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Innovativeness Dimensions and Growth of University Students' Owned Micro Enterprise in Moshi Tanzania: An Empirical Study

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Abstract

This study assessed the influence of innovativeness dimensions towards the growth of university students owned micro enterprises in Moshi Tanzania. Data were analysed by using descriptive and inferential statistics. Binary regression was used to model the relationship between innovativeness and firm growth. The study found out that the innovation dimensions have a significant positive influence on growth of Micro Enterprises. The findings indicated that innovation (p-value=0.001) had an effect on the growth of micro enterprises. The study recommends that micro enterprise owners should encourage innovative tendencies among employees in order to encourage firm growth, competitive, profitability and survival.

Key Words: Innovativeness, Growth, University Students, Micro Enterprises, and Moshi - Tanzania

1. Introduction

Micro enterprises [1]play a very important role in the economies of developed and developing countries (Lameck, 2014; Karpak and Topcu, 2010). They contribute to even and equitable economic development process (Memba, Gakure and Karanja, 2012). MEs are the engine of global economic development as they constitute over 90% in the economies. Their contributions to the economic development, income generation and poverty alleviation is widely recognized and known (ILO, 2007; Rao & Joshi, 2011, Muthee-Mwangi & Ngugi, 2014). They contribute to

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[1] In Tanzania, majority of micro enterprises (MEs) fall under the informal sector and engaging up to 4 people, employing capital amounting up to Tshs.5 million (URT, 2012), they contribute about a third of Tanzania's GDP, many are survivalists, few of them grow into medium and large firms, while many others are struggling to grow (Rutashobya, et al., 2015). They are labor-intensive in nature and have been established using savings or grants from family and friends (Madatta, 2011). MEs are easy to establish as they require less in terms of capital, technology, management and even utilities (UK Essay, 2015).

employment creation (Lukes & Laguna, 2010; Naude, 2013), income, investments, and manufactured exports (Ngugi, 2012), country's Gross Domestic Product (GDP) (Ankunda, 2010; Katua, 2014), training ground for the development of entrepreneurship skills (Kazungu & Panga, 2015; Kazungu, Ngugi, Rotich and Odhiambo, 2018), government revenue in way of taxation, poverty alleviation and economic development (Okeyo, Gathungu, & K'Obonyo, 2014), new methods, technology and overall economic growth (Yahya & Mutarubukwa, 2015).

Micro Enterprises are a key driver of economic and social development in the African context. They are hailed for their pivotal role in promoting grassroots economic growth and equitable sustainable development (Kiraka, Kobia, and Katwalo (2013). Micro enterprises formulate growth strategies for high market share, productivity and profitability (Anyanga and Nyamita, 2016). Growth[2] of micro enterprises thus contributes to employment and job creation, opportunity for financial gain, return on investment and increased chances for survival (Dobbs and Hamilton, 2007).

Despite their contributions to the national economy, fast changing and intense worldwide competitive environment have placed micro enterprises in a vulnerable position, then to deal with these challenges it is suggested that innovativeness[3] be put to the forefront and lead to higher performance (Wiklund and Shepherd, 2009). Businesses that act entrepreneurially are able to exploit new market opportunities and are better equipped to respond to the challenges of a competitive and uncertain business environment (Anderson & Eshima 2013, Liet al., 2009). When a business has a willingness to innovate it is said that the business is entrepreneurially orientated (Franket *al.,* 2010). Many challenges which were thought to be responsible for the incumbent poor performance of micro enterprises in Tanzania, have been widely researched and its recommendations implemented, yet no appealing improvement have been realized. To date 3 out of every 5 micro enterprises established fail within a period of less than five years from their establishment and the surviving firms are usually stagnant (Mgeni, 2016).

In Tanzania a graduate's decision to become self-employed has been a battle with the existing norms that envision graduates as salaried employees. Although the current government strives for graduate entrepreneurship and self-employment, it has not been able to erase the institutional legacy of Ujamaa completely (Mwasalwiba, et al. 2012). Falling rates of graduates' business start-up among graduates in Tanzania, is contributed by two main factors which are factors within the capability and those which are outside the control of capable which all together make a total of 13.3% despite efforts in teaching entrepreneurship issues in universities (Mwasalwiba et al., 2012). Kubegeya (2010) further argues that the idea of being an employer as one completes college or university education is still alien to the majority of Tanzanian university students.

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[2] Measured in-terms of financial or employees, numbers increase of sales, return on equity and accumulation of asserts all represent growth (Gatenya, 2012).

3 The degree to which an individual or an entity is relatively earlier in adopting new ideas than the other members of a system, a tendency to support new ideas, experimentation and creative processes of the business organization (Oscar and Hassan, 2013). A specific tool of entrepreneurs' means by which they exploit change as an opportunity for a different business or service (Schillo, 2011).

As stated by ESRF (2014), 36.9% of MEs in Tanzania passed have succeeded to grow more in higher level and while the remaining 63.1% fail to grow and reach the upper level of the business such as expanding the business activities and market. This is to say Tanzania is still in its infancy and is facing a number of inhibitors, including the difficulties in raising start-up capital, inhibitive banking and taxation systems, problems of trust, poor technology, negative attitudes, corruption, poor policy implementation at lower levels of government, and the increasing threat from cheap imports from countries like China. Hence micro enterprises need to act entrepreneurially in order to cope with the dynamic environment which requires the business to be innovative to ensure its growth and survival. Therefore this study therefore assessed influence of innovativeness behavior on the growth of university students owned micro enterprise in Moshi Tanzania.

Enterprise Growth strategies are classified by Hyland (2013) as either organic or inorganic clusters. Companies growing organically not only measure their success on financial metrics but also they take note of other internal metrics like customer satisfaction, in-house competencies and product quality. Inorganic (external) strategies deal with increasing output and business reach by acquiring new businesses by way of mergers or acquisitions (Hyland, 2013). The growth of micro enterprises may be measured specifically in-terms of financial or employees, numbers increase of sales, return on equity and accumulation of asserts all represent growth (Gatenya, 2012). In this study both organic or inorganic clusters were used to measure the growth of students owned micro enterprises using increase in sales, number of employees and profitability. In this study, Innovation was meant to be the way in which organization develop new products or services, develop the existing product or services and also new process are being developed in order to gain competitive advantage in the market or to win the market in a competing environment.

2. Materials and Methods
The study was conducted in Moshi Municipality using a Cross sectional design. The design fitted well with the nature of the study, as it allowed measurements of the correlations between study variables. Snowball sampling technique and Raosoft sample size calculator were used to identify 117 students involved in the study with the margin of error of 5%, 95% confidence level and 50% skeweness level. Survey Questionnaire was the main tool when collecting primary data in the field of the study. A total of 117 closed ended survey questionnaires were administered to the respondents from four Universities in Moshi Municipal. Secondary data were obtained from different sources with the use of documentary review. Data were obtained from documents like Tanzania SMEs development policy of 2003, report on Capacity of Tanzanian MSMEs in tapping the business opportunities in the East African Community of 2015 by, report by Organization for Economic Co-operation and Development (OECD) on promoting SMEs for development. Different journal articles on the influence of networking on the growth of MEs were also reviewed.

Qualitative data were analyzed to provide information which show socio-demographic characteristics of the respondents like marital status, age of the respondents' experience of the respondent, type of enterprise owned, years spent in operation, then data were interpreted using descriptive statistics where frequencies and percentage were used in interpretation of the data analyzed. Quantitative data were analyzed by using descriptive statistics (frequencies and percentage) and binary logistic regression analysis. The model was applied because it makes use of several independent variables as well as categorical dependent variables, and hence the study used the following binary logistic regression model:

Econometric Model

$$Logit[p(x)] = \log\left[\frac{p(x)}{1 - p(x)}\right] = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \cdots \ldots + Equation\ (1).$$

Logistic regression involves fitting an equation of the following form of data:

$$Logit(p_1) = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \cdots \ldots \ldots \ldots \beta_p x_{p,i} + \cdots \ldots \ldots + Equation\ (2).$$

Where:

Logit (p_i) =Y; is binary and represents the probability of MEs growth or not growth of MEs, coded as 0/1 respectively.

$\beta_1 - \beta_p$= Regression coefficients

α = Intercept

$X_{1, 1} - X_{p, 1}$= Independent variables or predictor variables

e_o = Error term

To ensure validity before the actual data collection, a pilot study was carried out to check the accuracy of instruments in order to make corrections where necessary. In this study 14 questionnaires were administered to test the reliability and validity of the questionnaires. The proposed pilot test falls within the rule of thumb by Cooper *et al* (2012), Cooper and Schilder (2011) and Creswell (2009) that 1% of the sample should constitute the pilot test. A pilot study was also conducted to test the reliability and validity of the study and hence to detect errors in the data collection process. This helped to discover errors on the issues raised such as ambiguous instruction or wording, inadequate time and measurability of variables defined. To test the reliability, Cronbach Alpha was conducted. It can be seen that responses from data gathered were reliable since all the Cronbach Alpha scores for the variable were above the accepted 0.6 marks of which was 0.842.

4. Findings and Discussions

Socio-Demographic Characteristics of Respondents

In order to assess the influence of innovativeness to the growth of university students owned Micro Enterprises, it was necessary to know the gender of the respondents as one of the attribute in socio-demographic characteristics of the sample. Findings in table 1 showed that males involve more in establishing micro enterprises than female, whereby male are of 53.8% and females were 46.2% of the sample population. However findings show that all types of gender participate in establishing micro enterprises, the magnitude difference between male and female was almost 7.6% which was not much significant. The findings were supported by study done by study Rosli and Sidek (2013) who observed more of male domination in a study on the impact of innovation on the performance of small and medium manufacturing enterprise. Tifre (2014) was consistence with findings of the study who got many male than female in such that out of the 333 respondents, 259 SEs (77.78%) are male owned which registered higher growth rate than those female owned small enterprises (7.25 percent against 6.52 percent for female). The findings showed that growth rate of female owned SEs is 1.15% lesser than those male owned ones, though it is statistically insignificant.

