# Effects of Relational Norms on Mitigating Opportunism: A Case of Smallholding Vegetable Farmers in Sri Lanka

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**Abstract:** Lack of empirical evidence regarding the relative efficacy of relational norms on mitigating opportunism particularly against smallholding vegetable farmers represents a significant gap in the literature. Therefore, this paper attempts to fill this gap studying the effects of relational norms on mitigating opportunism against smallholding vegetable farmers in Sri Lanka. Survey data collected from 100 smallholder vegetable farmers in Welimada Agrarian Development Division in Sri Lanka was used for empirical testing. Data was analyzed using Partial Least Square - Structural Equation Modeling (PLS-SEM).

Empirical results confirmed that relational norms i.e. information exchange, solidarity, flexibility, role integrity, and reciprocity between smallholding vegetable farmers and exchange partners have a significant impact on mitigating opportunism against smallholder vegetable farmers accepting all hypothetical relationships. Based on the results, the study concludes that relational norms between smallholder vegetable farmers and exchange partners encourage mutual interest seeking and discourage self-seeking behavior of exchange partners preventing opportunism against smallholder vegetable farmers in Sri Lanka. Relational norms should be further enhanced by strengthening exchange relationships ensuring favorable transaction environment in order to minimize opportunism which leads to mitigate transaction costs and thereby improve the performance of smallholder vegetable farmers.

Keywords: Sri Lanka, Opportunism, Relational Norms, Smallholding Vegetable Farmers

### I. Introduction

Transaction Cost Economics (TCE) highlights that opportunism is a key behavior assumption that leads to generate transaction costs (Williamson, 1985[1]). Therefore, effective safeguard device against opportunism is needed to apply in order to minimize transaction costs (Hobbs, 1996[2]; Williamson, 1985[1]). TCE suggests two alternatives to mitigate opportunism i. e. market (use open market to purchase inputs and sale outputs) and hierarchy (internalize transactions within the firm hierarchy) (Williamson, 1979[3], 1985[1]; Zhang, 2009[4]). In view of smallholder farmers, market mechanism is not a good solution for governing opportunism because available imperfect market fails to generate reliable information for all transaction parties (Pitelis and Pseiridis, 1999[5]: Spraakman, 1997[6]). As a result, smallholding farmers have a higher possibility of suffering hazards from opportunism of exchange partners because they do not have capacity to collect and evaluate information due to various barriers including geographical barriers in remote areas with poor infrastructure facilities, lack of knowledge to access information, lack of time and capacity to gather and handle information, and lack of resources to obtain necessary information (Pitelis and Pseiridis, 1999[5]: Spraakman, 1997[6]). In contrast, hierarchical governance is also not feasible to minimize opportunism because smallholder farmers are naturally lacking in resources required for internalizing transactions within the farm hierarchy (Li and Oian, 2007[7]: Premaratne, 2002[8]). Therefore, smallholder farmers find it difficult to safeguard their transactions from opportunism using either market or hierarchy.

Instead, some scholars suggested that a mutual understand generated from strong relationships between exchange parties facilitates to govern opportunism (Achrol&Gundlach, 1999[9]). Smallholder farmers use informal relationships to access necessary information (find reliable exchange partners, search for the lowest prices to purchase inputs) and assess information (support obtained to evaluate information in order to make more rational decisions) which lead to safeguard their transaction from opportunism (Donnell, 2004[10]; Jones et al., 1997[11]; Lu et al., 2012[12]; Okten and Osili, 2004[13]; Premaratne, 2002[8]). Due to the long-term relationships developed through regular interaction, a mutual understanding between exchange parties develops (Bolino et al., 2002[14]; Dwyer et al., 1987[15]). Such mutual understanding provides guidance for long-term relationship by developing suitable behavior and preventing improper behavior (Dwyer et al., 1987[15]; Gundlach et al, 1995[16]). Such mutual understanding that leads to govern their relationships refers as relational norms (Achrol and Gundlach, 1999[9]; Dahlstrom and Nygaard, 1999[17]; Dwyer et al., 1987[15]).

