

Determinants of Collective Marketing Agents' Performance: An Empirical Study of Smallholders' Collective Marketing with Evidence from Malawi Tobacco Growers

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Abstract

Improving marketing access for smallholders is one of the different mechanisms aimed to stimulate rural agricultural activities and alleviate poverty. Collective marketing through agents has been pointed out as a key strategy that can improve smallholders marketing activities. This paper presents the findings of a study that had analysed the determinants of collective marketing agents' performance in relation to its smallholder tobacco farmers. Data was collected from 16 groups of tobacco growers from Thyolo and Mchinji districts in Malawi. In all, 104 questionnaires were distributed, but 86 qualified for analysis. Data were analysed using multiple regression analysis. The findings support two hypotheses related to monitoring and information systems. Even though the study findings support external influence and goal conflict hypotheses, they were largely insignificant. The result suggests that improving agents' performance requires well-established monitoring systems and information flow. This study bridges the existing knowledge gap on the relationship between smallholders and collective marketing agents in developing world context. To improve agent performance in this relationship is critical for the betterment of smallholders' livelihood. Therefore, policy-makers and donors should, set up mechanisms and rules aimed that empower smallholders to monitor their agents.

Keywords: Collective marketing, agents' performance, smallholder farmers, agency theory

Introduction

Improving market access for smallholders is one of the different mechanisms aimed to stimulate rural agricultural activities and alleviate poverty (Bernard & Spielman, 2009; Gyau et al., 2014; Poulton et al., 2006; World Bank, 2008). Yet, smallholders in developing world continue facing marketing limitations including those raising marketing transaction costs and heightening the risks linked with commercialisation. Moreover, in the developing world context, most of smallholders' are found in rural areas which lack good infrastructure, appropriate market information, and credit markets, hence condemning farmers to higher transactional costs and further disadvantaging their market participation (Fischer & Qaim, 2012; Karatepe & Scherrer, 2019; Sinyolo & Mudhara, 2018). To alleviate these constraints and become competitive in these rapidly changing markets, smallholders farmers must co-operate with each other to form associations or farmers' marketing groups (Bernard & Spielman, 2009; Fischer & Qaim, 2014). Collective marketing has emerged as a technique for organising production and marketing activities, particularly focusing the smallholders' agricultural sector to minimise high transactional costs and other market catastrophes in developing countries. Also, it facilitates

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smallholder farmers' reaching customers in regions characterised by imperfect and weak markets (Abebaw & Haile, 2013; Devaux et al., 2020; Fischer & Qaim, 2014; Ochieng et al., 2018). In Malawi, for example, the government has significantly succeeded in implementing collective marketing for agricultural produce. In consequence, there has been a positive impact on smallholders, for example, by enabling them to minimise transactional costs, improve quality requirements, and expand crop production (World Bank, 2018).

Through collective marketing, smallholders can market their agricultural produce directly or through marketing organisations (Fischer & Qaim, 2014). As such, this study focuses on collective marketing through producer-marketing organisations. The main objective of producer-marketing organisations is to safeguard the interest smallholder farmers' groups to attain marketing power (Schroder et al., 1993). Membership to these organisations also engenders other farmers' benefits such as access to information on advanced farming technology, expanded market access, capacity-building and innovation in rural settings (Fischer & Qaim, 2014; Wennink & Heemskerk, 2006). Even though there is much empirical literature on smallholders' collective marketing through associations, many of these studies are context-specific and lack a holistic view of the relationship between farmers and their associations (Gyau et al., 2014). Specifically, some of these studies have analysed the impact of marketing through associations or co-operatives on smallholders groups (Fischer & Qaim, 2014). Other studies have analysed the profitability gains for smallholders' collective marketing initiatives through co-operatives (Okelai et al., 2020). Some literatures have examined the association between collective marketing and smallholders' farm performance (Abdul-Rahaman & Abdulai, 2020; Sikwela et al., 2016). However, their focus was on the performance of the farmers' farm. This study, therefore, analyses factors that influence the collective marketing agent performance among Malawi's Tobacco growers, specific the relationship between smallholders' tobacco growers and their marketing association TAMA.

