the study provide several suggestions for effectively managing BPO relationships. First, relational capital can safeguard against suppliers' opportunistic behavior, particularly when the supplier has

invested in a specific asset. The safeguarding effects are applicable in cases where the buyers encounter challenges in effectively and efficiently monitoring the suppliers. Consequently, it is advisable for buyers to employ caution or be wise in their monitoring practices in order to decrease the potential for suppliers to engage in opportunistic behavior. In essence, when the ease of monitoring is high, it is advisable to minimize the inclination to closely observe all aspects since this may lead to opportunistic behavior among parties.

Second, within the scope of the study, the researchers facilitated the practice of BPO between banks and their respective business process suppliers in Indonesia. The financial services sector is widely acknowledged as the primary catalyst for economic growth. Firms engaged in the financial services industry contribute value to people's lives by providing various intangible outputs referred to as services [9].

Consequently, supply chain management is increasingly becoming a pivotal concern due to its potential to confer a competitive advantage upon firms. According to [9], banks have two distinct value chains: digital value chain and physical value chain. Additionally, banks commonly maintain relationships with two suppliers. The first consists of government or private organizations, financial institutions, groups, and individuals providing capital resources or assets, and the second comprises human resources [46]. Most banks define their competitive advantage as outstanding customer relations and service [3]. Given that these two elements are interpersonal and based on direct interactions between individuals, the bank will pursue a strategy focusing on human resources with the expertise, skills, and ability to run front-office, middle-office, and back-office business process services [39].

The financial service industry, including the banking industry, has a high level of asset specificity because specific intangible assets play a crucial role in organizational performance [47]. Furthermore, organizational decisions regarding whether to internalize or outsource transactions are influenced in part by specific assets [7]. The economic theory of transaction costs suggests that transactions with high asset specificity are internalized in hierarchies [6].

Although banks require specific assets with a high specificity level, surprisingly, Indonesia's banking industry is now the largest buyer of outsourcing services besides after the manufacturing industry [8]. This is because banks want to focus on their core competencies, allowing suppliers to manage their business processes [2]. Given the prevalence of business process outsourcing, the results of the study can be generalized beyond the boundaries of the banking industry. The reason for this is that they possess a high level of specificity.

#### 5.4 Methodological implications

Incorporating the viewpoints of both parties involved in this study can enhance its reliability and foster greater understanding [48]. Furthermore, the prediction of business process outsourcing relationships is likely to yield inadequate and misleading insights if the opinions of both parties are not thoroughly understood [10]. In the present study, an examination was conducted to identify the differences and similarities in opinions among the parties concerning the manifestation of opportunistic behavior exhibited by suppliers. Additionally, the researchers conducted cross-

validation by comparing suppliers' self-reported opportunistic behavior with buyers' reports. By utilizing the present study's research findings, the researchers may effectively address the critique that the study analysis solely relies on monadic self-reports [49].

## 6. CONCLUSION, LIMITATIONS AND FUTURE RESEARCH

It is essential to acknowledge that the present study has some limitations that require further study. First, this study employed a cross-sectional design that may need a more in-depth of understanding of suppliers' opportunistic behavior in response to their investments. Therefore, a longitudinal design would have offered a more thorough perspective in this regard. Second, a comprehensive review of the existing literature was conducted to gather information on the influence of TCE, agency theory, and social capital theory on the occurrence of opportunistic behavior among suppliers in BPO arrangements. These topics are not the only subjects of discussion within the existing body of literature. There are additional factors that may contribute to opportunistic behavior [50]. In future studies, scholars may prioritize these factors and endeavor to ascertain their impact on suppliers' opportunistic behavior.

Future research objectives could investigate the correlation between suppliers' specific investments and their opportunistic behavior. This is of interest because a previous study [29] found that interactional justice can potentially mitigate the positive impact of specific asset investments on suppliers' opportunistic behavior. Furthermore, future studies on specific asset investments may explore the factors influencing their relationship performance and norms [2].

## DATA AVAILABILITY

The data that support the findings of this study are available on request from the corresponding author, Wulan Permatasari. The data are not publicly available due to [restrictions, e.g., their containing information that could compromise the privacy of research participants].