A few scholars (for example: Achrol and Gundlach, 1999[9]; Gundlach et al., 1995[16]; Heide and John, 1992[18]; Paswan, 1999[19]; Rokkan et al, 2003[20]; Ting et al., 2007[21]) have empirically tested the effect of relational norms on opportunism. However, the lack of empirical evidence regarding the relative

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valueof relational norms on mitigating opportunism particularly against smallholding farmers represents a significant gap in the literature. Therefore, this study attempts to understand how relational norms between smallholder vegetable farmers and exchange partners affect the mitigation of opportunism against smallholder vegetable farmers in Sri Lanka. Findings of this paper extend our understanding of the practical implication of relational norms on mitigating opportunism against smallholder vegetable farmers in developing countries like Sri Lanka.

This paper is structured as follows: next section deals with the literature review and the research model. Thereafter, research design is described and then empirical results are presented. Finally the conclusion and practical implications are drawn.

## II. Literature Reviewand Research Model

This section presents an integrated model incorporating both TCE and Relational Contact Theory (RCT) to analyze the effect of relational norms between smallholder vegetable farmers and exchange partners on the mitigation of opportunism. TCE highlighted that transaction parties do not have perfect knowledge about the market since they possess only limited information (Bellalaha and Aboura, 2006[22]). Information is unequal among transaction parties i.e. one party has more information than the other (Bwalya, 2013[23]; Priyanto et al., 2014[24]). If one partner has more information than the other partner, the partner who has more information may tend to behave opportunistically against the partner who has less information (Williamson, 1981[25]). Therefore, the partner who has less information tries to safeguard his transaction from opportunism by incurring costs to search reliable exchange partners, lowest prices to purchase inputs, highest prices to sale the output, as well as costs to negotiate with exchange partners and monitor transactions (Dyer, 1997[26]; Hobbs, 1996[2]; Williamson, 1985[1]). Those costs are referred to as TC (Dyer, 1997[26]; Hobbs, 1996[2]; Williamson, 1985[1]). According to Williamson (1979[3]), two remedies i.e. complex contracts with legal rules, standards implied in the law are needed to protect from opportunism or hierarchical governance internalizing transaction within the firm is needed to avoid opportunism.

Meanwhile, the Relational Exchange Theory (RCT) suggests that when exchange parties have mutual interests they would develop a relationship with each other and conduct transactions frequently expecting mutual benefits (Dwyer et al., 1987[23]; Heide and John, 1992[18]). When this relationship continues for a long period of time, it would generate relational norms (Rokkan et al., 2003[20]). Relational norms refer to the informal agreements that govern individuals' behavior in society. These relational norms would lead exchange partners to exchange information, resources, support, and cooperation (Lu et al., 2007[27]). Scholars such as Achrol and Gundlach (1995[27]), Dahlstrom and Nygaard (1999[17]), Dwyer et al. (1987[15]), Tuusjarvi and Moller (2009[28]) have highlighted the importance of relational norms which can be used as an alternative safeguard mechanism against opportunism.

Smallholder vegetable farmers in Sri Lanka highly depend on a few intermediary traders, whole sellers or retailers (Gamage and Damayanthi, 2012 [29]). They tend to conduct frequent interactions with them to sell their outputs and purchase inputs at village level (Gamage and Damayanthi, 2012[29]). These regular interactions lead to develop relational norms between them. Although Macneil (1980[30]) theoretically introduced ten relational norms, scholars empirically tested only a few. Gundlach (1995[27]) tested the solidarity, mutuality, flexibility, role integrity, and harmonization of conflict. Doucette (1996[31]) empirically tested the role of integrity, solidarity and information exchange. Paswan and Young (1999[19]) empirically tested the role of integrity, solidarity and mutuality. Studies conducted by Noordeweir et al. (1990[32); Heide and John (1992[18]), used information exchange, flexibility and solidarity for empirical testing. However, the current study selects five norms (information exchange, solidarity, flexibility, role integrity, and reciprocity) which are more relevant to the smallholder vegetable farmers and their exchange partners to develop hypothetical relationships with opportunism. Figure 01 shows the conceptual research model of the study.

