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Performance of Micro and Small-Scale Enterprises (MSEs) in Tanzania: Growth Hazards of Fruit and Vegetables Processing Vendors

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Processing of agricultural raw produces in Tanzania is becoming important for food insecurity, poverty alleviation, and economic development. Unfortunately, smallholder food processing enterprises do not access opportunities created by market, thus their growth is less likely. In that regard, this paper analyses growth performance of Micro and Small scale Enterprises (MSEs) involves in processing fruits and vegetables in Tanzania. The MSEs are herein defined as enterprises that engage between 5 and 49 employees or with capital investment of value from Tanzanian shillings (TZS) 5 million (mil) to TZS 200 mil. The sampled enterprises were collected during field work carried out in Dar es Salaam, Morogoro, Coast and Tanga regions of Tanzania.

The results show a low growth rate of studied enterprises, i.e. at 0.25 and 0.16 per year for revenue and capital investment respectively. The main factors associated to studied MSEs growth are MSE's operational capital; number of owners; staff-size; profit; annual production of products; access to basic market information; linkage to supportive bodies; business improvement services; distances to inputs sources and marketplaces; and manager-owner's age as well as experience in business activities.

These results suggest that if studied enterprises operate under same condition and perhaps more or less the same growth rate, it will take centuries to realise large scale enterprises growth levels. Therefore it is proposed studied MSEs have to merge and cooperate. Generally, this paper makes two major contributions. First, gives empirical evidences regarding growth of MSEs in developing countries. Second, it construct a basic step in understanding how SME's policy of Tanzania. Especially, for the food processing sub-section can be transformed to grow fast to bring significant impact on Tanzanian economy.

Keywords: Fruits, vegetable Processing, MSEs, Performance, Cox PH, Growth Hazard

1. Introduction

Since independence to to-date (i.e. at time this paper is written), Tanzania's economy is highly depending on agriculture-sector. The sector contributes to more than one-fourth '*quarter*' of country's Gross Domestic Product (GDP). Also, it accounts for almost 85% of total exports and employs nearly 80% of total labour force of about 24.77 million (mil) people. However, Tanzania's economy is still one of poorest in the world as majority of her people subsists on less than one United State Dollar ($) a day (CIA, 2012). On the other hand,

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the Tanzania's economy is led by private sector that majored by small and medium scale enterprises (SMEs) (Nkya, 2003, Milanzi et al., 2006).

The United Republic of Tanzania (URT) SME policy clarifies that Tanzania intends to attain strong economy by year 2025 (URT, 2003). However, the Tanzanian economic survey book of fiscal year 2011/2010 depicted that, in recent years the Tanzania's economy grew fast, but absolute poverty and inequality stubborn are still present. This is contrary to facts that, SMEs widespread ownership provides more equitable distribution of income and contributes to poverty reduction (Nkya (2003) and Calice et al., (2012)). Liedholm (2002) claimed that, during periods of overall economic growth the Micro and Small Scale Enterprises (MSEs) tends to perform better. Unfortunately, for most of Tanzanian SMEs their progress are relatively at low rate compared to the transitions and developed economies countries. For instance, estimates showed that, Tanzanian SMEs have greatest potential for further employment generation (URT, 2003). But, yet it contributed about a third of GDP (Olomi, 2006), employed 20% of labour force, and 94.7% of school leavers (URT, 2009). Thus, this paper objectively believes there is a need of understanding growth of agriculture related enterprises while reflecting on strong economic hope of Tanzania. For this reason, it addresses the booming Fruits and Vegetables Processing (FVP) sub-section of Tanzania.

2. Paper Issue and its Relevance

Most of Tanzanian SMEs, especially food processing ones are confronted with many problems in their operations. These include heavy cost of compliance resulting from their size; insufficient working premises; inadequate link with other sectors; limited financial services; and lack of capital as well as agro-processing machines. Also are characterised with technical known how; high transaction and organisational costs problems that are difficult to measure quantitatively. (ILO, 2003; URT, 2003; Eskola, 2005). Also, Tanzanian SMEs are not competitive enough in terms quality of products to access export markets (Milanzi et al., 2006) and suffer from severe exposure to information asymmetries (Ruteri and Xu, 2009). As such, becomes constrained from achieving economies of scale and scope.

Specifically for studied MSEs, it is presumed that, above envisaged characteristics follow complex networks of supply chains. This leads to a situation where sellers and buyers of PFVP do not meet immediate. That causes lack of quick disclosure and dissemination of information among actors in supply chains *'market imperfections'*. This constructs a major problem, which is slow growth. Because of that, stay small over long period *'stagnate'* without experiencing rapid expansion growth stage until closure. This is contradicting with micro and small scale enterprises growth theories. Generally, the enterprise's growth theories depicts that, through learning process an enterprise as a living body would go through time course from start-up, growth to closure or death stages (Degenhardt et al., 2002). Also, an enterprise can grow in terms of scale and scope as a strategy to exit closure stage (Mao, 2009). However, MSE's growth herein is manifested in terms of increase values of revenue and capital investment in machinery.

Therefore, this study seeks to investigate MSE's human resources, investments, and associated supply chain characteristics that successful influence studied enterprises growth. The main objective is to assess empirically growth performance of Tanzanian FVP MSEs and determine factors accounts for their growth. So, this paper borrows Milanzi et al. (2006) definition of enterprise as another name for business institution but include ideals of being bold, adventurous, innovative, and taking risk that means entrepreneurship.

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3. Methodological approaches to the study

In a field study, survey was conducted in the Dar es Salaam, Morogoro, Tanga, and Coast regions of Tanzania. Most of primary information generated during field survey consists of cross-sectional and panel data types that are time variant and invariant. The panel data represents sampled MSE's operational information at three periods of start-up period, middle of their operation, and at their recent time of operation before interviews for this work. Where, 140 MSEs in above mentioned study locations were selected as sample using simple random sampling procedure. In which, data were gathered through interviews with enterprise's manager-owners. Also, focus group discussions included local experts using questionnaires contained open and close ended questions. The direct observation method was also carried out.