As for age of MEs owners, results in table 1 shows that greater percentage of age group is below 30 years which is 49.6%, followed by 30–40 years which is 26.5%, 40–50 and above 50 years were 16.2% and 7.7% respectively. This implied that most university students are youths, they are able and capable to maintain the operations of micro enterprises. The findings of the study are

relevant to those of Alembummah (2015) where respect to age, 29% of respondents fall within the ages of 25 – 34. The rest were within the ages of 45–54, 35–44, 56–65 and 18–24 representing 28%t, 22%, 14% and 7% respectively. The findings are against Kamendi (2016) who focused on the role of entrepreneurial orientation on the growth of small and medium enterprises in Nairobi, the findings showed that shows that majority (48%) of the respondents was in the age category of 30-40 years, 24% were in the age category of 20-30 years, 21% were in the age category of 40- 50 years and 7% were above 50 years.

Table 1 shows that majority of respondents were pursuing bachelor degrees (57.3%) followed by diploma level (17.9%), masters level (16.2%) and certificate level (8.5%). Results imply that bachelor degree shows more response in establishing micro enterprises. The findings related to the study done by Kamendi (2016) where majority (45%) of the respondents had university qualification followed by 37% who had Certificate/ Diploma and 18% Secondary School certificates. Joppe (2000) did a similar study and found out that respondents which high education level have technical knowledge on the study problem assists in gathering reliable and accurate data on the problem under investigation. This demonstrated that most of the micro enterprises owners possessed qualified professional skills and technical knowledge on study and thus provided the study with reliable information on innovativeness dimensions and growth of small and medium enterprises.

Table 1: Gender Distribution of the Respondents

Socio-Demographic factor	Category	Frequency (n=117)	Percent (%)
Gender	Male	63	53.8
	Female	54	46.2
Age bracket	Below 30 years	58	49.6
	30-40 years	31	26.5
	40-50 years	19	16.2
	Above 50 years	9	7.7
Educational Level	Certificate	10	8.5
	Diploma	21	17.9
	Bachelor degree	67	57.3
	Masters	19	16.2

Business Characteristics

From the field of the study, the number of employees determines the size of the business entity, hence it was important to know the number of employees in order to know the size of business operation. However the number of employees from the business organization usually differs from one entity to another entity with regards to the size of organization, the table below shows results from the field of the study. Findings in table 2 showed that there is a great number of micro business organizations which have employed number of people ranging from 1–4 employees which accounted for about 74.4% out of the total population from the field of the study, but also other Es with 5–10 employees not only that but also the researcher observed other organization having more than 10 employees which accounted for 22.2% and 3.4% respectively.

Years of operation of business organization basically means the existence of business organization since it has been established. Results in table 2 shows that 63.2% were established between zero and 5 years of operation, 34.2% between 5–10 years and 2.6% for a period of 11–15

years. This implied that more of students who own the micro enterprises have not been established for a long period of time and this is because motivational given in schools and other motivators such carrier days pushes them into establishing and operating micro enterprises. Findings of the current study differs from those of Kamendi (2016) where majority (43%) has been in operation for a period of 6-10 years, 26% for a period of 11-15 years, 24% for a period of less than 5 years and 7% for 15 years and above.

Results in table 2 show revenues were grouped into groups where respondents were required to choose among the group of revenue that his/her organization fits on and the results were as follows 1-2.5 million, 2.5-3.5 million, above 5 million, 3.5-5 million and last was below 1 million were 32%, 30%, 22%, 19 and 14% respectively, the table below shows the distributions of results as obtained from the field of the study. This implies that there was quite different revenue earned with different Es. That is to say periodic (yearly) revenue differ with the nature and type of business that is being established and operated, not only that but also it shows that the nature of customers that a business is serving.

Table 2: Business Characteristics

Business characteristic	Category	Frequency (n=117)	Percent (%)
Number of employees	1-4 employees	87	74.4
	5-10 employees	26	22.2
	11-15 employees	4	3.4
Years of Operation	Below 5 years	74	63.2
	5-10 years	40	34.2
	11-15 years	3	2.6
Turnover per Year	Below 1 million	14	12.0
	1-2.5 million	32	27.4
	2.5-3.5 million	30	25.6
	3.5-5 million	19	16.2
	Above 5 million	22	18.8

Correlation between Variables

To understand the relationship between Innovativeness and Micro enterprises growth, Pearson Correlation Matrix was done. This type of test gives evidences as to existence of the relation between the dependent and independent variables. It also indicates the state of inter-correlation between the independent variables. Table 3 shows findings of the correlation between variable construct.

Table 3: Correlation between Variables.

Variables		Innovation	MEG
Innovation	Pearson Correlation	1	
	Sig. (2-tailed)		
MEG	Pearson Correlation	.237*	1
	Sig. (2-tailed)	.010	

Innovativeness and Growth of Micro Enterprises

In order to assess the influence of innovation on growth of micro enterprises, it was important to know as to whether micro enterprises introduce new services/products/process regularly or

not. Results show that 77.8% of the respondents agree that their business introduce new products. 88.1% agreed that their business places a strong emphasis on new and innovative products/services. Results further shows that 89.8% of respondents agreed to pursue new opportunities, 59.8% agreed that over the past few years, changes in their processes, services and product lines have been quite dramatic. 78.9% agreed that their business have demonstrated a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented. 85.4% of business places a strong emphasis on continuous improvement in products/service delivery, and 91.4% agreed that their businesses have a widely held belief that innovation is an absolute necessity for the business" future.

As in Namusonge and Martin (2014) findings of this study proves that innovation is such a vital component in business undertakings, and that without it, it is virtually impossible for a business to survive due to the increased competition that is observed within industries. Therefore for a business to thrive and grow, owner-managers must see innovation as a proponent of business success. Findings further agrees with Ailian (2010) who raised that enterprises with strong absorption ability could obtain innovative information provided by suppliers in open innovation which can enhance innovative performance, however, poor absorption capacity of SME opening to suppliers may reduce innovation performance taking 109 small and medium electronic technology enterprises as objects.

Table 5: Innovativeness Behavior and Growth of University Students Owned Micro Enterprises

Measures	SA	A	N	D	SD
Our business regularly introduces new services/products/processes	29.1	48.7	21.4	0.9	00
Our business places a strong emphasis on new and innovative products/services	38.5	49.6	11.1	0.9	00
Our business is continually pursuing new opportunities.	34.2	55.6	10.3	00	00
Over the past few years, changes in our processes, services and product lines have been quite dramatic	5.1	54.7	18.8	17.1	4.3
In our business there is a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented	18.8	59.8	19.7	1.7	00
Our business places a strong emphasis on continuous improvement in products/service delivery	50.4	35	14.5	00	00
Our business has a widely held belief that innovation is an absolute necessity for the business" future	48.7	42.7	6.8	00	1.7

SD = Strongly Disagree, D = Disagree, N = Neutral , A = Agree, SA= Strongly Agree

Results of hypothesis testing

As seen in Table 6, the model produced positive and significant relationship innovativeness and the growth of university students owned micro enterprise in Tanzania (β=3.305, and p=0.001). Therefore, H$_A$ is confirmed, which means that there was a positive significant relationship between innovativeness behaviour and the growth of university students owned micro enterprise in Tanzania. This implies that micro enterprises owned by university students are innovative for their survival in the market operation. These findings corroborate those by Kumarpeli and Semasinghe (2015), who confirmed that willingness to engage in relatively high levels of risk-taking behaviors helps a firm seize profitable opportunities in the face of uncertainty and the achievement of long-term profitability. But also another supportive study done the results were, however, in contrast with Bruderl and Preisendorfer (2000) who stated

that in predicting firm growth, one important factor that cannot be overlooked is innovation. Boohene, Marfo-yiadom and Yeboah's (2012) were with the same results who found that a positive and significant relationship between innovativeness and growth of businesses.

Table 6: Relationship between Innovation and Growth of USoMEs

	β	S.E.	Wald	df	Sig.	Exp (B)	95% C.I.for EXP(B)	
							Lower	Upper
Innovation	3.054	.936	10.646	1	.001	21.200	3.385	132.759
Constant	.511	.730	.489	1	.484	1.667		

Variable(s) Innovation.

4. Conclusions and Recommendations

The findings showed that innovation contributes largely to the growth of university students owned micro enterprise. This has evidenced by findings from descriptive statistics where findings showed that 81% out of the total population agreed on as innovation is the key contribution dimension of EO towards growth of micro enterprise, though 15% out of population were neutral and 4% out of the total population disagree. Not only that but also the binary logistic regression showed that emphasis on new innovative products which had a P-value of 0.008 with coefficient of β=1.854 indicating that most of the micro enterprise university students owned by university students are innovative in nature and therefore they are able to maintain the competition in the market.

This study therefore recommends Micro Enterprises owners to encourage the innovativeness behaviour to among the employees and explore their creativity and welcoming new ideas from different stakeholders without regarding their status in the business organization, flexibility and creating an enabling, relaxing and flexible working environment devoid of stringent structures to allow the free flow of work and assigned tasks. Also the owners/students of micro enterprises should introduce new products/services for the purpose of capturing the tension of the market and also challenge the competitors with regards to market operation. The study covered only small geographical area especially in Moshi in Tanzania, but still there are other regions and countries where entrepreneurial activities are being practiced, hence for the sake of transferring knowledge, it is recommended that other studies can be carried out in Tanzania and other East African countries.