## REFERENCES

- [1] Ketokivi, M., Mahoney, J.T. (2020). Transaction cost economics as a theory of supply chain efficiency. *Production and Operations Management*, 29(4): 1011-1031. <https://doi.org/10.1111/poms.13148>
- [2] Burkhardt, J. (2019). Specific investments in the supply chain-a literature review on the state-of-the-art knowledge with an outlook on safeguarding mechanisms and avenues for future research. *Supply Management Research: Aktuelle Forschungsergebnisse*, 2018: 129-147. [https://doi.org/10.1007/978-3-658-23818-6\\_8](https://doi.org/10.1007/978-3-658-23818-6_8)
- [3] Rai, A., Keil, M., Hornyak, R., Wüllenweber, K. (2012). Hybrid relational-contractual governance for business process outsourcing. *Journal of Management Information Systems*, 29(2): 213-256. <https://doi.org/10.2753/MIS0742-1222290208>
- [4] Kale, P., Singh, H., Perlmutter, H. (2000). Learning and protection of proprietary assets in strategic alliances: Building relational capital. *Strategic Management*

- Journal, 21(3): 217-237.  
[https://doi.org/10.1002/\(SICI\)1097-0266\(200003\)21:3<217::AID-SMJ95>3.0.CO;2-Y](https://doi.org/10.1002/(SICI)1097-0266(200003)21:3<217::AID-SMJ95>3.0.CO;2-Y)
- [5] Alghababsheh, M., Gallear, D. (2020). Social capital in buyer-supplier relationships: A review of antecedents, benefits, risks, and boundary conditions. *Industrial Marketing Management*, 91: 338-361. <https://doi.org/10.1016/j.indmarman.2020.10.003>
- [6] Groenewegen, J. (1996). Transaction cost economics and beyond: Why and how? In *Transaction Cost Economics and Beyond*, Dordrecht: Springer Netherlands, pp. 1-9. [https://doi.org/10.1007/978-94-009-1800-9\\_1](https://doi.org/10.1007/978-94-009-1800-9_1)
- [7] Macher, J.T., Richman, B.D. (2008). Transaction cost economics: An assessment of empirical research in the social sciences. *Business and Politics*, 10(1): 1-63. <https://doi.org/10.2202/1469-3569.1210>
- [8] Delbufalo, E. (2021). Asset specificity and relationship performance: A meta-analysis over three decades. *Journal of Business Research*, 134: 105-121. <https://doi.org/10.1016/j.jbusres.2021.05.015>
- [9] Naimi-Sadigh, A., Asgari, T., Rabiei, M. (2021). Digital transformation in the value chain disruption of banking services. *Journal of the Knowledge Economy*, 13: 1212-1242. <https://doi.org/10.1007/s13132-021-00759-0>
- [10] Bhattacharya, A., Singh, P.J., Nand, A.A. (2015). Antecedents of buyer opportunistic behavior in outsourcing relationships. *International Journal of Production Economics*, 166: 258-268. <https://doi.org/10.1016/j.ijpe.2015.03.011>
- [11] Wang, L., Zhang, C., Jiang, F.M. (2019). Matching governance mechanisms with transaction-specific investment types and supplier roles: An empirical study of cross-border outsourcing relationships. *International Business Review*, 28(2): 316-327. <https://doi.org/10.1016/j.ibusrev.2018.10.004>
- [12] Huang, M.C., Huang, H.H. (2019). How transaction-specific investments influence firm performance in buyer-supplier relationships: The mediating role of supply chain integration. *Asia Pacific Management Review*, 24(2): 167-175. <https://doi.org/10.1016/j.apmr.2018.03.001>
- [13] Subramani, M.R., Venkatraman, N. (2003). Safeguarding investments in asymmetric interorganizational relationships: Theory and evidence. *Academy of Management Journal*, 46(1): 46-62. <https://doi.org/10.5465/30040675>
- [14] Lee, G. (2022). Matching task complexity with supplier management to enhance outsourcing performance. *SAGE Open*, 12(3): 21582440221123460. <https://doi.org/10.1177/21582440221123460>