This paper employs Cox proportional (Cox PH) analytical tool to investigate growth of studied MSEs over time. The analysis evolves interaction manager-owner's intrinsic knowledge, resources, and geographical proximity (i.e. physical distance) of sampled enterprises. Currently, the studied MSEs operate independently 'unilaterally' and are characterised with complex supply chain. Therefore, in order to examine effect of sampled MSE's resource and supply chain attributes on their growth performance. This work developed performance measures system (PMS) for analysis. These are MSE's inventories, distances to services points, ownership, revenue, profit, access of business services, annual availability of products, and human resources.

4. Description of Data and Tested Hypotheses

The ultimate results of any particular study depend on quality, validity, and availability of appropriate data with respect to studied issues. Thus, it is imperative to describe outcomes and covariates in growth analyses of sampled enterprises. The outcomes represent growth events *'growth in terms of revenue and capital investment values'* of sampled enterprises, while covariates are determinants of growth events.

4.1. Analysed Outcomes of Sampled Enterprises

This study aims at estimating growth performance of MSEs at a specific period of time. That is an experimental time. In which, herein it is time period from years 1982 to 2025. This time of an experiment was decided based on two reasons. First is that, oldest enterprise in this paper's sample started operating in the year 1982 and others came-up to year 2011. The second reason why experimental time was chosen to end in year 2025 is that, Tanzanian government aspires to have strong and competitive economy by such particular year.

Empirical analyses involve two growth outcome statuses. These are MSE's growth in terms of monthly revenue and capital investment in machinery values, measured in Tanzanian shillings (TZS). Where, their distribution was used to determine factors essential for growth of studied MSEs. Also, results obtained from growth analyses explore the control and policy measures. Which are important into consideration for better performance of studied entrepreneurs? That would contribute on on-going efforts to meet Tanzanian target of having strong economy by the year 2025. The vision is deemed to be achieved through transformation of low productivity agriculture economy to semi productive industrialised economy (URT, 2003).

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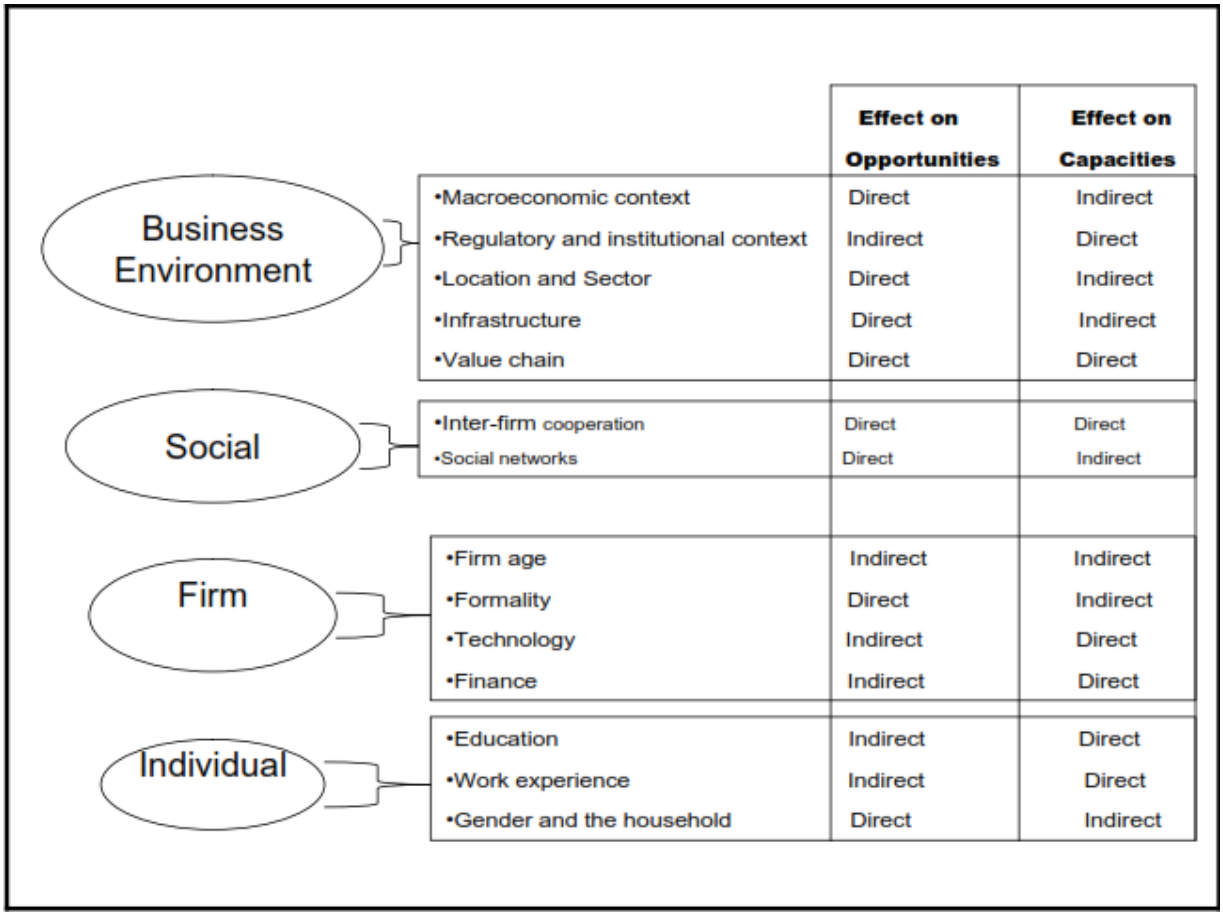
Note that, growth analyses of sampled MSEs and later on its results presented herein are for situation where and if studied enterprises continue operate unilateral. Also, most of smallholder entrepreneurs in Tanzanian do not effectively keep records of their businesses. Therefore, average figure of their quantitative data were used in assessing MSE's growth. In that regard, to present MSE's outcome the respondents were asked about their MSE's average revenue and capital investment in machinery values at each panel time of operation, i.e. start-up, middle, and recently time of their operation. Note to that, revenue values were later converted to monthly values for analyses.