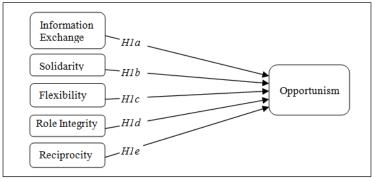


Figure 01: Conceptual Research Model

Information exchange and opportunism: Norm of information exchange is conceptualized as the practice where exchange partners (buyers of outputs and sellers of inputs) willingly provide confidential, useful and important information for trusted exchange partners, which is not usually disclosed to common exchange partners (Anderson and Weitz, 1992[33]; Doucette, 1996[31]; Heide and John, 1992[18]). Dyer (1997[26]) empirically observed that information exchange between exchange partners reduced information asymmetry which leads to mitigate opportunism. Information exchange facilitates to know in advance whether the products prices are high, input prices are low, potential exchange partner is honest and reliable etc. Information sharing develops decision making ability and risk of opportunism can be avoided sharing information (Mysen et al., 2011b[34]; Inkpen and Tsang, 2005[35]). Thus, information exchange helps to decrease opportunistic behavior (Carey, 2011[36]; Granovetter, 1985[37]). As relational norms develop over time, opportunities for sharing information between exchange parties increase (Inkpen and Tsang, 2005[35]). If exchange partners freely exchanged information, it would be possible to mitigate opportunism. Therefore, this study predicts that;

H1a: Norm of information exchange between farmers and their exchange partners negatively relate to opportunism against smallholder vegetable farmers.

Solidarity and opportunism: Solidarity refers as behavior incorporating the three elements where exchange partners would treat each other fairly, solve problems jointly, and be committed towards improving the relationship (Doucette, 1996 [31]; Heide and John, 1992[18]). Solidarity is conceptualized as the value the relationship treating fairly each other, solving problem corporately and will work to preserve the relationship. In the setting of smallholder farmers, the first component involves characteristics such as providing accurate market information, fulfilling promises, and not exploiting farmers even if there is an opportunity (Heide and John, 1992[18]). Exchange partners would treat each other fairly and meet all obligations (Macneil, 1980[30]). Second element of solidarity in farmers' exchange relationships refers to the support given by exchange partners when farmers experience hardships while the third item includes commitment towards relationship maintenance and improvement (Macneil, 1980[30]; Paswan and Young, 1999[19]). Heide and John (1992[18]) found that solidarity protects exchange partners who have invested in specialized assets from opportunistic inclinations of the other party. In a survey conducted on automobile dealers and tire dealers, Boyle et al. (1992[38]) found that suppliers tend to employ fewer threats when solidarity exists. This indicates that under solidarity exchange partners show lower tendency for opportunism. Paswan and Young (1999[19]) found that when solidarity exists partners tend to support each other such as by providing business advice. Moreover, solidarity increases partners' long-term commitment intentions (Gundlach et al., 1995[27]; Jap and Ganesan, 2000[39]). This is an implication of a lower level of opportunistic tendencies. Therefore, this study assumes that:

H1b: Solidarity between farmers and their exchange partners relate negatively with opportunism against smallholder vegetable farmers.

Flexibility and opportunism: Flexibility refers as the elastic behavior of exchange partners including two components: flexibility towards behavioral uncertainty and flexibility towards environmental uncertainty (Heide and John, 1992[18]; Ivens and Blois, 2004[40]). In the context of farmers' exchange relationships, flexibility refers to making allowances for one party if they are unable to fulfill an obligation. Under flexibility there is no much need to cover for every possible circumstance in advance since exchange partners adapt to changing circumstances as they occur. Dwyer and Gassenheimer (1992[41]) uncovered that flexibility leads channel partners to make more attempts at satisfying each other. This essentially implies that they would behave without opportunism so as to satisfy the trading partner. According to Boyle et al. (1992[38]), flexibility prevents the use of threats by exchange partners. As observed by Heide and John (1992), under flexibility, exchange parties make necessary modifications in favor of the disadvantaged party if changed circumstances prove damaging to one party. This implies that the partners are not opportunistic. Therefore, the study proposes;

H1c: Flexibility between farmers and their exchange partners negatively relate to opportunism against smallholder vegetable farmers.