- [15] Hanafizadeh, P., Zareravasan, A. (2020). A systematic literature review on IT outsourcing decision and future research directions. *Journal of Global Information Management (JGIM)*, 28(2): 160-201. <https://doi.org/10.4018/JGIM.2020040108>
- [16] Zhou, K.Z., Xu, D. (2012). How foreign firms curtail local supplier opportunism in China: Detailed contracts, centralized control, and relational governance. *Journal of International Business Studies*, 43: 677-692. <https://doi.org/10.1057/jibs.2012.7>
- [17] Crosno, J.L., Tong, P.Y. (2018). Just going through the motions? An empirical investigation of control, compliance, and performance in franchisor-franchisee relationships. *Journal of Business Research*, 92: 360-373. <https://doi.org/10.1016/j.jbusres.2018.08.003>
- [18] Adler, P.S., Kwon, S.W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, 27(1): 17-40. <https://doi.org/10.5465/amr.2002.5922314>
- [19] De Vita, G., Tekaya, A., Wang, C.L. (2011). The many faces of asset specificity: A critical review of key theoretical perspectives. *International Journal of Management Reviews*, 13(4): 329-348. <https://doi.org/10.1111/j.1468-2370.2010.00294.x>
- [20] Kwon, Y.C. (2011). Relationship-specific investments, social capital, and performance: The case of Korean exporter/foreign buyer relations. *Asia Pacific Journal of Management*, 28: 761-773. <https://doi.org/10.1007/s10490-009-9172-1>
- [21] Nahapiet, J., Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2): 242-266. <https://doi.org/10.5465/amr.1998.533225>
- [22] Heide, J.B., Wathne, K.H., Rokkan, A.I. (2007). Interfirm monitoring, social contracts, and relationship outcomes. *Journal of Marketing Research*, 44(3): 425-433. <https://doi.org/10.1509/jmkr.44.3.425>
- [23] Stump, R.L., Heide, J.B. (1996). Controlling supplier opportunism in industrial relationships. *Journal of Marketing Research*, 33(4): 431-441. <https://doi.org/10.2307/3152214>
- [24] Wang, Q., Li, J.J., Ross, W.T., Craighead, C.W. (2013). The interplay of drivers and deterrents of opportunism in buyer-supplier relationships. *Journal of the Academy of Marketing Science*, 41: 111-131. <https://doi.org/10.1007/s11747-012-0310-9>
- [25] Wagner, S.M., Bode, C. (2014). Supplier relationship-specific investments and the role of safeguards for supplier innovation sharing. *Journal of Operations Management*, 32(3): 65-78. <https://doi.org/10.1016/j.jom.2013.11.001>
- [26] Pulles, N.J., Ellegaard, C., Veldman, J. (2023). The interplay between supplier-specific investments and supplier dependence: Do two pluses make a minus? *Journal of Management*, 49(4): 1430-1459. <https://doi.org/10.1177/01492063221087643>
- [27] Klassen, R.D., Shafiq, A., Johnson, P.F. (2023). Opportunism in supply chains: Dynamically building governance mechanisms to address sustainability-related challenges. *Transportation Research Part E: Logistics and Transportation Review*, 171: 103021. <https://doi.org/10.1016/j.tre.2023.103021>
- [28] Inkpen, A.C., Tsang, E.W. (2005). Social capital, networks, and knowledge transfer. *Academy of Management Review*, 30(1): 146-165. <https://doi.org/10.5465/amr.2005.15281445>
- [29] Crosno, J.L., Manolis, C., Dahlstrom, R. (2013). Toward understanding passive opportunism in dedicated channel relationships. *Marketing Letters*, 24: 353-368. <https://doi.org/10.1007/s11002-012-9220-3>
- [30] Griffith, D.A., Zhao, Y. (2015). Contract specificity, contract violation, and relationship performance in international buyer-supplier relationships. *Journal of International Marketing*, 23(3): 22-40. <https://doi.org/10.1509/jim.14.0138>
- [31] Heide, J.B., Kumar, A., Wathne, K.H. (2014). Concurrent sourcing, governance mechanisms, and performance outcomes in industrial value chains. *Strategic Management Journal*, 35(8): 1164-1185.