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Examining the community perceptions on the Corporate Social Responsibilities of the mining companies in Kahama District, Tanzania

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Abstract

This study examined the community perceptions regarding the engagement of mining companies in corporate social responsibility activities and motive driving the companies to fulfill their corporate social responsibilities using the Carroll's Pyramid of corporate social responsibility. The study was conducted in Bugarama ward, Kahama district in Tanzania. Data were collected using a structured questionnaire with 100 randomly sampled household level respondents and analyzed for descriptive statistics. The findings revealed the engagement of the company in a range of corporate social responsibility activities ranging from the ones that were conveniently beneficial to communities to those that were rationally organized. Economic success was found to be the most important motive. The desire to be identified as ethical and fulfilling philanthropic expectations of the communities had some links with economic profitability and business sustainability. On the other hand, the desire to comply with the laws was found to have the least link with engagement in corporate social responsibility. From these findings, it is concluded that corporate social responsibility is a strategic investment that seek to strengthen social capital. Behind ethical and philanthropic responsibilities appears to be the economic responsibilities that businesses seek to achieve

Key words: *Corporate Social Responsibility, Community, Pyramid, Motive, Tanzania*

Introduction

Corporate-community relations has recently grown into an important focus in public and business administration research. Corporate Social Responsibility (CSR) is not only treated as a research and knowledge area but also as one of the major principles (Belal, 2016) if not best practices that guide the interaction between businesses and societies in modern states. In many of the countries, CSR has been incorporated in the existing laws that guide establishment and operation of business enterprises. Business are required to make sure that their operations improve the wellbeing and environments of the societies around them (Gamu & Dauvergne, 2018). In other countries, CSR is perceived as a good practice that presents the business entities as having connection with the social lives of the communities and concerned with communities' welfare, livelihood, and the general social and economic development (Ratner, 2001). While the first conception insist on the desire to encourage the businesses to fulfill their legal responsibility, the later insist the view that the separation between the business and social worlds is narrow and thus business actors need to be corporate citizens who hold a sense of responsibility (Cronin, 2018).

Despite the growing consensus that businesses need to engage in CSR activities, the practices and perceptions related to CSR differ across countries and communities (Matten & Moon, 2008). Owing to these variations, CSR tend to take different forms ranging from a contractual obligation to benefit the communities to a voluntary solicitation of trust and legitimacy in the communities (Idemudia, 2007). While the growth of CSR activities is perceived as a necessary, there is no objectively accepted explanation to why companies engage in CSR. The lack of a common ground for explaining why businesses should engage in CSR increases the need for scholarly enquiries to understand the motivations behind engagement of businesses in CSR activities in different social, political, and economic contexts.

The paradox surrounding the question whether CSR is an obligation of the businesses or just an option has invited endless debates which necessitate the need to answer another related question, especially why are the businesses increasingly being engaged in CSR activities. Scholars such as Ni & Van Wart (2015) look at CSR as the attempt to do good in order to do well. Doing good to do well implies that what is seen as a 'responsibility' of the businesses has a hidden motivation behind. In other words, the attraction to be seen good in the

eyes of the communities, which CSR displays is the rational desire to attain economic goals such as increasing profitability and market share (Edinger-Schons, Lengler-Graiff, Scheidler, & Wieseke, 2018; Gamu & Dauvergne, 2018). In this point of view, the assumption is largely that businesses use CSR as a strategic tool for achieving business economic aims and interests.

A different view is presented by Gupta, Briscoe, & Hambrick (2017) who argue that the advancement of CSR in a company is largely determined by the companies' ideological orientations. This means that the degree at which the business will be engaged in CSR activities will differ not only because of the difference in the desire to achieve better financial results, but rather the orientation towards the culture of contributing to the fulfillment of social needs. This position can also be associated with the need to behave as good corporate citizens who must respect the values and norms of the communities as well as fulfilling the social expectations of the communities (Garriga & Mele, 2004; Ahn & Park, 2018). The two closely related arguments associate CSR fulfillment with both the ethical and philanthropic orientation of CSR in business.

On the other hand, there are those who see CSR as the fulfillment of the compulsory obligation imposed upon the businesses by the law to ensure that the businesses give back to communities in exchange with their financial gains (Ali, W, Frynas & Mahmood, 2017; Schmitz & Schrader, 2015). The argument in connection with this position is that the engagement in CSR is not voluntary. It is assumed that in communities where there are no laws for enforcing CSR as a requirement, businesses' engagement in CSR activities will generally be low. In the light of these varying views, the need arises to understand what motivates the businesses to engage in CSR paying attention to the local contexts of the communities including their awareness, experience, and perceptions regarding the fulfillment of CSR.

Purpose of the Study

The aim of this study was to examine the community perceptions on the fulfillment of CSR by mining companies in Bugarama, Kahama district. To achieve this, guided by the Carroll's' pyramid of CSR, the analysis focused on the key CSR approaches, community members awareness, and the perceptions of community members regarding the duty of the companies to fulfill their CSR in the communities. Specifically, the study sought to identify the existing CSR activities in the community, understand the community members' awareness of

CSR, and assess the perceptions of local community members regarding the reasons for the mining companies' engagement in CSR.

Conceptual ground

Like most of the management concept, CSR does not have a single objective definition. As Matten & Moon (2008) observed, the concept is characterized by dynamics across time and places. Even for researchers who have carried out studies on CSR practices overtime such as Archie Carroll have revealed the need to look into new dimensions and practices across societies and countries (See Carroll, 1991; 1999; 2016). There are two ways of looking at CSR, which also necessitates looking at it in two different ways. These are the narrow and broad approaches. In a narrow approach, CSR is confined to the fulfillment of legal requirements specified by governments and authorities to ensure that businesses processes do not cause harm on societies or the negative effects are mitigated by businesses (Marika, Magutu, & Munjuri, 2017).

On the other hand, the broad perspective looks at CSR as a broad range of theories, approaches, processes, and practices which recognize and seek to ensure that businesses have a duty to society and need to maintain good relationship with societies (Carroll, 2016). It generally entails success of the business without endangering people's wellbeing, respecting social norms, and protecting the natural environments (Adetunji & Ogbonna, 2013). While the first conception place emphasis on the legality of CSR, the later treats it as not necessarily limited to the obligations of the businesses that are specified by business regimes. It suggests that there is a sense of responsibility that the business world owes to the social and natural world and thus need to be good to the societies and their natural environments. With this conception, business entities are expected to interact positively with the societies even if there are no specific laws that require businesses to engage in CSR activities.

The design and analysis of in this study were guided by the Pyramid of Corporate Social Responsibility by Archie Carroll. Carroll's pyramid of CSR provides an influential framework for both defining CSR and explaining why businesses engage in activities that constitute what is known as CSR. Carrol (1991) identify businesses with four types of responsibilities, which he arranges in an order a pyramid, especially from the more basic and expedient to those that are more advanced and seemingly intricate. In that order, economic responsibilities are the basic and more likely followed by legal responsibilities,

then ethical responsibilities, and finally philanthropic responsibilities (Carrol, 1991; 1996). Therefore, corporations will seek to fulfill their responsibilities in a pyramidal order as figure 1 shows.

Figure 1: Carroll's pyramid of corporate social responsibilities

According to the Carrol's pyramid of CSR, becoming profitable is the most basic and obvious responsibility of corporations. Therefore, before thinking about respecting authoritative rules and acting in accordance with the need to fulfill social expectations, the corporations will always be concerned with being profitable and attaining economic success. In other words, corporations give in order to be profitable and remain profitable (Carroll, 1991). Next to the economic responsibilities, corporations will act in the way that they should fulfill their legal responsibilities. The assumption attached to these responsibilities is that the fulfillment of legal responsibilities relates to obeying and observing the supreme authoritative rules including the laws and regulations of the country (Frynas & Yamahaki, 2016). This implies that corporations are more likely to engage in CSR if there are laws that require them to do so and there are mechanisms for enforcing such laws (Alvarado-Herrera, Bigne, Aldas-Manzano & Curras-Perez, 2017). Therefore, the rules that specify the obligations of the businesses and how they should interact with communities that surround them need to be in place, and communities have to be aware of such rules.

The next category of responsibilities in the order are the ethical responsibilities. These responsibilities have to do with the need to observe, respect, and act in

agreement with the social and cultural norms of the communities. The assumption is that businesses will also opt to do what appears to be socially right even if they are not compelled by the laws (Idemudia, 2007). The last in the order are philanthropic responsibilities. These relate to the need of corporations to contribute towards attaining social goals of the societies and communities around them, which is based on the concern for the wellbeing of the communities and addressing social atrocities such as poverty and diseases (Carrol, 1999). When this order is followed, it is more likely to assume that the mining companies will be concerned with ethical and philanthropic responsibilities following the fulfillment of economic and legal responsibilities (Carrol, 1996). Alternatively said, philanthropic giving is subject to an assurance that there are some economic returns. Similarly, the desire to fulfill the legal obligations and expectations of government authorities needs to be considered side by side with the fulfillment of the businesses financial and economic goals.

Some evidence from previous studies

Different studies in the area of CSR have focused on the motivation of the businesses to engage in CSR activities. Some of these studies were more relevant since they were guided by the classification of CSR motives according Carroll (1991). Ramasamy & Yeung (2009) in a self-administered survey on the Chinese consumers' perceptions of CSR found that the Chinese consumers were more supportive to corporate responsibilities. Of the four types of responsibilities, especially economic, legal, ethical, and philanthropic; the findings revealed that economic responsibilities were the most important while philanthropic responsibilities were the least important for the consumers. Related to the economic motives, the recent study from Kenya revealed that companies used CSR as a means for attracting graduate employees to join them (Marika, Magutu, & Munjuri, 2017). A related observation is provided by Loosemore & Lim (2017) who found a close linkage between engaging in CSR activities and the efforts to enhance the financial performance of the business enterprises.

On the other hand, some studies show that laws have been instrumental for ensuring that businesses have a positive impact on social development. For instance, Carroll (2016) presents recent evidence of consistency between the assumptions of the pyramid approach and the CSR practices in the US. He argues that CSR is attributed to five main motives. These are to perform in consistency with low, complying with state regulations, acting as law abiding

citizens, fulfilling legal obligations to stakeholders and societies, and providing goods and services that meet legal standards.

Despite the fact that the evidence available have not been able to challenge the primacy of the economic motives behind engaging in CSR, it is also becoming evident that the presence of the laws and their effective implementation could help to strike a balance between the hidden economic motive and the usually displayed ethical and philanthropic motives of CSR activities in the communities (Devin & Richards, 2018). Reflecting on the previous studies, it is important to consider all the four categories of CSR motives as perceived by communities in a specific social economic setting. The next section provides a synthesis of the methods through which the study was carried out.