The current study focuses on Malawi tobacco growers because the country is one the top ten producers of tobacco globally. Moreover, Malawi's economy depends heavily on tobacco as a commercial commodity, which by 2012 contributed to 52 percent of the total export value for the country in 2012 (Jeffrey et al., 2016). Malawi tobacco growers produce their tobacco in their respective groups and market through producer marketing agent, the Tobacco Association of Malawi (TAMA). TAMA sometimes delays sending transport vehicles to farmers to pick tobacco. This delay might result in the loss of tobacco quality in addition to delaying tobacco marketing and selling processes (Sangala, 2016). Some observable inefficiencies in logistical functions have included improper storage, delays in delivery time, inadequate information flow, inadequate distribution of loans, input materials and training (Jaffee, 2003; Nsiku & Botha, 2007; World Bank, 2018). Therefore, the objective of this study is to analyse the determinants of marketing agents' performances. This study aims to analyse the determinants of collective marketing agents' performance. The specific objectives of this study are to analyse the factors that influence the marketing agent's performance. The two components to be studied here are smallholders' tobacco growers and their marketing organization, TAMA. To achieve these objectives, the study sought to answer the following question: What factors influence the marketing agent's performance in Malawi's tobacco sector? Identifying these factors can help improve agent's performance to achieve the country's agricultural goals for smallholders and

alleviate poverty. Furthermore, the study findings can also serve some poverty alleviation activities in other developing countries with the same setting.

Theoretical Perspective: Agency Theory

The Agency theory traces its origin to informational economics of the 1960s (Eisenhardt, 1989; Arrow, 1971). This theory facilitates the assessment of both explicit and implicit parts of the agreement between the agent and principal (Eisenhardt, 1989). The theory focuses on solving the capacity and motivational problems occurring when the goals of the principal and the agent differ (Tate et al., 2010). The Agency theory dominates the analysis of several techniques aimed to handle a several agency-related problems caused by asymmetric information including monitoring structures, incentives systems, and bonding (Jensen & Meckling, 1976; Saam, 2007). In agriculture marketing, the application of agency theory is well-established. Examples of these studies include Bandiera (2007), Cheunge, Steven (1973) Cook et al. (1997), María Martínez-León and Martínez-García (2011), Ménard (1996), J. Roumasset, (1995); James Roumasset and Uy (1987). The Agency theory faces criticism. It works on the assumption that complete contracts that provide all possible incidents such as ambiguities in language, unforeseen situations, and disagreements are restricted by bounded rationality, hence leading to limited formation of the efficient contracts. Other contract obstacles include information asymmetries and transactional costs (Agarwal et al., 2014; Eisenhardt, 1989).

Moreover, the Agency theory ignores the competence part of the agent as it focuses on incentivising managers. Even when incompetent managers are honest, they could fail to perform to the shareholders' satisfaction. Thus, people need not rely on incentives to perform their duties. In other words, they just need to go head and can carry assigned duties out (Agarwal et al., 2014; Hillman & Dalziel, 2003). This criticism notwithstanding, the Agency theory suited this study whose objective was to analyse the determinants of agent's performance, which is at the core of this theory. The theory's wide application notwithstanding, the supply chain management areas have had only limited use of the theory (Fayezi et al., 2012). To fill this gap, this study, therefore, applied the Agency theory to study collective marketing, with the farmers' groups serving as principals and the marketing organisation, TAMA, as the agent.

Organisational and informational assumptions

Information asymmetry

Information asymmetry occurs amidst unequal distribution of information between the two contracted parties - the principals and the agent. Such information asymmetry leads to adverse selection (hidden information) and moral hazard (hidden action) problems (Bergh et al., 2018; Douma & Schreuder, 2017). Adverse selection is an *ex ante* information problem that occurs when one side is better informed than the other party. It is also the presentation of wrong information about the agent's capacity to perform given duties (Arrow, 1985; Hui et al., 2018). Principals face some difficulties since agents can decide to hide some key information regarding their actual competency and capacity to execute activities for the former. Moral hazard is an *ex post* informational problem referring to an action occurring after the agent and the principal enter an executable contractual agreement (Holmstrom, 1979; Hui et al., 2018). Moral hazard occurs because sometimes principal may fail to observe the agent's actions, hence raising the prospect of using a contract. In this regard, literature highlights a number of issues caused by moral hazard for example free riding (Holmstrom, 1979). Co-operative association face a number of

agency problems mainly caused by a lack of clear boundaries on the relationship between the principal and the agent (Barney & Ouchi, 1988; Shogren et al., 2017). Implicitly, the principal can hardly observe all the binding contractual tasks the agents perform. Subsequently, moral hazard leads to goal conflict and uncertainty (Eisenhardt, 1989),