- <https://doi.org/10.1002/smj.2145>
- [32] 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>
- [33] Crosno, J.L., Brown, J.R. (2015). A meta-analytic review of the effects of organizational control in marketing exchange relationships. *Journal of the Academy of Marketing Science*, 43: 297-314. <https://doi.org/10.1007/s11747-014-0386-5>
- [34] Ishida, C., Brown, J.R. (2013). A taxonomy of monitoring in business-to-business relationships. *Journal of Marketing Theory and Practice*, 21(2): 123-140. <https://doi.org/10.2753/MTP1069-6679210201>
- [35] Brookes, M., Altinay, L., Aktas, G. (2015). Opportunistic behaviour in hospitality franchise agreements. *International Journal of Hospitality Management*, 46: 120-129. <https://doi.org/10.1016/j.ijhm.2015.02.001>
- [36] Zaefarian, G., Robson, M.J., Najafi-Tavani, Z., Spyropoulou, S. (2023). Relationships of stressors and opportunism in cross-border exchange partnership contexts: When and how monitoring matters. *Journal of International Business Studies*, 54(3): 441-475. <https://doi.org/10.1057/s41267-022-00560-4>
- [37] Praxmarer-Carus, S. (2014). Why the proposal of a complex contract may harm or foster a partner's trust. *Journal of Business Research*, 67(7): 1421-1429. <https://doi.org/10.1016/j.jbusres.2013.07.025>
- [38] Chang, H.H., Hung, C.J., Huang, C.Y., Wong, K.H., Tsai, Y.J. (2017). Social capital and transaction cost on co-creating IT value towards inter-organizational EMR exchange. *International Journal of Medical Informatics*, 97: 247-260. <https://doi.org/10.1016/j.ijmedinf.2016.10.015>
- [39] Gewalt, H., Dibbern, J. (2009). Risks and benefits of business process outsourcing: A study of transaction services in the German banking industry. *Information & Management*, 46(4): 249-257. <https://doi.org/10.1016/j.im.2009.03.002>
- [40] 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>
- [41] Heide, J.B., John, G. (1990). Alliances in industrial purchasing: The determinants of joint action in buyer-supplier relationships. *Journal of Marketing Research*, 27(1): 24-36. <https://doi.org/10.1177/002224379002700103>
- [42] Kim, S.K., McFarland, R.G., Kwon, S., Son, S., Griffith, D.A. (2011). Understanding governance decisions in a partially integrated channel: A contingent alignment framework. *Journal of Marketing Research*, 48(3): 603-616. <https://doi.org/10.1509/jmkr.48.3.603>
- [43] Straub, D., Rai, A., Klein, R. (2004). Measuring firm performance at the network level: A nomology of the business impact of digital supply networks. *Journal of Management Information Systems*, 21(1): 83-114. <https://doi.org/10.1080/07421222.2004.11045790>
- [44] Bolin, J.H. (2014). Hayes, Andrew F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York: The Guilford Press. *Journal of Educational Measurement*, 51(3): 335-337. <https://doi.org/10.1111/jedm.12050>
- [45] Porter, M.A., Aike, L.S., West, S.G. (1994). Multiple regression: Testing and interpreting interactions. *Journal of the Royal Statistical Society, Series D (The Statistician)*, 43(3): 453. <https://doi.org/10.2307/2348581>
- [46] Rajamani, D., Geismar, H.N., Sriskandarajah, C. (2006). A framework to analyze cash supply chains. *Production and Operations Management*, 15(4): 544-552. <https://doi.org/10.1111/j.1937-5956.2006.tb00162.x>
- [47] Zaheer, A., Venkatraman, N. (1995). Relational governance as an interorganizational strategy: An empirical test of the role of trust in economic exchange. *Strategic Management Journal*, 16(5): 373-392. <https://doi.org/10.1002/smj.4250160504>
- [48] White, A., Daniel, E.M. (2004). The impact of e-marketplaces on dyadic buyer-supplier relationships: Evidence from the healthcare sector. *Journal of Enterprise Information Management*, 17(6): 441-453. <https://doi.org/10.1108/17410390410566733>
- [49] Wang, X.H., 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>
- [50] Hawkins, T.G., Wittmann, C.M., Beyerlein, M.M. (2008). Antecedents and consequences of opportunism in buyer-supplier relations: Research synthesis and new frontiers. *Industrial Marketing Management*, 37(8): 895-909. <https://doi.org/10.1016/j.indmarman.2007.05.005>