Methods

Approach and design

A descriptive cross-sectional design was employed for the purpose of this study. According to Omair (2015), a descriptive study design serves two important roles in research. First, it can be used to understand the distribution of characteristics in a selected study sample. Secondly, it may be used to understand characteristics of the study objects, which may be generalized to provide the lesson for related or similar populations or contexts. On the other hand, a cross sectional design focuses on observed characteristics of a phenomenon at a given point in time (Creswell et al, 2013). The intention of the study, which was to understand how a specific community under the study perceived the reason for the fulfilment of CSR determined the choice of the study design. However, the findings of the study could be useful for explaining the reasons and motives for engagement of businesses in CSR activities in other communities, especially the rural communities which have been integrated into large scale mining investment both within and outside Tanzania.

Study area

The study was conducted in Bugarama ward in Kahama District in Shinyanga region. Bugarama is one of 35 wards of Kahama district. The other wards are Bukomela, Bulige, Bulungwa, Bulyanhulu, Busangi, Chambo, Chela, Chona, Idahina, Igunda, Igwamanoni, Isaka, Jana, Kashishi, Kinamapula, Kisuke, Lunguya, Mapamba, Mega, Mpunze, Mwalugulu, Mwanase, Ngaya, Ntobo, Nyankende, Sabasabini, Segese,   Shilela, Ubagwe, Ukune, Ulewe, Ulowa,

Ushetu, and Uyogo. The ward has six villages namely Bugarama, Buyange, Bunango, Igadija, Igwamanoni, Ilogi. The ward was selected because of the fact that four of its villages, namely Bugarama, Ilogi, Buyange, and Bugwamanoni are encompassed in the famous Bulyanhulu Gold Mine (BGM), which started its operations in 2001 replacing artisanal miners who had occupied the areas for 26 years since gold was discovered in the area. The villages which were involved in the study were Bugarama and Ilogi. The reason for selecting these villages is that, the largest part of their populations directly interact with the BGM and its employers as part and parcel of the two communities. In this study, the two villages are treated as a single community due to the similarity they have owing to the development of mining activities and related economic life.

Study population and sampling

The study targeted the local community members who had been in the communities around the gold mine. All adult member who had attained the age of 18 during the study qualified to be part of the study. The sampling frames, which had lists of all households in the villages were obtained from the village authorities and systematic random sampling was used to select 50 households for each of the two villages. The households for each of the village were divided in two categories where 25 of them were to produce male participants and 25 female participants. The final study sample included 100 respondents who were selected using simple random (rotary) sampling for each of the households. The selection of a respondent at household level involved listing the names of all eligible members on pieces of papers, mixing them, and finally picking one of them to be included in the sample.

Data collection tools and procedure

Data for this study were collected using a structured questionnaire with 41 close-ended questions. The first 10 items in the questionnaire sought to collect data related to the social-demographic characteristics of respondents including age, sex, education, income, occupation, marital status, and employment history of the respondents. These were important for examining the perceptions across social demographic groups in the sample. The next nine items sought to document the respondents' awareness and experiences regarding the engagement of mining company in CSR activities. Some common social economic development activities of the communities were identified and the

respondents were asked to score the companies between 1 and 10 based on the extent to which the mining company was engaged in supporting those activities. In the next twenty items presented the reasons which motivate businesses to engage in CSR activities based on the Carroll's pyramid of corporate social responsibility in four categories, especially economic, legal, ethical, and philanthropic responsibilities. The respondents were asked to score the items between 1 and 10. The last two questions assessed the extent to which the respondents thought they were responsible for demanding the company to fulfill its CSR and the extent to which the company itself had a sense of responsibility. The respondents were asked to choose between 'less responsible' and 'highly responsible'. The administration of the questionnaire ended between 20 and 30 minutes each.

Data analysis

The analysis of data was done quantitatively. The questionnaire was coded and the responses were entered in the Statistical Package for Social Sciences (SPSS). Frequency tables were generated to compare the scores across different social demographic groups of respondents. Descriptive statistics were used to compare the scores of the company across the nine common areas of CSR activities in the study community and the variations in perceptions regarding the four categories of corporate social responsibilities. A comparison of the scores across the four categories of CSR motivations was done in the light of the literature and in particular the Carrol's (1991) pyramid of framework. Arguments and conclusions linked to the study objectives are supported by descriptive statistical analysis.

Results and Discussion

The study sought to examine the community perceptions regarding the engagement of mining companies in CSR activities and the perceptions regarding the motive that drive the companies to fulfill their corporate social responsibilities. In doing so, the entry point was to identify the existing CSR activities and the ways in which they are perceived and conceived by communities. However, there was a recognition that taking a stock of the social demographic characteristics of respondents would be crucial since the perceptions regarding the responsibility of institutions can be influenced by social demographic differences among community members, which the next subsection focuses on.

Social demographic characteristics of questionnaire respondents
Six variables were considered in this respect. These were sex, marital status, age, education, employment status, household income, and social position of the respondent. Table 1 provides a breakdown of the respondents by their key social demographic characteristics.

Table 1: Respondents' social demographic characteristics

	Variable: Categories	Percent
Sex:	Male	50.0
	Female	50.0
Marital status:	Single	55.0
	Married	32.0
	Others	4.0
	Widowed	9.0
Age category:	18-35(young age)	48.0
	36-50(young adult)	37.0
	51-59(mature adults)	7.0
	60-70 (old age)	7.0
	71 or above (elderly)	1.0
Education:	<Primary education	6.0
	=Primary education	33.0
	Secondary education	36.0
	Higher education (non-university)	21.0
	University/college education	5.0
Employment status:	Currently employed	22.0
	Currently not employed	74.0
	Retired	4.0
Household income:	Very low< 15,470TZS)	6.0
	Low>15,470 < 30,940 TZS	43.0
	Average= (30,940 to 46,410 TZS)	47.0
	High > 46,410 TZS	4.0
Social position:	None, just an average citizen	86.0
	Faith or religious leader	4.0
	Local government leader	6.0
	Big business owner/influential	4.0

As table 1 reveals, the study included 100 respondents whose 50% were male and 50% were females. Fifty-five percent of the respondents were single, 32% were married, while the remaining were either widowed (9%) or were in other marital status groups including divorced. In terms of the age, the majority were

either young (48%) or young adult (37%) age groups, which meant 18-35 and 36-50 years respectively. Of the remaining, 7% were in the 51-60 years' age group, the other 7% were in the 61-70 age group while only one had attained 71. This age distribution reflects the youthful age composition of the study community, which many of the interviewed community leaders associated with recent immigration that accompanied the increase of mining activities in the area.

In terms of education, the majority of the respondents had secondary education (36%) while 33% had primary education. The respondents who had higher education constituted 26% of the sample including a few who had university education (5%) and those who had other forms of higher education apart from university education. According to interview respondents, this is again attributed to the influx of the young school graduates into the community in search of improved livelihood and the limited willingness to engage in agrarian activities. Regarding employment status, only a small proportion (22%) identified themselves as employed while the majority, 74% reported not to be employed. The remaining 4% were retirees. In case of the income, the majority (90%) reported to belong to households which were earning a monthly income equals to (47%) or lower than (43%) the average rural household income, which was 30,940- 46,410 Tanzanian shillings. Further, the social economic positions of the respondents in the community, which could also influence both the knowledge and perceptions regarding CSR was considered. The majority, 86% were average citizens who did not hold any leadership position in the community, 6% had held or were holding positions in grassroots' authorities, 4% were religious and spiritual leaders, and the remaining 4% were influential business owners in the communities. Therefore, these difference provided a good mix of social demographic characteristics which needed to be compared in terms of influencing the awareness, perceptions, and the reasons for fulfillment of CSR by mining companies. The next section focuses on community's experiences of existing CSR activities.

Awareness and experience of existence of CSR activities.

The other important objective of the study was to identify the existing CSR activities from the experiences of community members. Through interviews, it was found that almost all the community level officials and leaders were informed of both the importance and the need for mining companies to engage in 'supporting' social and economic development of the communities around

them. Both grassroots bureaucratic officials and elected community leaders thought it was a responsibility of big businesses to allocate part of their income for supporting social and economic development in the communities. Based on the interviews, nine sets of CSR related activities were identified. The activities identified were further included in the scoring questionnaire. The results of the scores are summarized in Table 2.

Table 2: The most common CSR activities carried out by mining companies

Key focus of CSR activities in the communities	Scores	(%)	Mean	Std. Error	Std. Deviation
Economic engagement (employment, capital)	760	18.45	7.60	.248	2.482
Supporting the disadvantaged (poorer and disabled)	576	13.98	5.70	.312	3.127
Construction of offices of LGAs and roads	564.	13.69	5.64	.293	2.938
Construction of education facilities	481.	11.68	4.81	.297	2.977
Water supply systems	448.	10.88	4.48	.282	2.826
Water and sanitation in schools	432.	10.49	4.32	.281	2.813
Sponsorship for school children from poor families	425.	10.32	4.25	.294	2.941
Political activities such as elections	243	5.90	2.43	.190	1.908
Constructing worship houses (churches, mosques)	190.	4.61	1.90	.139	1.396
Total	4119	100.00			

The results in Table 2 indicate that the communities recognize in supporting community-level development initiatives and activities. The indirect supports for allowing the communities to engage in economic activities including employment and mobilizing capital had the highest score that accounted 18.45% of the 4119 total scores. The mean score was 7.60 (SD=2.242). Supporting disadvantaged groups including the poor and disable and construction of public infrastructures such as roads and offices of LGAs had relatively high scores accounting up to 13.98% and 13.69% and the mean scores of 5.70 (SD=3.127) and 5.64 (SD=2.938) respectively. Similarly, the contribution to the construction of education facilities had a relatively high score (4.81, SD=2.977), which was above the average of the mean score (4.57).