Uncertainty

Uncertainty refers to difficulties inherent in predicting unforeseen incidents between contracted parties (Williamson, 1975). Unforeseen contingencies can lead to opportunism because one party of the contract might exploit some contract loopholes to misinterpret the contractual agreements one's favour (Bosse & Phillips, 2014). The cost of agent shifting is lower when the uncertainty is lower. On the contrary, when uncertainty high the cost associated with agent shifting risk escalates (Eisenhardt, 1989). Uncertainty is categorised as internal or external (Wang & Kaarst-Brown, 2014). Internal uncertainty occurs when an organisation fails to understand their true requirements or the predominant environment of the transaction. Under this situation it is difficult for either contracted party to provide a true picture of the transaction (Wang & Kaarst-Brown, 2014). There is also a clear link between behavioural uncertainty with information asymmetry (Bergen et al., 1992). In this regard, collective marketing comes in because marketing association sometimes fails to convey relevant information to the principal. External/environmental uncertainty exists because of factors that fluctuate over time. These factors are not easily predictable or controllable by either the agent or the principal. These factors include climate change, regulations, political instabilities, technological advancement and environment changes (Bergen et al., 1992; Bosse & Phillips, 2014). These are "unanticipated changes in circumstances surrounding an exchange" (Zhihua Chen et al., 2020; Noordewier et al., 1990). Also, external uncertainty is associated with the contract adjustments costs. Over all, the Agency theory mechanisms aim to handle agency challenges.

Monitoring systems

Monitoring systems help the principal to manage and follow the agent's activities up. In this regard, the principal systematically collects information on the agent's contracted task. A principal has to establish a strategy for information gathering, which will make the principal become more informed on the agent's behaviour. Different strategies for observing the agent's behaviour include collecting information from agent's references, holding personal interviews, and evaluating the agent's performance based on set criteria, which inevitably has cost implications for the principal (Bergen et al., 1992; Spence, 1974) As a result, the agent becomes induced to do undertake contractual duties in line with principals' requirements. However, the principal must have the capacity to substantiate the agent's performance behaviour (Jensen & Meckling, 1976). Examples of monitoring systems involve budgeting systems, and well-written reporting structures. Monitoring systems are appropriate in monitoring the agent's behaviour and the principal can use different mechanisms such as field observation, and periodical checking of the sales personnel (Bergen et al., 1992)

Research model and hypotheses

The model for the current study explains the determinants of collective marketing agent's performance as demonstrated in Figure 1. This paper tests the effects of those factors (independent variables) on the performance of marketing agents (independent variable) The dependent variable for this study is the agent's performance, which is influenced by information

sharing (INFO), Monitoring (MONT), Goal conflict (GOAL), and external influence (EXTI). This model (Figure 1) was formulated after intensive literature review, mostly for constructs based on the Agency theory:

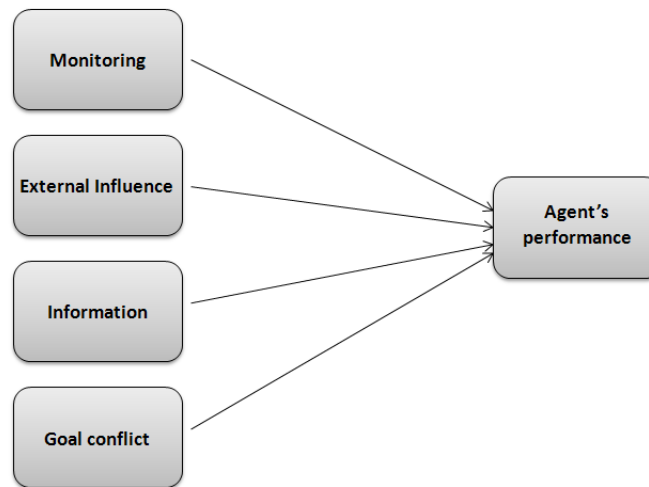


Figure 1: Research model

Agent's performance

Performance is critical in a business environment and attracts significant attention among academicians, marketing and management personnel (Delen et al., 2013; Feder, 1965; Gao, 2010; Ginsberg & Venkatraman, 1985). The term 'performance' is well grounded in empirical studies. These studies have examined a number of mechanisms and procedures in organisations (Dess & Robinson, 1984; Gao, 2010; Münstermann et al., 2010). Assessing the performance concept can use either financial indicators (e.g. profit, cash flows and return on investment), or operational indicators, or both. The main challenge with financial indicators is data availability and organisational confidentiality matters. Operational performance indicators include marketing efficiency, technological advancement, and services, or product quality. Operational or perceptual data can be easily collected because most of these data can be collected without involving confidential documents of an organisation or key informants (Ginsberg & Venkatraman, 1985; Rai, 2015; Chen 2015; Vorlauffer et al., 2012). In this regard, literature proffers that perceptual data of performance can precisely reflect objective data or measures, thus ensuring reliability and validity (Dess & Robinson, 1984). This paper focuses on the performance of the collective marketing agent by using operational performance measures. Agency literature also shows that information and monitoring can enhance the agent's performance; on the other hand, external influence and goal conflict goal conflict and external influence can weaken an agent's performance (Eisenhardt, 1989; Jensen & Meckling, 1976; McQuiston, 1989). Thus, critically there is a need to analyse the effect of these variables on performance, as discussed variables below.

Independent variables

Monitoring

The absence of proper monitoring systems leads to performance evaluation problems, behavioural uncertainty, and free riding issues. Effective monitoring systems assist principals to limit opportunistic behaviours (Tate et al., 2010; Zu & Kaynak, 2012). Free riding occurs when the principal is unable to monitor agents in all aspects due to the asymmetric information issues

(Holmstrom, 1982). The remedy for such moral hazard problem requires the principal to exert much more energy into monitoring the agent's behaviour (Dong, 2003; Holmstrom, 1979; Tate et al., 2010). Well-established monitoring of activities tend to reduce opportunistic behaviour and increases an agent's performance (Zu & Kaynak, 2012; Eisenhardt, 1985). For this particular study, monitoring focusses on the ability of the principal's (farmers' groups) to observe the practices and behaviour of their marketing agent (TAMA) in its marketing and service activities. Well-established monitoring can be a better approach of increasing the performance for various supply chain participants (Rokkan & Buvik, 2003; Zu & Kaynak, 2012). Based on this discussion, we hypothesise:

H1: *There is a positive influence between the monitoring of implemented activities and an agent's performance.*

External Influence

External influence refers to the extent to which the communication from one party affects the activities of other party (McQuiston, 1989). Supporting external environment is critical for collective marketing, and includes well-established relationships between the farmers' groups and the government, the market, and surrounding society (Markelova et al., 2009). The effect of external influence on smallholder collective marketing groups or their co-operatives can be either positive or negative (Chen et al. 2007; Knickel et al. 2008). The government, donors and other decision-making authorities can have a positive influence on farmers' collective marketing, hence leading to increased agent's performance by facilitating the emergence of a positive political, legal, and policy environment. Thus, implementing supportive public power systems are crucial so long as they do not undermine organisational democratic procedures and the objectives (Knickel et al., 2008). The performance of collective marketing agents can also be influenced by number factors caused by external parties, which negatively impacts on the performance (Lele, 1981; Mallin & DelVecchio, 2008; Shogren et al., 2017). In this paper, external influence is characterised by actions of governments and associations affecting the decisions made between the smallholders groups and their marketing association. Thus, we can hypothesise:

H2: *There is a negative influence between external influence and the agent's performance.*

Information

Information refers to "data that has been organised or given structure—that is, placed in context—and thus endowed with meaning" (Glazer, 1991). A well-strengthened and committed relationship between principal and agent requires well-established communication lines (Eisenhardt, 1989; Zu & Kaynak 2012; Chou, Chen, & Pu, 2008; Glazer, 1991). The principal and agent can establish a good work environment by information sharing, hence triggering improved activities conducted by either party (Fayezi et al., 2012; Zu & Kaynak, 2012). In this regard, the study examined information on matters such as farming mechanisms, price, and any information either the principal or agent need. Literature proffers that reputable information sharing structures translates into a positive impact on the agent's performance. Thus, we can hypothesise:

H3: *There is a positive influence between information exchange and the agent's performance.*