4.2. Covariates for Analyses of Studied Enterprises Growth

According to USAID (2005) report, there are numerous factors that are thought to affect and shape growth performance of small scale enterprises. These are business environment, social, firm, and individual characteristics. Each of these characteristics has either direct or indirect effects on the enterprise's opportunities and capacities. Ultimately, growth of an enterprise is determined based on way it use its capacities at optimal level on available opportunities. Figure 1 below shows whether above named characteristics effect directly or indirectly opportunities and capacities of enterprise.



	Effect on Opportunities	Effect on Capacities
•Macroeconomic context	Direct	Indirect
•Regulatory and institutional context	Indirect	Direct
•Location and Sector	Direct	Indirect
•Infrastructure	Direct	Indirect
•Value chain	Direct	Direct
•Inter-firm cooperation	Direct	Direct
•Social networks	Direct	Indirect
•Firm age	Indirect	Indirect
•Formality	Direct	Indirect
•Technology	Indirect	Direct
•Finance	Indirect	Direct
•Education	Indirect	Direct
•Work experience	Indirect	Direct
•Gender and the household	Direct	Indirect

Figure 1. Key factors affecting MSE growth
Source: USAID, 2005

Specifically, it is herein presumed that, staff-size of an enterprise in terms of human labour capital is related with MSE's growth. This is because staff-size can influence productivity and marketing practises to achieve goals. The sampled enterprises differ in staff-size, a situation that can cause great variation in their performance. Thus, it is expected that, MSEs with small staff-size will be at a position to grow less, while, MSEs with a bit of big staff-size

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can work accordingly to ensure efficiency delivery of PFVP. Not only that but also, an enterprise with adequate workers can have high possibility to seek and access business supports do better. On top of that, the human capital that describes employee's business skills and experience is crucial for MSEs growth. According to Maliti and Mnenwa (2008) some literatures (i.e. Lugalla (1995), and Biggs et al. (1998)), including their research found manager-owner's education and capital asset affects enterprise's performance. The above authors revealed firm growth is greater if manager-owner completed secondary and university levels of education. It is even higher when manager-owner had some technical knowledge.

Additionally, Goncalves et al. (2011) found that, covariates age, size, and interest on dept are restrictive factors for growth of young MSEs, but do not restrict significantly growth of old ones. That, means young enterprises have a negative impact on their growth. This also mirrors manager-owner's with young age and less experienced in business restricts enterprise growth. Therefore, it is considered herein if an enterprise is managed with old manager-owner, business experienced, and enterprise has high number of employees. Such enterprise is more likely to grow fast than enterprises with less experienced manager-owner and staff-size.

Not only that, but also, the increase of employees and assets values in an enterprise is indication of progress and development. Mabert and Modi (2010) correctly argued that, manufacturing resources and assets of a firm do have significant impact on its performance. They provide indication of firm's supply chain efficiency management. Thus, if an enterprise is owned by more than one owner is more likely to be equipped with enough working capital. In such regards, it is expected herein that, the manager-owner's age, experience in business, large number of employees, and owners in an enterprise, will have positive effect on MSE's growth. Therefore, physical assets and human resource information of sampled enterprises were used to test first hypothesis of that states,

Hypothesis (H_{o1}): ''There is positive relationship between MSE's resources and their growth over time''.

The other asked questions regarding growth analyses of sampled MSEs were those related to supply chain issues. These are distances to main local government business department, other supportive bodies, inputs sources, and PFVP marketplaces where price is high; access of basic market information; annual production of PFVP; linkage of enterprise to government or NGOs institutions; and access to trade improvement services through government officers visits. Generally, trade improvement services offered by trade officers in Tanzanian local government tend to be a major source of information about transformation and businesses, development process. Also, some small sized enterprises are linked with NGOs and government agencies to improve their performance. Normally, receive different kind of support mainly training, working equipment, and little financial support. Thus, entrepreneurs improve performance of their production and marketing activities.

On top of that, MSE's distances to and from the services points are very crucial for their growth performance. Where, specifically for working enterprises are constrained with high transaction costs, especially transport expenses and traveling time. Further, enterprise's access to supportive bodies, input sources, and marketplaces influence net benefits. In which, the short distances from service points to the MSEs minimises transaction costs such as transportation, monitoring, negotiation, and time spent in travel. Also, operating at a long distance from marketplaces where price is high can reduce expected profitability of MSEs.

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These ideal made this study to understand the effect of distances on MSE's growth. Therefore, mutually with covariates of sampled MSE's regarding annual production of PFVP, access to important business services and supports explored above, this paper postulates that;

Hypothesis (H_{o2}): ''There is trade-off between organisational attributes of MSEs that relates to supply chain and their growth over time''.

Furthermore, information of number of sampled MSEs in vicinity and their profit were included in MSE's growth models. In business, actors operate against their principal competitors. If competition is high in market the enterprise's profits are minimised. In this regard, it is expected that, more number of enterprises producing identical and more or less same identical products are in a village that affects profits; less will be their growth. Paulo (2010) found that, presence of many competitors with identical products, change in products demand, and linkages constrains growth performance of enterprises Thus, this paper further test influence of sampled MSE's profit as an outcome of competition on their growth. Therefore it is hypothesized that,

Hypothesis (H_{o3}): ''There is positive relationship between the MSE's previous profit and their growth''.