**Role integrity and opportunism:** Role integrity is conceptualized as the behavior where exchange partner performs the assigned role honestly, efficiently, and effectively (Kaufmann and Dant, 1992[42]; Macneil, 1980[30]; Paswan and Young, 1999[19]). Paswan and Young (1999[19]) defined the role integrity as;

"Contrasts the complexity of roles to be enacted in the context of a relational exchange relationship compared to discrete exchange settings which comprise relatively few expectations other than simple price-delivery requirements" (p.446).

Under role integrity, exchange parties would behave properly and adequately in all circumstances (Misztal, 1996[43]). Paswan and Young (1999[19]) suggested that if role integrity exists in a business relationship, formal rules are not required. From this proposition it is possible to understand that role integrity has an inverse relationship with opportunism. So the study posits:

H1d: Role of integrity between farmers and their exchange partners is negatively related with opportunism against smallholder vegetable farmers.

Reciprocity and opportunism: Boyle et al. (1992[38]) observed an inverse relationship between reciprocity and opportunistic behavior. Pilling et al. (1994[44]) found out that as an exchange relationship becomes more important, parties begin to develop reciprocity in the relationship. Moreover, they observed that channel partners used reciprocity as a substitute for more costly opportunism governing mechanisms. Gundlach et al. (1995[27]) found that channel partners became more committed due to reciprocity. That crates a mutual dependence between exchange partners. Because of this mutual dependence, they cannot behave opportunistically towards each other. As noted by Kaufmann and Stern (1988[45]), when reciprocity exists, exchange partners do not monitor each and every transaction to the minute detail to make sure if the other party has performed as expected since it would damage the friendship between them. This essentially implies an absence of opportunism. According to Boyle et al. (1992[38]), reciprocity prevents the use of threats by exchange partners. Since threats are a form of opportunism, this statement by Boyle et al. (1992[38]) means reciprocity lowers opportunism. Hence, the study proposes:

H1e: Reciprocity between farmers and their exchange partners negatively relate to opportunism against smallholder vegetable farmers.

#### III. Methodology

**Sample and Data Collection:** A survey was conducted in *Bogahakumbura* village in *Welimada* area, the most popular vegetable growing area located in the *Uva* Province in Sri Lanka. The study selected 100 smallholder vegetable farmers using simple random sampling method from a sample frame of 305 smallholder vegetable farmers. A pre-tested structural questionnaire was employed for the collection of data. The questionnaire was administered using face-to-face interviews with the farmers. Data collection was carried out from September, 2015 to February, 2016.

In the sample, 95% are male. Mean age of the farmers is 43 years (SD = 10.3). Majority of the farmers (57%) have completed the secondary level education. 78% of the farmers earn less than US\$ 750 per farming season (Mean = US\$ 640). This means monthly income of majority of the farmers does not exceed US\$ 120. Cultivated land area of all the farmers does not exceed 1 acre. 85% of farmers cultivated less than half an acre. (Mean land area = 0.44 acres and SD = 0.1). Furthermore the farmers have several years of farming experience. 57% of the farmers have been engaged with farming for more than 16 years (Mean = 15.8 years, SD = 10.8). This gives more credibility to their responses regarding the presence of relational norms and opportunism. The sample further showed that farmers conduct majority of their transactions with long-term exchange partners. On average, farmers conducted 88.6% of transactions with exchange partners with whom they have a close connection over a long period. Moreover, farmers have a high level of friendship with their exchange partners (Mean = 6.4), indicating a strong level of friendship. Sample data further showed that farmers often conduct their transactions singularly based on informal contracts (no written legal agreements).

**Measurement of variables:** Variables were measured using multiple items which were developed based on work of prior researches. Five independent variables (information exchange, solidarity, flexibility, role integrity, and reciprocity) and one dependent variable i.e. opportunism of exchange partners were adopted to conduct this research. Items used to measure variables are detailed in Table 1.