Goal conflict

Goal conflicts mainly result from differences in preferences between the principal and agent as either party focuses on utility maximisation (Fayezi et al., 2012; Saam, 2007). On the one hand, the agent looks at how to maximise his income; on the other hand, the principal focuses on return maximisation. Goal conflict occurs in different situations, for example, goal conflicts issues in co-operative associations, mismatches between practices and rules, and competing interests or goals between principals and agents (Barney & Ouchi, 1988; Zwalf, 2021). Marketing organisations tend also to be influenced by other factors other than the principal's interests. Consequently, the agent's decisions on maximising the principal welfare normally faces some challenges because of the bounded rationality between the agent and principal and the complications of contractual terms (Tate et al., 2010; Jensen & Meckling, 1976; Eisenhardt, 1989; Zu & Kaynak, 2012). In this study, goal conflict refers to the divergence between the rules and the execution of activities (Schapper et al., 2006), and conflicting interests between the principal (smallholders' groups) and the agent (in this case TAMA). Literature states that goal conflict is negatively related to the performance of an agent (Slocum et al., 2002). Thus, we hypothesise:

H4: There is a negative influence between goal conflict and the agent's performance.

Research Methodology

Research Design

A research design depends on factors such as the research problem, nature of the study, the field setting, and the study objective (Yin, 2009). This cross-sectional study employed a survey of tobacco growers in Malawi. As opposed to longitudinal studies, cross sectional research allows for the collection of data at a time, hence reducing a number of research limitations such as budgetary and time constraints. On the other hand, a longitudinal study requires the collection of data from the same respondents at different times. Moreover, this study used the descriptive study design because of its appropriateness since research questions and hypothesis were formulated before the data collection process.

The study was carried out in Malawi's agricultural sector on the tobacco industry. This study focused on the tobacco farmers' groups who market their tobacco through association. The groups normally consist of 10 to 30 people, officially identified as tobacco clubs. To enhance self-regulation each group has its own rules (Negri & Porto, 2016). This study generated data from 16 farmers' groups. Three of these groups were located in Thyolo district. The remaining 13 were located in Mchinji district. Most of the TAMA tobacco groups are located in Mchinji district. The key unit of analysis for this study is the marketing association, TAMA. Data was collected from key informants in those tobacco groups. The model for this study is based on Principal-Agent theoretical base. Thus, TAMA constitutes the «agent», representing farmers in marketing their tobacco produce.

Data collection and sampling

Primary data can be obtained from different key informants depending on the research problem (Jacobsen, 2015). The primary data for this study was done in collaboration with the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). The key informants

were members of smallholders’ marketing groups. We used a survey approach with closed-ended questionnaire to collect relevant information on the determinants of the agent’s performance.

Sampling Sample size and Sampling Techniques and Procedure

Sampling is a critical process in any research activity before beginning data collection. It has to do with categorising the items for the data collection process (Denscombe, 2010) For this study, the sampling frame was smallholders farmers groups who are affiliated to TAMA. To narrow down our study, the sample was collected from two districts, Mchinji and Thiolo. Due to the nature of tobacco growers’ groups, convenient sampling was the most appropriate sampling approach because they met with tobacco growers only in their groups; it was hard to locate individuals in their residents due to remoteness and short time of data collection. In this matter, individuals were then selected randomly from their groups to fill out the questionnaire. As our respondents were smallholder farmers most of them are remotely located, we could not use other means of data collections such as telephones or the post, and email, to administer the questionnaires. As such, administration remained the key method of administering questionnaire for this particular study. Also, 104 questionnaires were distributed to farmers. The questionnaires returned amounted to 89, hence a response rate of 83%. The key reasons for not collecting all the questionnaires due to the illiteracy level as some were unable to fill the questionnaire out because they were unable to read and write. A five-point Likert scale helped to answer the research questions. Desk review was used to collect secondary data. We reviewed various articles, reports, journals, and several data from farmers’ marketing groups to obtain a clear understanding of the research problem and build a clear groundwork for the primary data collection process.

Data analysis and Results

Validity and reliability

Descriptive statistics facilitated the cross checking of outliers and missing values in the data (Pallant, 2016). We used measurement of skewness and kurtosis to verify normality assumptions. The results indicate conformity with the normality assumptions. To ensure construct validity, we used scatter plot analysis. The results indicate that the study constructs, and their levels, could not compromise the quality of the validity of the study. The result of the confirmatory factor analysis for all the items indicated that convergent and discriminant validity had no problems. The key objective of the confirmatory factor was to determine the construct validity of the measures. Items measuring the same construct were collected together, indicating that they measured the same conceptual space. A study is reliable if the same result is obtained when the study is replicated using the same techniques and methods (Gummesson, 2000). To measure reliability Cronbach’s alpha was used and all values were above the recommended value of 0.7(Hair et al., 2016; Pallant, 2016).