In general, empirical tests of above hypotheses are herein used to understand growth and covariates that determine overall magnitude of sampled MSE's growth. Thus, the outcomes and covariates involved in growth estimation and their expected signs are summarised in Table 1 below;

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Table 1: Summary of outcome and covariates used for estimating growth of sampled FVP MSEs

Equation 3 and 4

Outcome and covariates description	Proxy	Measurement unit	Expected sign
Years to end of analysis (i.e. initial started year of oldest sampled enterprise to the calendar 2025)	AEY2025	Years	Experimental time or duration
Enterprise revenue (hgr_r)	RST	TZS/ Month	Status outcome
Enterprise capital investment in machinery (hgr_c)	CPTZ	TZS/Month	Status outcome
Age of enterprise manager-owner	RAG	Years	Young-positive Old-negative
Experience in business practices	BEX	Years	Many-positive Less-negative
MSE's capital in terms of assets	CSA	TZS	High-positive Less-negative
Distance to closer main input marketplace	DIP	Km	Shorter-positive Longer-negative
Distance to closer main PFVP marketplace	DMP	Km	Shorter-positive Longer-negative
Distance to closer main government business department	DGV	Km	Shorter-positive Longer-negative
Linkage to government or NGOs	LKS	Dummy	Yes (1)-positive No (0)-negative
Access to basic market information	INFM	Dummy	Yes (1)-positive No (0)-negative
Year round production of products *'PFVP'* by an enterprise	YRA	Dummy	Yes (1)- negative No (0)- positive
Access of business improvement from trade officers	TSA	Dummy	Yes (1)- negative No (0)- positive
Number of business owner in an enterprise	NOW	Number	High-positive Less-negative
On average number of employees in an enterprise	ANE	Number	High-positive Less-negative

Source: Author's compilation, 2013

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5. Theoretical framework of small scale enterprises growth

In economics, neoclassical growth theory of 1950's and 1960's recognises technical advance is a key driving force for economic growth. It is argued that, models of this theory are mute regarding technical advancements sources and operation strategies. This makes importance of technological advancement and incorporate institutions as well as theory of the firm into growth theory (Nelson, 1998). In which, new growth models, specifically of a firm treats firm *'an enterprise'* as living body that can grow in terms of scale and scope. This is based on an ability to transform its resources and capacities *'gene combination*' into viable output in lifecycle (Mao, 2009). However, main purpose of this paper is to study Fruits and Vegetable (FV) processing MSEs growth. Enterprise growth is argued to mean "a development process of enterprise from small to big and from weak to strong". Also transits from unbalance to balance and low to high balance conditions. It again takes balanced adjustment of various relations in interior and exterior characters of a firm (Mao, 2009).

According to Mao (2009) enterprise growth theory is based on three theories, first is scale boundary theory *'Coase's (1937)'* that reflects transaction cost to explain the reason of enterprise's generation and define scale. Second is lifecycle theory that regards an enterprise as life body. Third be gene combination theory that involving a concept of biological corporation where enterprise is viewed as organism. In lifecycle perspective, MSE's growth is divided into three stages: growth *'start up'*; regeneration and mature *'expansion'*; and aging *'diversification'* and death *'closure'* stages. Figure 2 below represents enterprise growth theory based on lifecycles theory.

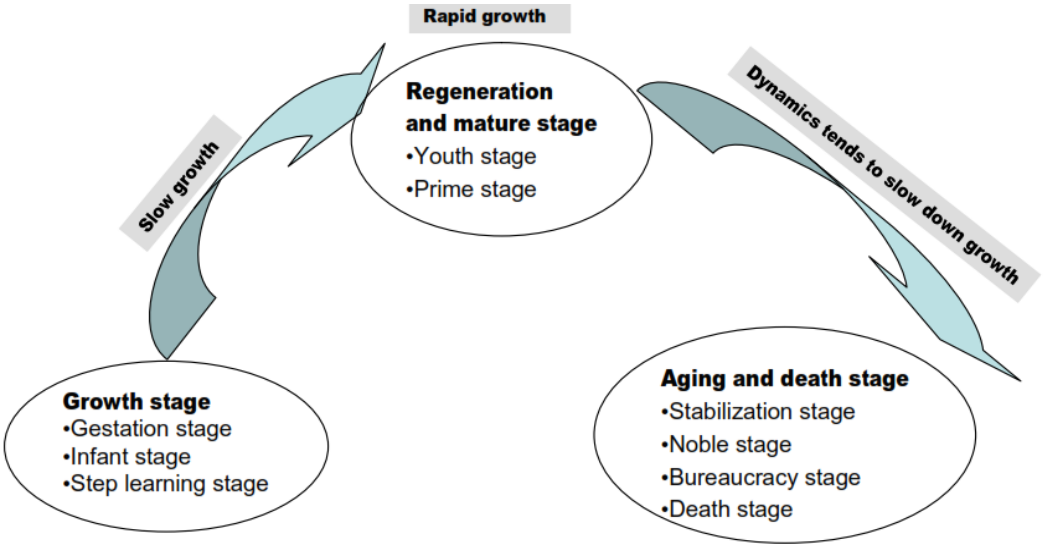

Figure 2. Enterprise growth theory based on lifecycle theory
Source: Author's work, 2013: Influenced by Degerhart (2002); Mao (2009)

The above lifecycle model describes enterprise dynamic. In which, at start-up growth stage the business is set-up, products are developed, experiences are made, and an enterprise demonstrates relatively low growth rate. After an enterprise successfully passes early start-up stage, it might enter expansion stage that characterised by rapid expansion of production, turnover and employment. Then after some time growth reaches a maturity stage, this is marked by a point where initial business ideal and concept will no longer guarantee a further dynamic expansion. Hence, enterprise's growth rate decline and die *'close'* otherwise is forced to advance towards a broader business concept of diversification stage. Within which, its

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products and services may again pass through above described growth process (Degenhardt et al., 2002).

From above understanding, the enterprise growth can be analysed from survival and development view of living body. In development sense, its growth is compared with that of living organism. In referring lifecycle theory that expresses life body would go through time course from born, growth to death. An enterprise is ought to experience periods from generation, growth, aging, and death or decline of growth rate during its development process. However, for enterprises which exist in market some expands rapidly while others stagnate.