Norm of information exchange was measured using four items; confidential information, information needed for efficient coordination of transactions, useful information for transactions, and feedback information. These items were developed based on previous studies of Anderson and Weitz (1992[33]), Doucette (1996[31]), Dyer and Chu (2003[46]), Heide and John (1992[18]). Solidarity is measured employing three items; treat each other fairly, joint problem solving, and commitment towards improving the relationship which are all developed based on the studies of Dant and Schul (1992[47]), Doucette (1996[31]), Heide and John (1992[18]). Flexibility was measured using one item of flexible behavior in dealing with the exchange partner which was developed based Ivens and Blois (2004[40]).

Role integrity was measured using four reflective items; the extent to which channel partners fulfill their assigned role correctly and honestly, the extent to which channel partners possess a clear knowledge of the other's needs, the extent to which channel partners maintain a role which is both complex and unique to that specific relationship, and the extent to which channel partners are satisfied with each other. These items were formulated with the support of the studies by Kaufmann and Dant (1992[42]), Misztal (1996[43]), Paulin et al. (1998[48]), Paswan and Young (1999[19]). Under reciprocity, channel partners value the relationship and its long-term benefits rather than immediate gains (Kaufmann and Dant, 1992[42]). Two reflective items: whether the exchange partners monitor each and every transaction separately in order to certify that the other has performed as expected and whether the exchange partners ignore temporary mistakes made by the other party because they value the relationship and its long-term benefits rather than short-term payoffs, were used to

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measure reciprocity. These items were developed based on the research work of Kaufmann and Dant (1992[42]).

Table 1: Reliability and validity of items used to measure constructs

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Measures		OLs	t	a*	AVE
Flexibility  Flexibility in dealing with evaluation partners. They are flexible to medify	$\mathbf{B}^{1}$	1.04	0.42	0.94	1.07
Flexibility in dealing with exchange partner: They are flexible to modify	В	1.04	8.43		
the promises and agreements when I face unexpected situations (Cancel orders, delay the credit instalments).	$S^2$	1.02	0 02		
	3	1.03	8.83	0.00	0.05
Information Exchange	Ъ	0.88	5.83	0.98	0.95
Confidential information: They always support me providing confidential	В	0.88	3.83		
and secret information that is not usually disclosed to others (future trends in the market etc.).	S	1.05	7.10		
Information needed for efficient coordination of transactions: They	В	1.05 0.91	7.19 6.61		
always support me providing information which helps me to plan and	Ь	0.91	0.01		
organize transaction activities in advance (delivery time, future market	S	1.03	6.76		
prices etc.).	3	1.03	0.76		
Useful information: They always support me providing useful	В	0.95	7.24		
information such as unforeseen market trends and threats.	S	1.04	7.56		
Feedback information: They always communicate regarding each	В	-	7.13		
other's performance (Buyers give feedback on the quality of their	Δ.	0.96	7.13		
	S	0.95	7.61		
products, Suppliers inquire the quality of their inputs).  Role Integrity	ာ	0.73	7.01	0.98	1.01
Exchange partners always fulfil their role correctly and honestly.	D	1.01	8.74	0.98	1.01
	B B	1.01	9.31		
Exchange partners always possess a clear knowledge of our needs.		-			
	S	0.84	7.70		
Exchange partners always maintain a unique relationship with us.	В	1.04	9.47		
	S	1.12	9.50		
Exchange partners are always satisfied with the relationship between us.	В	0.87	7.96		
D + 4	S	1.03	7.99	0.04	0.03
Reciprocity	D	0.82	6.04	0.94	0.83
Exchange partners do not monitor each and every transaction separately	B				
in order to certify that we perform as expected.	В	0.98	6.69		
Exchange partners ignore temporary mistakes made by me.	S	0.80	6.45		
Cal: Jan: 4	3	1.03	6.25	0.06	0.00
Solidarity There are not belowing any activities the and about their	D	0.71	6.40	0.96	0.80
<b>Treat fairly:</b> They are not behaving opportunistically and show their	В	0.71	6.40		
fairness in many activities in transaction (in weighing, assigning value, offering or charging prices etc.).	S	1.04	7.50		
Joint problem solving: If I fail to perform according to previous promises	В	0.81	7.21		
or when I face difficult situations, they will discuss with me and find	S	1.01	8.44		
possible solutions jointly.	٦	1.01	0.44		
Commitment towards improving the relationship: They devote their	В	0.86	6.71		
time, resources and opportunities to continue the relationship with us.	S	0.90	7.68		
Opportunism	b	0.70	7.00	0.99	0.70
I think that exchange partners exaggerate needs to get what they want.	В	0.94	6.32	0.77	U./U
Trank and exchange parmers exaggerate needs to get what they want.	S	0.94	6.33		
I think that exchange partners are not sincere.	В	0.79	6.34		
		0.79	5.90		
T think that exchange partners are not sincere.		0.00			
<u> </u>	S		501		
I think that exchange partners provide an incomplete and deceptive	В	0.77	5.84		
I think that exchange partners provide an incomplete and deceptive picture when negotiating.	B S	0.77 0.82	5.90		
I think that exchange partners provide an incomplete and deceptive	B S B	0.77 0.82 0.75	5.90 5.94		
I think that exchange partners provide an incomplete and deceptive picture when negotiating.  I think that exchange partners are not fair during transactions.	B S B S	0.77 0.82 0.75 0.77	5.90 5.94 6.75		
I think that exchange partners provide an incomplete and deceptive picture when negotiating.	B S B	0.77 0.82 0.75	5.90 5.94		