Table 1. Measures of reliability and validity for independent variables;

Variable	Item	Cronbach’s alpha	Rotated Component Matrix a					# of items	
			Component						
			Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Earl y	Fin al
	MONI	.508	.543	.156	.068	.177			

	T1								
Monitoring	MONI T2		.529	.224	.214	.097	-.131		
	MONI T3		.838	.099	-.077	-.042	.005		
	MONI T5	$\alpha = 0.817$	.785	.117	-.044	-.006	.106	7	6
	MONI T6		.653	.132	.268	.027	.318		
	MONI T7		.655	.044	.288	.141	.058		
	INFO1		.124	.754	.052	-.011	.067		
Information	INFO2	$\alpha = 0.788$	.294	.560	.246	.084	.168		
	INFO3		.373	.627	.273	-.018	.137	7	5
	INFO5		-.016	.687	.173	.280	.120		
	INFO7		.044	.703	.178	.055	.070		
	GOAL1	$\alpha = 0.801$	.117	-.066	.068	.828	.111		
Goal Conflict	GOAL2		.086	.170	-.026	.803	-.013	3	3
	GOAL3		-.051	.134	-.026	.866	.001		
External Influence	EXT2		.053	.183		.074	.854	3	3
	EXT 2	$\alpha = 0.766$	.345	.062	.149	.096	.581		
	EXT3		-.024	.189	.048	.128	.885		
	Average Variance	extracted (AVE)	0,66	0,67	0,67	0,83	0,77		
(Extraction Method: Principal Component Analysis). Rotation Method: Varimax with Kaiser Normalization.									

Table 2. Measures of reliability and validity for dependent variable;

Variable	Item	Cronbach's alpha	Rotated Component Matrix a					# of items	
			Component						
			Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Early	Final
Performance	PERF2		.208	.128	.733	-.085	.364		
	PERF3	$\alpha = 0.773$	.234	.337	.593	-.145	.105		

PERF5	.026	.206	.833	.156	-.012	6	4
PERF6	.089	.392	.537	.017	.214		

Hypotheses and model testing

Regression estimation

The regression analysis methods used for this study are the Maximum Likelihood (ML) and the Ordinary Least Squares (OLS). The OLS method is the most powerful and popular methods in a causal relationship studies because it offers some attractive statistical properties that qualify as more appropriate methods of regression analysis (Gujarati, 2004; Hair et al., 2016). Due to the preceding discussion, OLS was found to be the appropriate method to estimate the coefficients of the study variables. Several variables were included in the regression model; therefore, the final model is the following:

$$PERF = \beta_0 + \beta_1 MONIT + \beta_2 EXT + \beta_3 GOAL + \beta_4 INFO + \varepsilon$$

Data examination

The data collected were carefully examined to check if they matched with a number of assumptions for multiple regression analysis. We performed several tests to for the outliers' identification, normality assumptions, heteroscedasticity, and multi-collinearity assessment. We ran descriptive statistics first of all to obtain the true characteristics of the data. The results of some analyses are presented below:

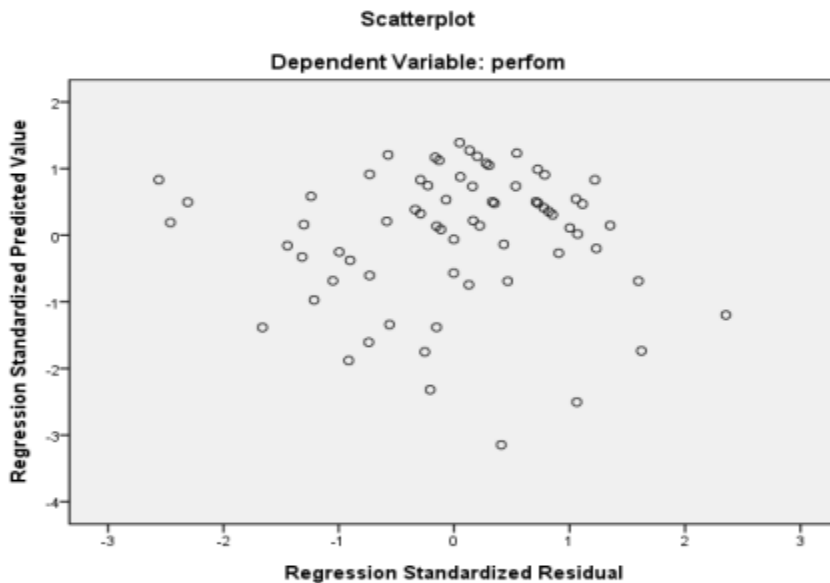


Figure 2: Test of Test of heteroscedasticity

Regression results

Table 3. Results of multiple regression analysis

Model	Unstandardized Coefficients		Standardized coefficients	t
	B	Std. Error	Beta	
1 (Constant)	1.298	.939		1.382
GOAL	-.075	.109	-.070	-.688
MONIT	.216	.108	.208	1.997
INFO	.525	.129	.479	4.077
EXTI	-.077	.135	-.058	-.569
Dependent variable: PERF Model fit: $F(4.64) = 9.457$ $R^2 = 0.371$ $R^2 \text{ Adj} = 0.332$				

Based on these results, the following regression model was developed:

$$\text{PERF} = 1.298 - 0.075 \text{ GOAL} + 0.216 \text{ MONIT} + 0.525 \text{ INFO} - 0.077 \text{ EXTI} + \varepsilon$$

Hypothesis 1 is supported by the regression results and is significant. The statistics ($b = 0.170$, $t = 1.997$, $p < 0.01$) demonstrates positive relationship between Monitoring (MONIT) and the agent's performance (PERF), as hypothesised before the data collection process. The result shows a negative relationship between external influence (EXTI) and agents' performance (PERF) was negative as hypothesised by hypothesis 2; however, it was not statistically significant. The statistical estimation showed, with $b = -0.064$. As expected hypothesis 3 results is significant and supported by the statistical results. The results show that $b = 0.386$ and $t = 4.141$, which indicates the presence of a significant positive association between Information (INFO) and the agent's performance (PERF). The statistical estimation supports hypothesis 4. The sign of the coefficient of "b" was negative as hypothesised and indicates a negative relationship between Goal conflict (GOAL) and the agent's performance (PERF). $b = -0.047$ and $t = -0.659$. Despite being negative, this relationship is insignificant.

Table 4. Summary of hypotheses testing

Hypotheses	Hypothesized effect	Findings
Hypothesis 1	+	+***
Hypothesis 2	-	-
Hypothesis 3	+	+**
Hypothesis 4	-	-

** significant at $P < 0.05$

*** significant at $P < 0.01$

Discussion

Most of the collective marketing literature has paid more attention to the determinants of smallholders groups' performance (Barham & Chitemi, 2009; Okelai et al., 2020). The current study aimed to analyse the agent side of the relationship and contributes to the school of thought by analysing the determinant of collective marketing agent's performance. The agent on this study represents the smallholders' groups on tobacco marketing activities. We tested the

hypotheses for empirical validation and results were as per our expectations. However, not all hypotheses were significant, the reason for insignificance are well explained in this section. The positive sign of monitoring variables clearly indicates a positive relationship between agent's performance and monitoring systems. The logic behind here is that, well established monitoring systems force the agent to do contracted duties as directed by the principals'. Our finding is in line with the existing literature, which found that effective monitoring systems can help the agent to comply with the principals' requirements. If monitoring systems turns out to be costly, behavioural systems may be effective from the principal perspective (Bergen et al., 1992; Glavee-Geo et al., 2020). Effective monitoring systems enhances the sustainability of the group since it gives the principal (farmer groups) power to monitor the actions of their agents. In this view, the groups should ensure that they observe on how the agents perform the contracted duties on regular basis. Improvement of collective market agent performance require consistent monitoring and setting up good review systems (Ochieng et al., 2018; Zu & Kaynak, 2012). Smallholder groups stand on the weak position when it comes to power relations issues between them and their marketing associations due to the existing power structures in developing world. In this environment, the government and donors should establish environment supportive monitoring to encourage the compliance behaviour of smallholders' marketing agent (Rokkan & Buvik, 2003).