On the other hand, the engagement of the mining companies in supporting religious and political activities such as construction of worship houses and financing electoral campaign rallies was found to be low with the mean scores of (1.90, SD=1.396 and 2.43, SD=1.908) respectively. Close to the average of the mean score, were the supports related to water supply, water sanitation in schools, and sponsoring education for children from poor households, which

had the mean scores of 4.48 (SD=2.826), 4.32 (SD=2.813), and 4.25 (SD=2.941). These findings indicate that CSR of the mining companies are largely convenient and in most cases focus on development sectors, which are likely to create appreciated impact in the communities. These include economic empowerment initiatives, which in addition to the responsibility of the companies to support them are sought by community members themselves to ensure economic survival. They also target areas that are more likely to capture high attention of both the communities and their authorities such as education and poverty. In this respect, it is feasible to argue that the communities are aware of that the mining companies engage in CSR activities, and indeed their engagement tend to vary across community development issues and sectors. Subsequently, this raises the need to understand, from the view point of community members, why the companies engage in CSR activities.

Perceived reasons for CSR

The perceptions relating to the essence and reasons why mining companies engage in CSR activities were assessed in the light of the Carroll's Pyramid of Corporate Social Responsibilities. The aim was to determine which of the four levels of CSR namely economic responsibilities, legal responsibilities, ethical responsibilities, and philanthropic responsibilities may best explain why the mining companies engage in CSR activities identified in the study community. Each of the four group of responsibilities included five interrelated reasons associated with engaging in CSR activities, which the respondents had to score along a scoring scale of 1 to 10. Table 3 provides the results of the analysis, which include the total scores for each of the reasons in each category and their sums, percentage of the scores contributed by each of the perceived reason in a group, the mean scores for each reason and each group and the standard error and standard deviation.

Table 3: Comparison of individual and group scores

Economic responsibilities:	Score	(%)	Mean	Std. error	Std. deviation
To maintain strong competitive position	819	(22.66)	8.19	0.187	1.873
To get as much profit as possible	812	(22.47)	8.12	0.188	1.876
It helps them to maximize earning per share.	785	(21.72)	7.85	0.190	1.90
To maintain a high level of operating efficiency	690	(19.09)	6.9	0.206	2.057
To get respect that they are consistently profitable	508	(14.06)	5.08	0.205	2.048
Sum average	722.8	(20.00)	**7.22**	0.195	1.952
Legal responsibilities:					
To be defined as the ones that fulfil legal obligations	552	(28.09)	5.52	0.232	2.325
Provide goods & services that meet minimum legal requirements	437	(22.24)	4.37	0.225	2.255
To be law abiding corporate citizens	413	(21.02)	4.13	0.250	2.497
To be consistent with expectations of government	392	(19.95)	3.92	0.244	2.444
To comply with regulations of the central and local authorities	171	(8.70)	1.71	0.109	1.085
Sum average	393	(20.00)	**3.93**	0.212	2.121
Ethical responsibilities:					
To prevent compromising the social norms-may affect goals	734	(25.29)	7.34	0.236	2.362
To make good citizenship be defined as acting morally right	593	(20.43)	5.93	0.245	2.451
To make corporate integrity and ethic transcend mere compliance	572	(19.71)	5.72	0.242	2.421
To recognize and respect newly revolving ethical norms	517	(17.82)	5.17	0.251	2.511
To perform in a way that they respect social norms and mores	486	(16.75)	4.86	0.232	2.318
Sum average	580.4	(20.00)	**5.80**	0.241	2.413
Philanthropic responsibilities:					
Just to assist in whatever makes community happy (e.g. fine and arts)	635	(24.23)	6.35	0.252	2.520
Voluntarily contribute to projects that are for improving quality of life	608	(23.20)	6.08	0.242	2.419
A sense of social duty to assist public and private (social) institutions	515	(19.65)	5.15	0.236	2.363
Make managers participate in charitable works of the communities	477	(18.2)	4.77	0.217	2.174
To be consistent with the charitable expectations of communities	386	(14.73)	3.86	0.190	1.896
Sum average	524.2	(20.00)	**5.24**	0.227	2.274

The four group of corporate social responsibilities in Table 3 need to be examined in a comparative way. What can be clearly observed is that the scores for nearly all the vive items that constitute economic responsibilities were closely equal (except the last in the order) and were close to the expected average score which was 722.8 (20%). This suggests that all the five reasons in the economic responsibilities' category have an important contribution to the desire of mining companies to engage in CSR activities. By looking at the sum averages of the mean scores in the fourth column, it is revealed that economic responsibilities had the largest mean score (7.22, SD=1.952), followed by ethical responsibilities (5.90, SD=2.413), then philanthropic responsibilities (5.24, SD=2.274). Legal responsibilities had the least mean score (3.93, SD=2.121). These results show that the engagement of mining companies in corporate social

accountability activities is more motivated by economic and ethical reasons compared to legal and philanthropic motives. However, a father grasp of the pattern of these results may not be easy without understanding the interaction between these four groups of responsibilities and their related motives. This can be best done as part of the general discussion, which the next section presents.

General Discussion of Findings

The study has examined the community experiences relating to the engagement of mining companies in CSR activities and the perceptions regarding the motive that drive the companies to fulfill their corporate social responsibilities. The findings have revealed the existence of several ways in which the companies engage CSR and are considered to support community development activities, initiatives, and efforts. The ways in which the communities benefit from the existence of the mining companies range from contingent economic facilitation, which include ad hoc employment and income earning activities which are growing in the community due to the existence of the mining companies and their employees to rationally organized support to communal services projects such as education, water, and developing transport infrastructure.

These findings support previous studies that have found varying and overlapping forms of corporate responsibility that may be associated with different motives. Porter & Kramer (2006) for instance found that because of the interdependence between economic and social life, CSR may take different forms ranging from an affirmative action to address a social harm to strategic initiatives for ensuring success and continuity. These forms can be both implicit and explicit (Matten & moon, 2008) or both rationally planed and circumstantial and contingent as the findings have revealed (Husted & Allen, 2007). However, these different forms are all likely to manifest themselves under a single umbrella that includes positive actions directed towards supporting development of the communities.

Further, the findings have revealed that communities perceive most of the CSR activities as having an economic motivation rather than a humanitarian and philanthropic motivation. While these findings agree with previous studies by Carrol (1995) and Devin & Richards (2018), they can be questioned if considered in line with the findings of the study by Hasan, Kobeissi, Liu. & Wang (2018) whose recent study revealed that the engagement of the businesses in CSR

activities becomes possible if the business is productive. In other words, economic success, apart from being a motive is also a driver of CSR. In addition, there appear to be a close linkage between the quest to be attuned with moral standards of the communities and achieving greater acceptability and legitimacy (Garriga & Mele, 2004; Ahn & Park, 2018). This has been identified as one among the most effective techniques and tools used by businesses to maintain good relationship with communities and therefore be able to achieve their economic goals including profitability, market stability and competition, and productivity. Therefore, the distinction between economic motives and fulfilling ethical responsibilities may not be as sharp as suggested by Carroll (1991). The two are highly overlapping.

 In addition, what the findings have suggested that legal responsibilities are of a list concern appears to be supported by previous studies, especially when one takes into account the capacity of community-level actors to demand large businesses to fulfill their legal responsibilities. In some cases, studies have found that awareness of the laws that empower communities to demand that business entities should fulfill their responsibilities is limited (Gamu & Dauvergne, 2018). The findings from this study generally increase our understanding of the communities' perceptions on why are profit making companies contribute to community development efforts. It is notable from the study that businesses may not be as altruistic as simply assumed in the philanthropic view of CSR. The choice of what the businesses should support as part of social development may be determined by productivity and the need to maintain status quo. Therefore, the existence of legislations that require companies to engage in CSR activities may not guarantee positive contribution of CSR to the improvement of social welfare (McWilliams & Siegel, 2001; Schwartz & Carrol, 2003). This is mainly because the primary goal of all businesses, as opposed to public organizations is to make some profits.

Conclusion

As suggested by findings of previous research and the current study, the businesses are more likely to give if they have received or they have a legitimate expectation to gain from giving. This logical relationship between corporate social responsibilities of business success make the two tactically and strategically interdependent. However, the general tradeoff in this relationship is whether the businesses would like to treat their engagement in CSR activities

an anonymous and compassionate virtue that could be kept secret and not known to communities, other businesses, and governing authorities. Probably this is not a case in the world of business. However, since knowledge is unlimited, contextual, and dynamic, further research is required to test the hypothesis whether successful businesses are more likely to engage in CSR supports when the information regarding their engagement is likely to reach a wider audience compared to environments where the audience is limited or inexistent. This is recommended as an area for further research.

While creating environments for profitability and continued growth is a primary concern of the business institutions, CSR may take a form strong engagement in humanitarian and ethical support to communities if such engagement has a potential of making them loved in the eyes of not only the communities, but also the other businesses and the world at large. In that case, the idea that businesses would engage in CSR activities when they are continuously making loss or without expectations of recovering from such losses may not intellectually work. The take-home message in this respect is that, behind the engagement of any business in CSR activities there is always a question of creating better environments to be recognized, appreciated, trusted, and relied upon. With this idea, CSR stands as a tactical and strategic social investment by businesses.

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Estimating Money Demand in Cambodia

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Abstract

This study extended the existing to analysed the impact of money demand in Cambodia. In addition, to analyse the stable demand for money, the study used autoregressive distributed lag model (ARDL) approach to estimate the short and long run causality of the variables considered in the econometrics model. The results based on the bounds testing procedure confirm that a stable, long-run relationship exists between demand for money and its determinants: real income, inflation rate and nominal exchange rate. The empirical results reveal that there is a unique cointegration and stable long-run relationship among money supply, income, inflation rate and exchange rate. And found that depreciation of domestic currency decreases the demand for money. The results also reveal that after incorporating the CUSUM and CUSUMSQ tests, money demand is stable between 1996 and 2016.