6. Modelling and Specification of Growth Hazard Functions for Studied MSEs

Actually, empirical evidences are required to illustrate growth performance of studied MSEs. It has been noted that, Cox PH tool is herein employed to explore magnitude of covariates thought to affect growth of sampled MSEs. Whereas, characteristics of MSEs, their manager-owners, and supply chain including distances to main service points are set to be growth catalysts of MSE's growth. Thus, Cox PH functions aims to answer what are relevant enterprise's external and internal factors to consider in future for improvement of Tanzanian smallholders FVP sub-section.

Specifically, analyses herein are done conditional that sampled enterprises continue existing i market up to time, *t.* That means at end of experimental time. Therefore, it is important to incorporate survival construct in MSE's growth model. This is survival function $S(t)$, which gives probabilities that durations of sampled MSE's growth will be less than or equal to some specified time, *t*. That implying sampled enterprises has to survive until time, *t*. Also, studied growth hazard for all sampled MSEs have chances of occurring within time, *t,* which is experiment time duration.

Note that, MSE's growth hazard functions herein are modelled condition that, none at start-up growth stage had attained the herein set hypothetical MSE's growth values. The set growth values for sampled MSEs are average monthly revenue and capital investment in machinery of TZS 357,743.00 and TZS 1,812,403.00 respectively. These are sampled enterprise's average mean values of monthly revenue and capital investment in machinery. In that regard, two equations are herein specified for MSE's growth analysis. One equation '*3 below'* represents Cox PH function that estimates MSE's growth in terms of monthly revenue, on average. The other equation '*4 below'* is for assessing MSE's growth in terms of capital investment in machinery value on average. Note that, both equations equation '*3 and 4 below'* estimates occurrence of such growth events over time.

Generally, there are two possible methods of incorporating covariates in the hazard regression models, one is Cox PH and accelerated lifetime being the other (Hensher and Mannering, 1994). The Cox PH models applied herein seems to be appropriate methods of handling collected heterogeneous data with high variation and complex business reality this paper intends to realise. Other advantage of using this model is, it allows making assumptions according to study interests. For instance, in modelling occurrence of MSE's growth events herein are done by making modification in Cox PH models to allow for age varying effects of an initial, middle, and recently measure of enterprise's efficiency in its operation.

Therefore, in modelling growth of MSEs, it is assumed that enterprise, *i*, in sampled MSEs, *j*, can increase its monthly revenue and capital investment in machinery over time. The MSE's

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growth hazards up to time t, $hgr_{ij}(t)$, are coded as RST and CPTZ to represent increase value of monthly revenue and capital investment in machinery respectively. Note that, data for these growth outcomes were originally measured in TZS. Then later, were categorised to take value of 1 when MSE's attained set growth value and 0 if otherwise. They define MSE's growth probability statuses that could be derived in time, t, by enterprises. An argument of, $hgr_{ij}(t)$, is assumed to be vector of the covariates representing sampled MSEs, their manager-owners, and geographical proximity characteristics. Where, in considering aspect of MSE's heterogeneity effect this can be specified as,

$$hgr_{ij}(t) = h_{oc}(t)\exp(\beta x_{ijt}) \quad (1)$$

Where, growth hazard, $hgr_{ij}(t)$, is a result from multiplicative effect of incorporated covariate, x, in function which affects MSE's growth over time, t, and, h_{oc} is a shared classical baseline hazard that accounts for MSE's heterogeneity. That means in the equations 1 and 2 below, h_{oc} is a function of, t, and, $\exp(\beta x)$, is function of, x. Indeed, outcomes determinants integrated in Cox PH functions below proportionally gives outcomes status from effect of combination of baseline growth hazard of MSEs and selected scaled covariates at different point of times in their operations. Note that, this paper's growth empirical models have been estimated using the hazard functions in SPSS package under extended Cox regression option that includes time covariate, $T\_$.

In addition to that, as far as Cox PH is concern, estimations of MSE's growth hazards are done by undertaking estimation of classical baseline hazard semi-parametrically. Where, two outcomes in growth models are natural logarithm of time from initial time an enterprise started operating to when each enterprise first attain growth values. Thus, mathematical presentation of employed Cox PH growth function for sampled MSEs includes covariates from identified PMS. It takes form as presented in question 2 below.

$$hgr_{ij}(t/x(t)) \equiv [h_{oc}(t,\beta)]e^{RAG+BEX+CSA+NOW+TSA+YRA+DMP+DIP+LKS+INFM+ANE+PRF} \quad (2)$$

An assumption is that, the covariates in above Cox PH growth function are weakly exogenous. Further, there are some covariates (i.e. BEX, NOW, DIP, ANE, and LKS) do appears in each of Cox PH growth models below presented by equations *'3 and 4'*. These are of more interest to look at in final results of this paper. On top of that, covariates that have been included in MSE's growth assessment were essential to meet proportional hazards assumption of Cox regression. If introducing coefficients, β's, $h_{oc}(t)$, and covariates, $x's$ in question 2 above yields structural questions 3 to 4 shown below. These are Cox PH functions used to analyses growth performance of sampled MSEs.

$$\text{RST} = h_{oc}(t)\ exp\ (\beta_1\text{BEX}_t + \beta_2\text{PRF}_t + \beta_3\text{DIP}_t + \beta_4\text{DMP}_t + \beta_5\text{YRA}_t + \beta_6\text{CSA}_t + \beta_7\text{ANE}_t + \beta_8\text{NOW}_t + \beta_9\text{TSA}_t + \beta_{10}\text{LKS}_t) \quad (3)$$

$$\text{CPTZ} = h_{oc}(t)\ exp\ (\beta_1\text{RAG}_t + \beta_2\text{BEX}_t + \beta_3\text{DMP}_t + \beta_4\text{DIP}_t + \beta_5\text{NOW}_t + \beta_6\text{INFM}_t + \beta_7\text{ANE}_t + \beta_8\text{LKS}) \quad (4)$$

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Note: The proxies of covariates used in above functions are described in Table 1 above under the context of description of data collected for this paper.