Source: Survey data, 2016.

(n=100),  $\alpha^*$  Cronbach's alpha, 1 =Farmers' reply regarding buyers, 2= Farmers' reply regarding suppliers,  $OLs=Outer\ Loadings$ 

Opportunism of exchange partners was measured using five reflective items; exaggeration of needs, sincerity of partner, truthfulness in dealings, good faith bargaining, and breach of agreement. These items were adopted from the studies of Anderson (1985[49]), Dahlstrom and Nygaard (1999[17]), Dwyer et al. (1987[41]), Gundlach et al. (1995[27]), Mysen et al. (2011[34]), Rokkan et al. (2003[20]). All the items of each variable were measured by a 7-point Likert scale (1 – Strongly disagree; 2 – Disagree; 3 – Somewhat disagree; 4 – Neither agree nor disagree; 5 – Somewhat agree; 6 – Agree; 7 – Strongly agree). Each farmer was asked to state their agreement to the statements using these rankings. Respondents were requested to select the most important vegetable buyer and input supplier and get answer regarding such buyer and supplier for each closed-ended question accordingly.

**Data analysis:** Data was analyzed by applying Partial Least Square - Structural Equation Modeling (PLS-SEM) using SmartPLS software. Each variable is reflected by a set of factors which are highly correlated with that particular variable. The models in this research are assessed separately in a two-step process. In the first step, reliability and validity of the item measures are examined and in the second step, the assessment involves the examination of the structural relationships.

Reliability of variables was measured using indicator reliability and composite reliability while validity incorporated convergent validity and discriminant validity. Results showed that indicator reliability of each variable is much larger than the preferred level of 0.7 and all the indicators are significant at 1%. Values of internal consistency reliability of variables are shown to be larger than 0.7, representing high levels of internal consistency reliability among variables. The research adopts consistency coefficient (Cronbach's alpha) to examine reliability of constructs. The Cronbach's  $\alpha$  coefficients of all variables in the study are over 0.8 and therefore have reached the acceptable level (see Table 1).

The study checked convergent validity of each variable. All of the Average Variance Extracted (AVE) values are greater than the acceptable threshold of 0.5, confirming the convergent validity (see Table I). The study measured discriminant validity by comparing the square root of AVE values with the construct correlations. All the square roots of AVE are greater than correlations of the variables hence confirming discriminant validity (see table 2). Two-tailed t-test was carried out for both inner and outer models to check statistical significant.