Keywords: Money Demand, ARDL, econometrics model, cointegration, Cambodia

1. Introduction

Money demand models represent a natural benchmark against which monetary developments can be assessed. The importance of money demand has become a prominent research topic in economics in recent years due to its role in monetary policy formulation. There can be seen a wide array of literature on the demand for money, however, the focus of them is varied in accordance with time span, choice of variables and motives of money demand. The majority has emphasized that wealth and permanent income effect for money demand. The current income effects for money demand rather than permanent income, as people demand money mostly for transaction purpose.

Monetarism today is mainly associated with the work of Friedman, who was among the generation of economists to accept Keynesian economics and then citizen it on its own terms. Friedman argued that "inflation is always and everywhere a monetary phenomenon". Also, he advocated a central bank policy aimed at keeping the supply and demand for money in equilibrium, as measured by growth in productivity and demand. Opponents of monetarism, including neo- Keynesian, demand for money is intrinsic to supply, while some conservative economists argue that demand for money cannot be predicted. Stieglitz has claimed that the relationship between inflation and money supply growth is weak when inflation is low (Friedman 1970)

Bahmani-Oskooee and Rehman (2005) used quarterly data from 1973 to 2000 to estimate the demand for money for seven Asian countries. Using ARDL approach and CUSUM and CUSUMSQ tests, they found that in some Asian countries even though real M1 or monetary aggregates are cointegrated with their determinants, the estimated parameters are unstable.

Akinlo (2006) used quarterly data over the period 1970:1-2002:4 and the ARDL approach combined with CUSUM and CUSUMSQ tests, to examine the cointegrating property and stability of M2 money demand for Nigeria. The results show M2 to be cointegrated with income, interest rate and exchange rate. Moreover, the results revealed somewhat stable relation mainly with the CUSUM test.

However, in addition to those fundamental determinants, new findings on the determinants of money demand have appeared in recent literature. In this paper, concentrations are on some variables that is believed to have a mixed effect on money demand in Cambodia, between data period from 1996 to 2016. The income, exchange rate, and inflation rate, have a considerable impact on the demand for money in Cambodia.

Moreover, having a stable money demand is very important, the existence of a well- specified and stable relationship between money and other macroeconomic variables, like price, and exchange rate can be perceived as a prerequisite for the use of monetary aggregates in the conduct of monetary policy. The main contribution of this paper is to demonstrate that whether exchange rate could make the wealth effect or expectation effect uncertain, it could have a positive or negative impact on money demand. Therefore, be considered as another determinant to be included in the money demand function due to the vital role it plays.

The organization of this term paper is stated as follows. Section 2 discusses about the model of money demand, briefly reviews a few relevant empirical

works. Section 3 presents the estimation methodology, data, sample, estimate result; Section 4 is conclusion.

2.   Literature Review

In the macroeconomic literature, it is common to assume that the demand for money depends on scale variable and the opportunity cost of holding it. The scale variable is usually defined as the real income or the real consumption expenditure, whereas the opportunity cost variable is usually considered as the interest rate on alternative asset. The general specifications of money demand function are assumed to take the following functional form.

$$\frac{MD}{P} = L(w, z) \tag{1}$$

Where *MD* is the demand for money, *P* is inflation (the price level), *w* is the real income level which represents the scale variable, and *z* is the opportunity cost variable. The variable, representing the opportunity cost, is usually considered as interest rate on alternative asset. However, when dealing with the case of developing countries whose financial sectors are not well developed, researchers often use the inflation rate as the proxy for the interest rate variable. Moreover, taking the currency substitution phenomenon into account, many studies on the demand for money in developing countries often include rate variable in the standard function of money. This inclusion of exchange rate variable in the standard function of money demand is first suggested by Mundell (1963).

For recent empirical studies on this kind of money demand function see, for example, Bahmani-Oskooee and Tanku (2006), AKinlo (2006). Some studies such as Zamaroczy and Sa (2002) Kang (2005) and Samreth (2008) provide information and empirical evidence on the currency substitution phenomenon in Cambodia. Taking this in to account, the money demand function becomes:

$$\frac{MD}{P} = L(w, \pi, Ex) \tag{2}$$

Where π and Ex are respectively the inflation and nominal exchange rates, the exchange rate, here is defined as the amount of domestic currency per unit of foreign currency. Therefore, the increase of Ex is interpreted as the depreciation of domestic currency against foreign currency. The estimation equation takes the following equation:

$$\text{Ln}\left(\frac{MD_t}{P_t}\right) = a_0 + a_1 LnW_t + a_2 \pi_t + a_3 LnEx_t + \varepsilon_t \tag{3}$$

Where ε represents the error term, based on the conventional economic theory, the income elasticity coefficient b1, is expected to be positive; the coefficient of inflation, b2 is expected to be negative. For the elasticity coefficient on the exchange rate variable (a_3), it can be either positive or negative. If the increase

exchange rate is perceived as the increase in wealth and leads to the rise of domestic money, the coefficient of exchange rate is positive. But, if the increase in exchange rate leads to the decrease in domestic money demand then the coefficient of exchange rate is negative. Additionally, the dummy variable representing the effect of political upheaval in Cambodia during 1997-1998 is included in equation (3). There for, we obtain the estimation equation below.

$$\text{Ln}\left(\frac{MD_t}{P_t}\right) = a_0 + a_1 LnW_t + a_2\pi_t + a_3 LnEx_t + a_4 DUM_t + \varepsilon_t \tag{4}$$

Where DUM_t =1 for period of 1997 -1998 and DUM_t =0 elsewhere

3. Research Method

3.1. Data

This study employs secondary data from World Bank for the analysis, and the sample period from 1996 to 2016. This sample period is chosen due to the availability of the data of all variables in the model. The demand of money balances are proxies by the monetary aggregate, M2 which consists of Cambodia Riel in circulation outside banks and Riel-denominated demand deposit in banking system.

3.2. Model Specification and Estimation

There are various techniques for cointegration analysis on money demand function. The popular approaches are: the well –known residual based approach proposed by Engle and Granger (1987) and the maximum likelihood-based approach proposed by Johansen and Julius (1990). When there are more than two I(1) variables in the system, the maximum likelihood approach of Johansen and Julius has the advantage over residual- based approach of Engle and Ganger, however, both of the approaches requires that the variables have the same order of integration.

This study adopted ARDL approach to cointegration technique as the methodology for the empirical analysis on money demand function in Cambodia. The specified money demand function of equation (4) can be written as unrestricted error correction version of ARDL model below.

$$\Delta Ln\left(\frac{Mdt}{Pt}\right) = \alpha + \sum_{i=1}^{n} \delta i \, \Delta \, \text{Ln}\left(\frac{Mt-i}{Pt-i}\right) + \sum_{i=1}^{n} \beta_j \, \Delta \, w_{i-t} + \sum_{i=1}^{n} \lambda_j \Delta \pi_{t-i}$$
$$+ \sum_{i=1}^{n} \mu_i \Delta LnEx_{t-i} + \varphi_1 \Delta Ln\frac{Mdt-i}{Pt-i} + \varphi_2 Lnw_{t-1} + \varphi_3 \pi_{t-1}$$
$$+ \varphi_4 LnEx_{t-1} + \varphi_5 DUM_{t-1} + \mu_t \tag{5}$$

The ARDL procedure contains two steps. First, the existence of the long-run relation between the variables in the system is tested. In other words, the null hypothesis of no cointegation or no long-run relationship defined by H₀ :

$\varphi_1=\varphi_2=\varphi_3=\varphi_4=0$ is tested for against its alternative H$_1$: $\varphi_1\neq\varphi_2\neq\varphi_3\neq\varphi_4\neq0$ by computing the F-statistics. The distribution of this F-statistics is non-standard irrespective of whether the variables in the system are I(0) or I(1). The two sets provide the bands covering all the possible classifications of the variable into I(0) or I(1), or even fractionally integrated ones. If the computed F-statistics is higher than the appropriate upper bound of the critical value, the null hypothesis of no cointegration is rejected; if it is below the appropriate lower bound, the null hypothesis cannot be rejected, and if it lies within the lower and upper bounds, the result is inconclusive.

4. Result and Discussion

4.1. Estimation Result

To begin with, the study carried out bound test to justify the existence of cointegration or long-run relationship among variables in the system. Table 1 shows the results.

Table 4.1 Bound test

Test Statistic	Value	K
F-statistic	5.109584	4
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

It is clear from the results in table 1, that the F-statistics values are larger than I1 bound value; hence, there is co-integration among these variables. Based on this, we proceeded to analysed the ARDL model. The results are showed in table 2

Table 4.2 Result of ARDL Test

Variables	Coefficients	Standard Error	t-statistics	Prob.
Ln(MD/p) $_{t-1}$	0.456127	0.035099	3.376242	0.0057***
LnW	0.796735	0.337660	2.359579	0.0504**
LnPt	0.873534	0.429805	2.032394	0.0816*
LnEX	3.002673	9.104417	0.329804	0.7512
DUMt	0.201157	0.889426	0.226165	0.8275
C	-24.00150	73.85354	-0.324988	0.7547

Adjusted R-squared =0.956568, S.E. of regression = 0.337643, Durbin-Watson stat =2.811406

Prob(F-statistic) = 0.000039, ***, ** and * indicates significance at 1%, 5% and 10% respectively. The results from the ARDL model shows that money demand, income and the general price level (inflation) is significant 1%, 5% and 10% respectively, however the political situations is not significant.

The study also carried out the serial correlation and heteroskedasticity test to determine whether the variables are serial correlated and also has heteroskedasticity and perhaps whether the model is good. Table 3 below shows the results.

Table 4.3 Breusch-Godfrey Serial Correlation LM Test

F-statistic	2.003405	Prob. F(2,5)	0.2296
Obs*R-squared	8.452424	Prob. Chi- Square(2)	0.0146

Table 4.4 Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.472477	Prob. F(11,7)	0.3122
Obs*R-squared	13.26656	Prob. Chi-Square(11)	0.2763
Scaled explained SS	1.768367	Prob. Chi-Square(11)	0.9992

From table 4.3, it's clear from Breusch-Godfrey serial correlation LM test that the variables are serially correlated (the p-value 0.0146>5%) this may be due to the mixture of the variables. However, heteroskedasticity does not exist.