7. Empirical results and discussions

This sub-section provides empirical results of sampled enterprise's growth in terms of average monthly revenue and capital investment in machinery values. Therefore, two growth outcome statuses and several covariates were estimated using the Cox PH functions to analyse sampled enterprises. Basically, the smoothed hazard functions are used to show sampled MSE's growth distribution. While, the survival curves are utilised to predict time transpires for occurrence of set growth events. After, growth findings help to forecast how long *'duration'* sampled enterprises will take to achieve Tanzanian medium and LEs revenue growth levels. Also, standard capital investment in machinery growth values for LEs as per European commission (EC). This means the forecasts of sampled enterprises growth are based on graph estimations of their growth performance under existed Tanzanian business environment.

The estimation of growth events for sampled MSEs was done at time interval (0, 43 years). This interval constitutes MSE's earliest observed entry time and last growth time for experiment. Furthermore, total number of observation was 140 and analysis time at risk from time, *t*, and equals 0 is 2686 from risk time equals 0. This means time duration which a subject *'enterprise'* is at risk of having set growth events as defined by analyses. Moreover, in MSE's growth analyses an opted confidence interval for exp(β) was 95% around the survival function with iterations of 20.

Note that, as Cox PH is used for analyses, then proportional hazards assumption of Cox PH model has to be met. Which means baseline hazard depends upon time and effect of covariate is the same for all time points. Thus, if β and *z*-values are negative then hazards have negative duration dependence. Implies that, the longer enterprise delay to attain growth events, more likely events will occur earlier. Consequently, to ensure preciseness of estimated parameters, this paper tested proportional hazards assumption with respect to covariates used in Cox PH model. That was done by defining time-dependent covariate *'T_ COV_'* as a function of time variable T_ and other covariates included in the model. Afterwards, significance of time-dependent covariates coefficients was tested to tell whether proportional hazards assumption is reasonable in respect to implemented growth models. In which, covariates which had positive and negative duration dependence but fit the models, were incorporated in analyses as time-dependent covariates to account for dependence. For this reason, it is important to understand that, in discussion of the results a negative coefficient for covariates implies negative effects on growth event occurrence.

Further, the likelihood ratio, Wald, and score X^2 tests statistics at bottom of analysed growth estimations is asymbiotically standard normal equivalent test of Omnibus null hypothesis that all of $\beta's$ are zero. That also represents Cox regression model testing of hazards proportionality assumption (Table 2). Therefore, these preceding test statistics values are essential for interpretations results. Also note that, Table 2 below displays coefficients values associated to intensity of sampled MSEs growth and covariate for each coefficient. After reports values of exponential coefficients that offer multiplicative effect on baseline hazards of studied growth events, *z*-score which are ratio of each regression coefficient to its standard error, P>|z|, and S.E values which represents values of covariate's probabilities and standard errors respectively.

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- *Cox PH results and factors that influence growth of sampled MSEs*

In growth assessments the numbers of events occurrence at initial records were 30 and 20 for MSE's monthly revenue and capital investment in machinery respectively. The results in Table 3 below indicate tests statistics are in close agreement. This suggests fittest of sampled MSE's growth models and proportionality tests of Cox PH growth functions fit to the data. In that instance, Omnibus null hypothesis stating that all of $\beta's$ are zero is soundly rejected.

The Cox PH results in Table 2 below is interpreted that, the business improvement services offered by government officials to enterprises; annual production of PFVP; and distance to main marketplaces characteristics are highly statistically significant affecting their monthly revenue. Also, the number of owner(s) in enterprise; manager-owner's age and business experience are highly statistically significant manipulating sampled MSE's capital investment in machinery. While, MSE's operational capital; distance to main inputs sources; manager-owner's experience in business; link to supportive institutions on business matters; number of owners in enterprise; and prior profit are marginally statistically significant influencing sampled MSEs revenue.

On top of that, Table 2 below shows MSE's staff-size; linkage to supportive bodies; access to market information; and distance to main input sources characteristics are marginally statistically significant affecting sampled enterprises capital investment in machinery value. Also, duration dependence tests (i.e. T_COV_) in growth models are marginally statistically significant. Thus, before interpreting covariates associated with sampled MSEs growth. This papers starts with highlights of tested hypotheses. The first hypothesis (H_o1) states that,

The results in Table 2 above displays that, sampled MSE's operational capital *'CSA'*; human capital in terms of owner's number in enterprise *'NOW'*, and manager-owner's experience in business activities *'BEX'* influences their monthly revenue. Means, when holding other covariates in Cox PH model constant, an addition of one person as owner and one TZS as operational capital in an enterprise increases the hazard of monthly revenue growth event. That is by the factors Exp (-0.974) and Exp (9.95E-1) on average, means by 73.0% and 49.5% respectively. Note that, negative sign for number of owner in an enterprise means this covariate influences monthly revenue to occur earlier. While, for capital investment in machinery growth assessment, an addition of one owner in an enterprise increases capital in machinery growth hazard by a factor Exp (-1.609) on average, this by 35.7% respectively. Note again that, the number of owner(s) in enterprise influences attainment of capital investment growth value earlier.

Further, growth analysis regarding capital investment results shows if want to know effect of let say 2 unit change in manager-owners age *'RAG'*, the odd ration Exp [(0.477 (2)] = Exp (2.79) = 2.6. This means that, effect of 2 unit increase in age of manager-owner is to decrease hazard *'duration'* of attaining set capital investment value by 97.4%. That means favour set capital investment growth event to occur but not earlier by 2.6%. The above results are perhaps due to reasons that, multi-owned MSEs are subjected to consist of machinery of high value after donation of more than one entrepreneur than MSEs owned by a single person. This also may enable such enterprises to increase production, sales volume, and employ more labour force. Thus, perform better compared to single owned enterprise.