The demonstrated insignificant negative association concerning the external influence and performance variables can be explained from the theoretical perspectives (Olson, 1971; Parks & Truman, 1952). Literature has recognised the possible effects of external influence on the agents' performances in developing countries (Roumasset, Boussard, & Singh 1979; Hazell, Bassoco, & Arcia, 1986). Despite this realisation, it is challenging to assess this variable in smallholders' agricultural environment context because it requires voluminous data (long time series). In the smallholders' agricultural business context, obtaining this data poses challenging, and is more daunting in the developing than developed world context. To cover this gap literature suggests some other methods (Antle, 1987; Dillon & Scandizzo, 1978). Sometimes, smallholders join these groups due to governmental and group pressure. The government or group pressure to participate in these groups are common conducts, especially in Africa where most of the smallholders undertake substance agriculture, which is hard for marketing at the individual level (Parks & Truman, 1952). Depending on the setting, external influence varies from low to high (Ostrom, 2000).

Even though governments establish and empower several institutions to help smallholders market their produce, some of them still have indirect influence on these associations' duties. In Malawi, they use a "centralised" system with the decision-making and farmers' group management of tobacco associations, which is somehow interrelated (Otañez et al., 2007). As a result, the power of democratic community got lost and limited some help is required to safeguard freedoms primarily because power structures and institutional arrangements often disfavour the poor (Inman & Rubinfeld, 1997). Thus, farmers ended up having no power to raise a voice on incompetent or dishonest representatives, particularly when it includes higher authorities (Litvack et al., 1998).

The results show that information sharing is positively relatedly to the collective agent's performance. Moreover, well-built information systems further enhances the performance of

collective marketing agents (Glazer, 1991). Furthermore, to gain market power, the two contracted parties need to have relevant and clear information (Glazer, 1991). Our findings are consistent with extant literature, which highlights the effectiveness of information sharing in reducing the agents' opportunistic behaviour, leading to the establishment of a strong relationship between the two parties (Glavee-Geo et al., 2020; Zu & Kaynak, 2012). In addition, good information flow between the agent and the principal has proven to be critical in achieving a good goal congruent between the two parties (Bergen et al., 1992). As per our hypothesised expectations, the regression results demonstrate a negative association between the two variables, that is, goal conflict and agent's performance. Despite this expected result, the relationship is not significant. Nevertheless, as previous literature indicates this result still shows the power of goal conflicts on agents' performance which is negative (Eisenhardt, 1989). The explanation for this insignificant association between the two variables is twofold. One plausible explanation is the nature of the environment in which the data was collected. Like any other developing country, the collective marketing in Malawi is characterised by power imbalance between the principal (smallholders) and the marketing association (the agent). Due to unequal power structures between the principal and the agent, we believe that getting comprehensive information on this construct poses challenges primarily because smallholders are not powerful. Another explanation is the lack of clear information on the rules and obligations of the two contracted parties in this endeavour, which further undermines the significance of the association found in the current study.

Theoretical Contribution and Implications

This study makes some theoretical contribution to the existing literature. From a theoretical point-of-view, this study has made some propositions and confirmed the association of some variables through hypothesis testing. For example, the relationship between information sharing and the agents' performance. From the conceptual model developed, this study has highlighted a key issue, which is not extensively researched upon in the context of smallholders' collective marketing through marketing associations. Most of the studies have had focused on analysing groups only, hence neglecting providing a holistic view of the relationship between the farmers and their marketing associations.

Managerial implication

From a managerial point-of-view, the study underscores the importance strengthening the capacity of marginalised groups to monitor their marketing agents. For smallholders to get the best out of their collective marketing through their agents, it is crucial for policy-makers and donors to develop effective monitoring systems, which can help smallholder farmers to monitor their agents in every activity in the marketing process. Likewise, information sharing should be transparent, especially between the marketing organisations and the smallholder farmers.

Conclusion and Recommendation

The study has established can smallholders' farmers have power over their agents when monitoring and information systems are well-established. Transparency in sharing information between principals (farmers' groups) and agents builds trust. Moreover, well-established monitoring system is critical. Through the monitoring the agent, the principals can minimise the ability of the agent to unilaterally act in his or her own interest. One of the recommendation from this study is that, developing countries authorities should establish conducive environment that

empowers smallholders in their relationship with marketing agents. Second this study recommends high level of transparency in marketing activities that are performed by agents on behalf of smallholders. Africa agricultural sector still needs more studies of such nature because most of the agricultural activities are at the subsistence level. This study has also analysed crops in other countries. However, the model of this study did not include other variables such as moderators and mediators due to limited data availability. Otherwise, including these variables in the model could have produced even more interesting results. Thus, further studies can also cover these variables to make the outcome even much more robust.

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