To confirm the stability of the estimated model, the tests of CUSUM and CUSUMS of squares are employed in this research paper. Figure 2 and 3 respectively provide the graphs of CUSUM and CUSUMS of squares tests. Figure 4.1(a) indicates that the plot of CUSUM is completely stable within 5% of critical bands. Figure 4.1(b) we can see that it's nice within the 5% significance boundary so we can say the model is stable.

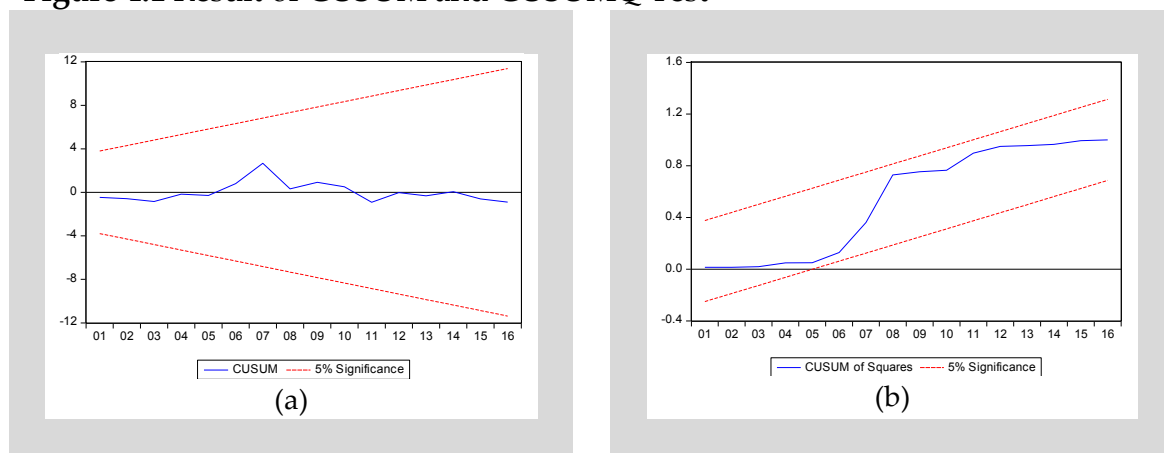**Figure 4.1** Result of CUSUM and CUSUMQ Test

(a)

(b)

Table 4.4 provides the results of error correction representations of the estimated ARDL model. As expected, the ECM term, here represented as EC (t-1), is negative with an associated coefficient estimate of -1.740655. This implies that about 17.40% of any movements into disequilibrium are corrected for within one period. Moreover, given the very large t-statistic, namely -6.958481, we can also conclude that the coefficient is highly significant.

Table 4.4, Results of Error Correlation of ARDL Model

Dependent variable Ln (M/P)

Variables	Coefficients	Standard Error	t-statistics	Prob.
ΔLnW_t	24.180233	6.871406	3.518965	0.0097***
ΔLP_t	-9.933596	3.454837	-2.875272	0.0238**
$\Delta LnEX_t$	-0.206589	0.084178	-2.454187	0.0438**
ΔDUM_t	127.760835	67.869059	1.882461	0.1018
EC_{t-1}	-1.740655	0.250149	-6.958481	0.0002***

Adjusted R-squared =0.459169, R-squared = 0.789677, Δ = first difference

*** and ** indicates significance at 1%, 5% and 10% respectively.

The results also show that national income, inflation and exchange rates are statistically significant at 1% and 5% respectively. This implies that a percentage change in the significant variables will lead to a percentage increase or decrease in the real money demand according to the sign and coefficients of each of the variables in the short run. The dummy variable representing the political turmoil in Cambodia were found to be insignificant.

**Table 4.5** Long run coefficients. Dependent variable Ln(MD/P)

Variables	Coefficients	Standard Error	t-statistics	Prob.
LnW	19.406361	6.155168	3.152856	0.0161**
LnP	6.719734	4.909967	1.368590	0.2134
LnEX	-0.030087	0.029540	-1.018532	0.3423
DUM	51.587163	53.330407	0.967312	0.3656
C	107.064771	119.350070	0.897065	0.3995

From the long run coefficients displayed in table 5, it is confirmed from this studies that only national income influences real money demand in the long run in Cambodia as it's significant at 5% level. This means that a percentage point increase in national income will lead to 19.41% increase in the real money demand in Cambodia.

4.2. Graphical Discussions

Money supply in Cambodia continued to grow at a sustainable rate and did not put additional inflationary pressure on the economy. Money supply has been cautiously managed to support the demand of money in the economy and to maintain the resilience of the banking sector.
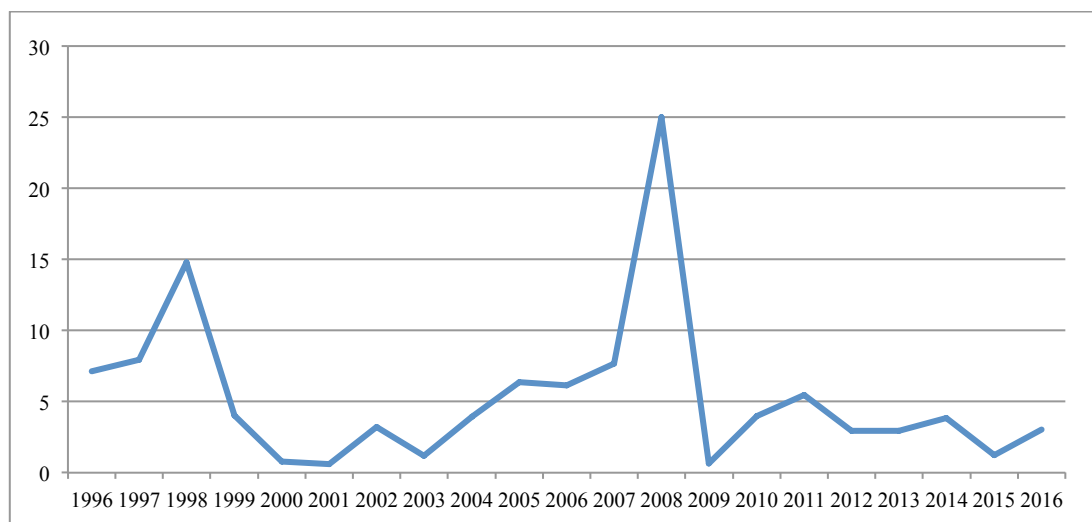
Figure 4.1 Money Growth in Cambodia
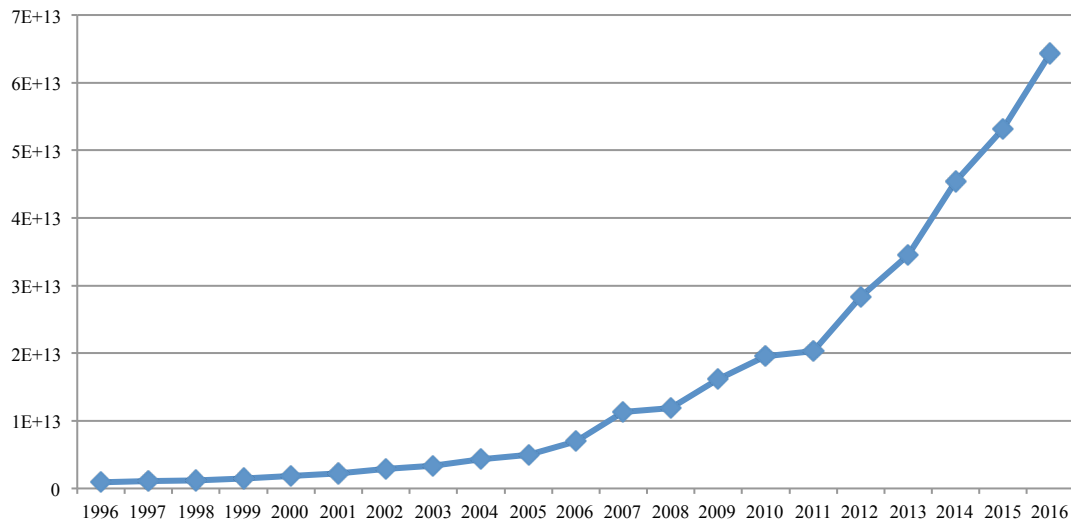
Source: Data from World Bank

Figure 4.1 shows the money supply in Cambodia from 1996 to 2016 which use data from World Bank. The money supply is a major variable that affects money demand. The graph shows that money supply in Cambodia has been increasing from 1996 -2016.