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Hypothesis (H_{o1}): 'There is positive relationship between MSE's resources and their growth over time'

Table 2. Cox PH coefficient estimates for sampled MSE's set growth values (n=140)

Covariate (_t)	**Coef. (β)**	**Exp(β)**	**z**	**P>|z|**	**S.E**
MSE's GROWTH IN TERM OF MONTHLY REVENUE ANALYSIS					
Manager-owner's experience (BEX)	-0.053	0.948	-2.208	0.025**	0.024
Number of owners in an enterprise (NOW)	-0.974	0.378	-1.730	0.084**	0.563
Time-dependent covariate (T_COV_)	3.12E-1	1.000	1.880	0.061**	1.66E-1
MSE's operational capital (CSA)	9.95E-1	1.000	2.099	0.036**	4.74E-1
MSE's annual productivity of PFVP (YRA)	-2.470	0.85	-3.005	0.001***	0.822
MSE's distance to main input source (DIP)	-0.073	0.929	-2.212	0.027**	0.033
MSE's distance to PFVP marketplace (DMP)	0.021	1.021	3.500	0.000***	0.006
MSE's linkage to supportive bodies (LKS)	1.453	4.277	1.659	0.097**	0.876
MSE's number of employees (ANE)	0.095	1.100	0.749	0.454	0.127
MSE's access to government services (TSA)	1.659	5.253	3.414	0.001***	0.486
MSE's profit (PRF)	-2.55E-1	1.000	-1.781	0.074**	1.43E-1
OMNIBUS TESTS OF MODEL COEFFICIENTS	39.595				
Likelihood ratio test	39.595			(11/0.000***)	
Wald Chi^2 goodness-of-fit test (df/p-value)					
Score Chi^2 test (PH assumption) (df/p-value)	43.236			(11/0.000***)	
Proportional revenue growth hazard rate (hgr_r) for sampled MSEs			0.25		
MSE's GROWTH IN TERM OF CAPITAL INVESTMENT IN MACHINERY ANALYSIS					
Manager-owner's age (RAG)	0.477	1.611	4.095	0.000***	0.116
Manager-owner's experience (BEX)	-0.430	-0.651	-3.687	0.000***	0.117
Number of owners in an enterprise (NOW)	-1.609	-0.200	-2.714	0.007***	0.593
Time-dependent covariate (T_COV_)	0.001	1.001	2.344	0.019**	0.000
MSE's access to market information (INFM)	2.150	8.581	1.769	0.077**	1.215
MSE's number of employees (ANE)	0.315	1.370	2.130	0.033**	0.148
MSE's linkage to supportive bodies (LKS)	2.107	8.225	1.650	0.099**	1.277
MSE's distance to main input source (DIP)	0.005	1.005	2.251	0.024**	0.002
MSE's distance to PFVP marketplace (DMP)	-0.040	-0.961	-1.015	0.345	0.039
OMNIBUS TESTS OF MODEL COEFFICIENTS	31.826				
Likelihood ratio test	31.826			(9/0.000***)	
Wald Chi^2 goodness-of-fit test (df/p-value)					
Score Chi^2 test (PH assumption) (df/p-value)	27.621			(9/0.001***)	
Proportional capital in machinery growth hazard rate (hgr_c) for sampled MSEs			0.16		

Note: *** and **: significant at 1% and 5% level respectively.
Figures in brackets at the bottom (i.e. df/p) indicate degree of freedom and probability values.
Source: This paper's field data, 2011

In addition to that, aged entrepreneurs in the sampled MSEs had much time to invest. Thus, their enterprises are equipped with higher valued capital investments in machinery than young ones. Also, in African countries, particularly Tanzania the old entrepreneurs have less social luxurious leisure and even family responsibilities than young ones, in such invest into businesses. Or when an entrepreneur is getting older, he or she increases working morality by struggling harder for an enterprise success. Not only that but also, this papers seeks to test whether the sampled MSE's growth relates to human resource in terms of number of employees *'ANE'*. The results in Table 2 above indicate that, number of employees in an enterprise influences growth of sampled MSEs significantly. Where, when hold other covariates in capital growth Cox PH function, an addition of labour unit *'employee'* (i.e. person) stimulates the capital growth hazard in machinery by a factor Exp (0.315) on average, that is by 65.0%. This is possibly due to the fact that, enough staff-size in an enterprise make

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it possible to penetrate market, as many staff can specialise, divide, and pursue sundry tasks *'production, management, and supply'* to reach customers.

On the other hand, it is observed in the Table 2 of results above that, the manager-owner's experience in business activities *'BEX'* influences occurrence of set monthly revenue and capital in machinery growth event earlier. This is by the factors Exp (-0.053) and Exp (-0.430) on average. That means if want to know effect of let say 2 unit change in BEX, the odd rations Exp [(-0.053(2)] = 0.90 and Exp [(-0.430(2)] = 0.42. This means, effect of 2 unit increase in experience of manager-owner is to decrease hazard *'duration'* of attaining set monthly revenue and capital in machinery growth values by 10.0% and 58.0% respectively. Means, the 2 unit increase favour growth event to occur earlier by 90.0% and 42.0% respectively. This might be due to reason that, an experienced manager-owner can easily come across problems and improve performance of an enterprise through learning effect. As such, targets for sensible revenue and then invest in machinery. Because, he or she understands that, high level of revenue and capital in machinery are essential for enterprise's growth. This goes together with the fact that, an experienced manager-owner in business can easily adopt technologies and deal with the regular challenges and changes that occurs in market, thus invest more.

These results above supports first hypothesis *(H_{o2})* tested in this paper. In which, based on the MSE's growth analyses by Cox PH function it is found that, there is significant relationship between sampled MSE's CSA, RAG, BEX, NOW, and ANE characteristic and their growth performance. Therefore, this paper accepts its first hypothesis, H_{o2}, which proposes that,

''There is positive relationship between MSE's resources and their growth over time''

Not only that but also, the Table 2 above indicates that, covariates regarding annual availability of the PFVP *'YRA'*; MSE's access of business improvement services from government *'TSA'*; access to basic market information *'INFM'*; linkage to supportive institutions *'LKS'*; distances to main input sources *'DIP'*; and to marketplace of PFVP *'DMP'*; are relevant for growth of sampled MSEs. These results means, enterprises that produce PFVP annually; frequently access the business improvement services; linked to supportive bodied for business matters are Exp (-2.470), Exp (1.659), and Exp (1.453) ≈ 0.1, 4, and 5 times more likely to attain the set monthly revenue growth value than those MSEs which do not respectively. That is if the other covariates in Cox PH model are held constant. Also, if hold the other covariates in model constant, MSE's that access basic market information and linked to supportive bodies for the business matters are Exp (2.150) and Exp (2.107), ≈ 8 and 8 times more likely to attain capital investment in machinery growth value than those MSEs which do not respectively.