Table 2: Discriminant validity of independent variables

Tuble 20 2 iselfinitially of independent variables					
Variable	Flexibility	Info	Reciprocity	Role Integrity	Solidarity
		Exchange			
Flexibility	1.0355				
Info Exchange	0.7894	0.9742			
Reciprocity	0.7961	0.8191	0.9129		
Role Integrity	0.8660	0.8192	0.7955	1.0028	
Solidarity	0.8886	0.8722	0.8661	0.8952	0.8966

Source: Survey data, 2016.

#### IV. Results and Discussion

The study initially estimated the relationship between each items of each norm and opportunism. Table 3 shows that all path coefficients have minus signs revealing negative relationships with opportunism. Ten items out of the 12 have acceptable path coefficients while nine path coefficients are statistically significant. Table 3 further shows that one dimension of information exchange out of the four, i.e. information needed for efficient coordination of transactions and opportunism has a significant relationship. All three items in the norm of solidarity and opportunism show significant negative correlations. All items of flexibility and reciprocity have significant negative correlations with opportunism while only two out of the four items in role of integrity are negatively correlated with opportunism. Hypothetical relationships described in the conceptual research model were tested using PLS -SEM to identify the direct path coefficients between relational norms and opportunism. Table 3 shows that relational norms and opportunism have negative and significant path relationships. In order to test the statistical significance of the model, two-tailed t-test was conducted using bootstrapping algorithm. All path coefficients related to the five hypotheses in the structural model are statistically significant. Information exchange has a significant negative effect on opportunism ( $\beta 1=-0.302$ ) supporting hypothesis 1. The results reveal that norm of information exchange is the most important and powerful norm which affect the mitigation of opportunism. These results prove similar to the observations made by Dyer (1997[26]) who empirically observed that information exchange between exchange partners reduced information asymmetry and to the reflections of Heide and John (1992[18]) '.m that recognized information exchange as an effective governance tool against opportunism.

The results shows that solidarity has a significant negative effect on opportunism ( $\beta$ 1= -0.223) supporting hypothesis 2. As observed during the research, both exchange parties have always attempted to prove their reliability, predictability, and fairness to each other. Hence they refrained from engaging in any activity that might lead to the destruction of inter-personal trust developed between them from long-term transactions. Farmers believed that if a problem occurs in relation to the transaction, they can negotiate with their exchange partners and settle it in a friendly manner, because both parties have a very good understanding between themselves. Whenever one exchange party faced hardships, the other party would support them. Furthermore, a great degree of commitment to continue the relationship could be observed. Paswan and Young (1999[19]) found that when solidarity exists partners tend to support each other by providing business advice, advertising support, pricing assistance, inventory management assistance, and etc. Heide and John (1992[18]) observed a negative relationship between solidarity and opportunism. Boyle et al. (1992[38]) found that suppliers tend to employ fewer threats when solidarity exists. Similar findings were perceived this study as well.It was also perceived that the norm of flexibility also plays an important role in mitigating opportunism. Flexibility has a significant negative effect on opportunism ( $\beta$ 1= -0.223) supporting hypothesis 3. Farmers stated that their mistakes were tolerated by the other party if those problems have occurred due to unavoidable circumstances. Prevalence of such flexibility is because transacting parties have a long-term mutual orientation embedded in inter-personal trust. In the same way, several other scholars have empirically observed that when flexibility is present, exchange partners would refrain from opportunism. Boyle et al. (1992[38]) found that flexibility protects firms against threats and unfair requests of trading partners implying a negative relationship between flexibility and opportunism. Results of the study establish a similar relationship between flexibility and opportunism.