Figure 4.2 The Dynamics of Inflation Rate in Cambodia

Source: Data from World Bank

According to the data of World Bank as show in the figure 4.2 the inflation in Cambodia was up and down and had higher inflation rate during 2008-2009. The Friedman's Theory for Demand Money "Price level also determines the demand for money balances. A higher price level means people will require a larger nominal money balance in order to do the same amount of transactions, that is, to purchase the same amount of goods and services".
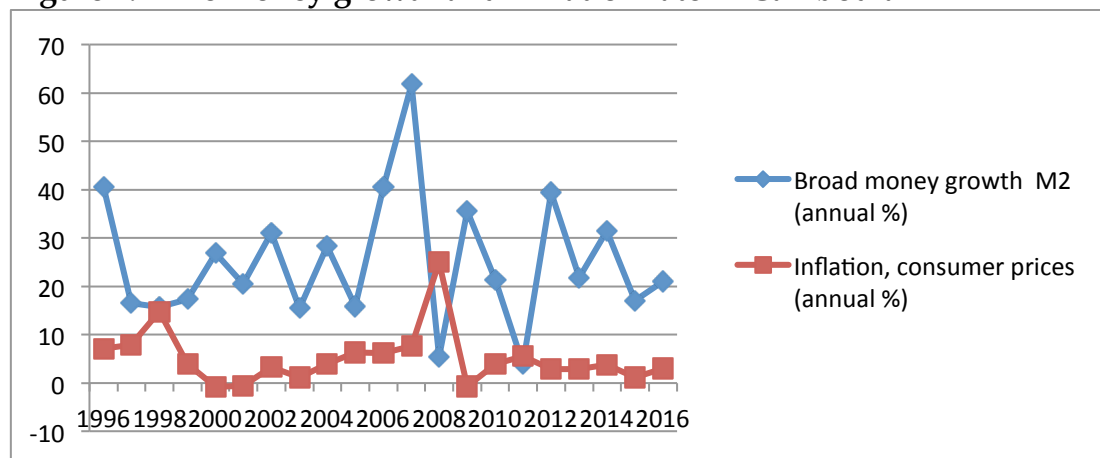
Figure 4.3 Official Exchange Rate in Cambodia (LCU per US$, period average)
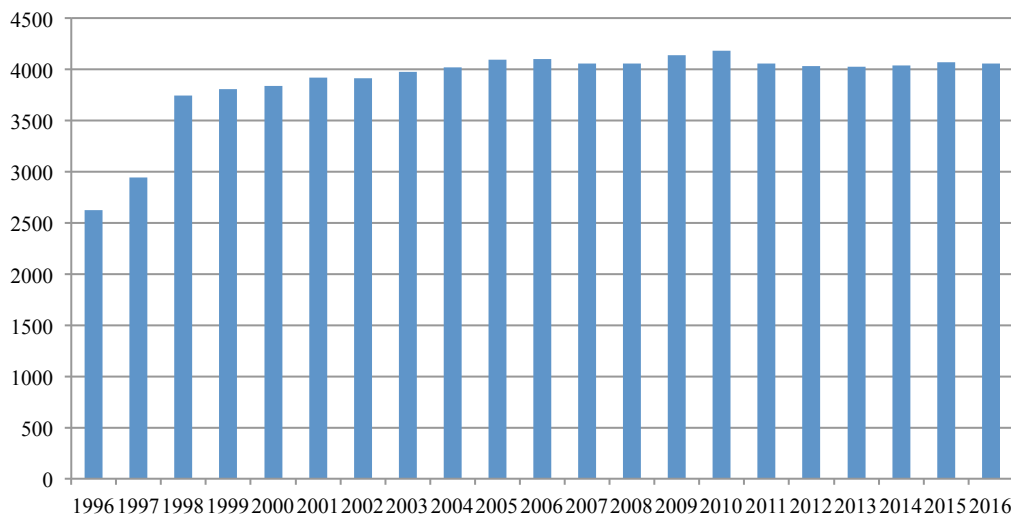
Source: Data from World Bank

The above graph shows exchange rate of Cambodian currency (Riel) and USD dollar from 1996 to 2016. The graph further indicates that exchange rate is quite stable over the study period.

Figure 4.4 The money growth and Inflation rate in Cambodia

Source: Data from World Bank

The figure 4.4, show about the comparing between money growth and inflation rate in Cambodia from 1996 to 2016. The graph above showed that the fluctuation of both graph is mixer of directions. In 2008 the inflation rate was high but the money growth was quite low. We expect inflation and money growth to have some positive relationships; an increased in money supply causes inflation to rise. However, money growth and inflation exhibit both positive and negative relationships in period considered, this seemingly variations are best explained by economic activities or phenomena during the period investigated.

5. Conclusion

By using the ARDL Model to analyse the stability of the money demand in Cambodia, the model confirms that the inflation rate, exchange rate is impact to money demand. Moreover, to confirm the stability of the model, the CUSUM and CUSUMSQ test are also conducted with the result that the estimated model is stable. In this term paper, the demand for money in Cambodia has been estimated using ARDL approach to cointegration analysis of Perasan. The ARDL method does not generally require knowledge of the order of integration of variables. The empirical results have shown that, most of variables in the model are statistically significant and consistent with the demand theory both in the long-run as well as in the short-run; however, some variables are found to be slightly inconsistent with the demand theory. In most instances there are explanations for this incidence.

The empirical analysis based on the bounds test, supports the stable money demand model for Cambodia. In fact, it shows that the existence of the long-run money demand equation can only be firmly established when inflation rate, exchange rate is included in the model. The negative effect of inflation rate on money demand supports our theoretical expectation that as the inflation rate rises, the demand for money falls. Furthermore, by applying the CUSUM and CUSUMSQ tests to the model, we show that long-run money demand model in Cambodia is more stable if inflation rate, exchange rate is included in the model.

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The Relationship Between Personal and Organizational in Supply Chain Integration: Case study in Malaysia

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Abstract

This study focuses on perusing how inter-personal relationship (IPRs) and inter-organizational relationships (IORs) interacts in the supply chain integration (SCI). Previous studies on supply chain integrations focuses more on inter-organizational relationships and ignoring inter-personal relationships. In this study an exploratory multiple case studies in Malaysia is used. We realize that in the early stage of supply chain integration, inter-personal relationships are identified as a precursor to building Inter-organizational relationships. During the operational stage, the two levels of relationships continuously interact with each other, until the end of the entire life-cycle of the dyad, inter-personal relationships helps in the emergence and growth pf IORs while the latter often uses these ties to negotiate for resource acquisition.

Keywords: Case study, personal-organizational relationship, Supply chain integration

1. Introduction

Supply chain integration is generally perceived to be a very important approach to intensify and boost both the effectiveness and efficiency of supply chain (Bowler, Castka & Balzarova, 2015). Lots of previous study focused more on the organizational level relationship management and ignored the individual level relationship (Brown, Amundson & Badurdeen, 2014). This study focuses on closing the knowledge gap on individual level relationship and to also investigate inter-personal relationship and inter-organizational relationship interaction mechanisms during both formative and operational stages of the supply chain integration. According to Fahimnia, Sarkis and Eshragh (2015) inter-personal relationship has three facets: personal affection, personal

communication and personal credibility (Banawi, & Bilec, 2014). Based on the content-based viewpoint, supply chain integration has to do mainly with information integration, strategic alliance, and process integration (Cabral, Grilo & Cruz-Machado, 2012); Besseris & Kremmydas, 2014). Due to the fact that both inter-personal relationship and inter-organizational relationship can be regarded as resources, we critically examined resource orchestration theory (ROT) in supply chain management through an assessment of dyadic relationship in supply chain integration at both individual and organizational levels (Aguado, Alvarez & Domingo, 2013; Azevedo, Carvalho, Duarte & Cruz-Machado, 2012). 7The two main questions that led the study are:

RQ1. How do IPRs and IORs interact in the formative stage of SCI?

RQ2. How do IPRs and IORs interact in the operational stage of SCI?

2. Methodology

The study makes use of an exploratory multiple case study approach in Malaysia. The data was carried out using semi-structured interviews of managers with varying supply chain responsibilities from both the suppliers and customers. While the qualitative data on the other hand, is triangulated with company archival information.

3. Findings

The study emphasized the crucial role of both inter-personal and inter-organizational relationships during supply chain integration (Bandehnezhad, Zailani & Fernando, 2012); Bergmiller & McCright, 2009). They are both valuable and incomparable resources, while the IOR is formal and exterior the IPR is informal and dependent. In the early stage of integration, inter-personal relationships come across as a prerequisite to building the inter-organizational relationships (Besseris, & Kremmydas, 2014); (Campos, Campos, Vazquez-Brust & Vazquez-Brust, 2016). However three important dimensions of IPRs work in relation: personal credibility acting as a facilitator that establishes inter-organizational confidence, personal affection acts as the gatekeeper, while personal communication accelerates the procedure (Elkington, 1998b). During the implementation stage, the two levels of relationships continuously relate with one another, with the possibility of strengthening and at times hindering the integration goal. All through the entire life-cycle of the dyad, IPRs helps in the establishment and growth of inter-organizational relationship while the latter often leverages these ties for resource acquisition.

4. Discussion

This study introduces orchestration theory by focusing and emphasizing on the interaction between inter-personal and inter-organizations relationships in supply chain management (Carvalho, Azevedo & Cruz-Machado, 2010); (Carvalho, Duarte & Cruz-Machado, 2011). The unclear scheme of the three inter-personal dimensions need to be organized and groomed to strengthen their effects on inter-organizational relationships (Castka & Balzarova, 2008); (Cherrafi, Elfezazi, Chiarini, Mokhlis & Benhida, 2016). In the same vein, the inter-personal and inter-organizational relationships of the supply chain integration process need to be organized in terms of breadth, depth and stage of life-cycle (Dües, Tan & Lim, 2013).

4.1 Managerial implications

The study provides senior decision makers in the top level management with more authentication of the important role of inter-personal relationships across a realm of managerial levels when working with business associate (Chiarini, 2014); (Duarte & Cruz-Machado, 2013b). Furthermore, the study ascertains when personnel with special skills and competence should be used during the different stages of developing and preserving inter-organizational ties (Dhingra, Kress & Upreti, 2014); (Duarte & Cruz-Machado, 2013a).

4.2 Sustainable Performance

The circular economy concept has started to be recognized as of great potential to help organizations achieve a breakthrough in environmental sustainability performance. It has quickly become an influential driving force behind sustainability, both in literature and practice (Genovese, Acquaye, Figueroa & Koh, 2017). The circular economy concept aims to redesign global production and consumption systems (Hobson, 2016). Through eco-industrial initiatives, where wastes produced at one point in a value chain are turned into inputs at another point (Mathews & Tan, 2011). These results in the creation of self-sustaining production systems, where most used products, scraps, residual materials, and other waste materials are collected, conditioned, and reused or recycled to improve material efficiency and profitability Preston, 2012). The concept puts sustainability and closed-loop thinking at the heart of business models and industrial organizations (Winkler, 2011)

5. Conclusion

The use of the integration for the dimensions of complexity might reflect a growing interest in the construct from various supply chain perspectives. However, the same variety potentially limits a more coherent understanding of personal and organizational supply chain integration. Complexity is not merely the opposite of simplicity nor did a synonym for complicacy, where everything deemed complicate can be addressed as complexity.

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