Table 3: Path coefficients between each item of Latent Variables

Variable	Relationship	Path	Т -	
	-	Coefficient (β)	Statistics	
Information	Confidential information→ Opportunism	-0.23	1.19	
exchange	Information needed for efficient coordination of	-0.39*	2.52	
	transactions→ Opportunism			
	Useful information→ Opportunism	-0.17	1.17	
	Feedback information → Opportunism	-0.14	0.96	
Solidarity	Treat fairly→ Opportunism	-0.26**	5.08	
-	Joint problem solving→ Opportunism	-0.37**	3.95	
	Commitment towards improving the relationship→	-0.35**	3.15	
	Opportunism			
Flexibility	Flexibility in dealing with the partner→	-0.90**	32.12	
	Opportunism			
Role integrity	Fulfil the role correctly and honestly→	-0.08	0.75	
	Opportunism			
	Possess a clear knowledge and empathise→	-0.53**	4.89	
	Opportunism			
	Maintain a unique relationship → Opportunism	0.07	0.42	
	Satisfied with the relationship → Opportunism	-0.40*	2.15	
Reciprocity	Do not monitor each and every transaction	-0.51** 2.86		
	separately → Opportunism	-0.51	2.00	
	Ignore temporary mistakes made→ Opportunism	-0.39*	2.06	

(n=100), \*p<0.05, \*\*p<0.01.

**Table 4: Estimation of structural model** 

Hypothesis	Path	Path coefficient	Т -
		(β)	<b>Statistics</b>
H1a	Information exchange → Opportunism	-0.302***	3.53
H1b	Solidarity → Opportunism	-0.223**	2.55
H1c	Flexibility → Opportunism	-0.223***	3.59
H1d	Role integrity → Opportunism	-0.143*	1.74
H1e	Reciprocity → Opportunism	-0.149*	1.79

(n=100), \*p<0.1, \*\*p<0.05, \*\*\*p<0.01.

Results confirm that role integrity has a significant negative effect on opportunism ( $\beta$ 1= -0.143) supporting hypothesis 4. Farmers believed that their exchange partners fulfill their assigned role correctly and

honestly. This desire to perform the assigned role well makes it impossible for exchange partners to use underhand methods to deceive the farmers, which portrays an absence of cheating and dishonesty. Hence it is possible to conclude that when exchange partners work with role integrity, opportunism is mitigated.

Results further showed that when farmers and their exchange partners have reciprocity, it causes opportunism to fall. Reciprocity has a significant negative effect on opportunism ( $\beta 1=-0.149$ ) supporting hypothesis 5. Under reciprocity, exchange partners value the relationship and its long-term benefits rather than short-term gains. Because of this mutual dependence, they cannot behave opportunistically towards each other. It proves the declaration made by Kaufmann and Dant (1992[42]) who stated that when reciprocity exists, channel partners do not monitor each and every transaction to the minute detail to make sure that the other party has performed as expected since it would damage the friendship between them. The study has a similar finding to the observations made by Boyle et al. (1992[38]), who witnessed an inverse relationship between reciprocity and opportunistic behavior.

#### V. Conclusion

This study examines how relational norms affect opportunism against smallholder vegetable farmers in Sri Lanka. Empirical results confirmed that relational norms between smallholder vegetable farmers and their exchange partners have a significant impact on mitigating opportunism against smallholder vegetable farmers accepting all hypothetical relationships. Based on the results, the study concludes that relational norms between smallholder vegetable farmers and exchange partners encourage mutual interest seeking and discourage self-seeking behavior of exchange partners preventing opportunism against smallholder vegetable farmers in Sri Lanka. The study argues that smallholder farmers in developing countries fail to safeguard their transactions from opportunism using either market or hierarchical governance as suggested by TC theory which assumes opportunism as the basic characteristic of economic exchange. The study provides evidence that relational norms have the power to govern opportunism of exchange partners by changing their general behavior in the long-term exchange relationship. Thus, this study contributes empirical evidence to the existing literature that norms play an important role in governing opportunism.

The results have significant practical implications to improve smallholder vegetable farming sector in Sri Lanka. First, smallholder farmers find it difficult to join in markets because of the limitations and barriers reflected in the transaction costs which mainly generate due to opportunism. Relational norms act as a governance tool to mitigate opportunism which improves the performance. Thus the study provides valuable insights for smallholder vegetable farmers to develop relational norms strengthening their relationship with exchange partners in order to reduce opportunism. Second, the results suggest that developing a social environment that encourages mutual interest seeking would enable exchange parties to mitigate opportunism. Facilitating to develop a favorable transaction environment developing market links and providing necessary facilities, lead to strengthen relationships that encourage mutual interest seeking between farmers and exchange partners

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