Note that, the sign of coefficient for annual production of PFVP covariate is negative. This means annual production of PFVP favours set monthly revenue event to occur earlier. Generally, results of controlled variable above can be interpreted as, risk or hazard of attaining set growth values is higher for MSEs that produce PFVP annually; linked to supportive bodies; access business improvement services and basic market information. This is perhaps due to benefits such as, training, advice, technical, and managerial assistances, and access of basic market information. The MSE's linkages to supportive bodies have advantages. For the sampled FVP enterprises mostly are offered various advices, financial, training, and sometimes working equipment.

As mentioned earlier, other covariates incorporated in sampled MSEs growth models that appeared to be statistically significant in affecting their growth are distance to input sources *'DIP'* and marketplaces of high price for PFVP *'DMP'*. The results in Table 2 above

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demonstrates, when other covariates in the monthly revenue Cox PH function are held constant, reduction of one Km from processing unit of an enterprise to main input sources. And an addition one Km to main marketplace of PFVP where price is high increases occurrence of revenue growth event by the factors of Exp (-0.073) and Exp (0.021) on average. That means by 10.6% and 16.7% respectively. While, one addition Km of distance to input sources for sampled MSEs increases occurrence of set capital in machinery growth event by a factor of Exp (0.005) on average, means by 12.6% respectively. This is when other covariates in the Cox PH model for capital analysis are held constant.

These above results might be due to reasons that, the far distances to input sources, where mostly enterprises fetch their inputs especially packaging materials, raw FV, and working equipment reduces their revenue. But, on the other side entrepreneurs invests higher in machinery knowing that cannot access inputs especially processing equipment. Also, at far distance to marketplaces of PFVP where price is high affects victimised enterprises in supply of PFVP. Because, they incur high costs in terms of time, transportation and energy *'transaction costs'* as compared to the MSEs that are situated at shorter distances. But, those enterprises selling their PFVP at far distance to marketplaces where price is higher also obtain high revenue. In turn, their average capital investment in machinery and revenue are indirectly affected. Therefore, the second hypothesis *(H_{o2}),* of this paper is accepted. This hypothesis is about testing if,

Hypothesis (H_{o2}): 'There is trade-off between organisational attributes of MSEs that relates to supply chain and their growth over time'

Finally, the other tested hypothesis is regarding previous received profits by sampled enterprises and their growth performance. This is the third hypothesis that states,

Hypothesis (H_{o3}): 'There is positive relationship between the MSE's previous profit and their growth'

The results in Table 2 above give evidences that, previous profit of sampled MSEs is highly statistically significant at 95% confidence interval influencing their monthly revenue growth hazard. Where, when holding other covariates in Cox PH function constant, an addition of one TZS as profit increases hazard of attaining set monthly revenue growth value by a factor of Exp (-2.55E-1) on average, this is by 78.1%. The profit covariate also influence set monthly revenue to occur earlier as an enterprise stays longer without attaining set monthly revenue growth value. Of-course possibly, this happens due to the contribution of profit on business capital and supply process of PFVP. In hazard sense it is argued that, high profit for the MSEs in study locations enable them growth faster in terms of revenue. Therefore, last hypothesis *(H_{o3})* is accepted and concludes that there is positive relationship between sampled MSE's previous profit and their revenue growth.

Furthermore, the Table 2 above shows that, statistical tests are highly statistically significant. This implies that, the Cox regression models for analysing sampled MSEs met the proportional hazards assumption. Therefore, it is concluded results therein shows that, the sampled MSE's on average hazard rates *'growth rate'* in terms of for monthly revenue and capital investment in machinery values, within assigned range of experimental time are 0.25 and 0.16 respectively. That is conditional to covariates incorporates in the models and experimental time. The growth hazards have positive duration dependence. This means the longer an enterprise stay without attain the set growth values, the more likely set growth events will occur soon. Generally, above growth hazards can also be interpreted as, there is

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probability of 26% and 15% that all the sampled enterprises will attain set monthly revenue and capital investment in machinery growth values at interval, $t, t + \Delta t$ *'from year 1982 up to 2025'* respectively. That is regardless of how long sampled MSEs have survived.

- *Forecasted Time for Sampled MSE's Growth at Standard Levels*

To this end of the Figures 4a,b and 4c,d below shows survival and smoothed growth hazards for the sampled enterprises. That means growth in terms of monthly revenue and capital investment in machinery values within experimental time. The generated graphs by growth Cox PH functions are basically used for prediction of time transpire for all sampled MSEs to attain set growth values. That means, interpretations of hazard and survival curves estimates probabilities and time transpires set growth events to occur. Not only that but also, the estimations are made based on average growth rates of sampled MSEs to forecast time required for attainment of standard European Commission (EC) revenue and Tanzanian capital investment in machinery values of LEs. This is only if the sampled MSEs continue operating unilaterally in order to be recognised as medium and larger scale enterprises. The survival curves shows growth events for the whole sample are terminated at a specific point in or within experimental time. In which, growth process started from 1 and monotonically decline to zero. At zero point indicates probability that, all the sampled MSEs must eventually grow to set growth levels.

On the other hand, the smoothed growth curves for sampled MSEs are monotonically increasing from 0 towards 1 and reach to some point it starts declining downwards. Again continue to increase and decline in such behaviour. Note that, the generated curves appears in the Figures 4a,b and 4c,d below are based on operations of the sampled MSEs from stage-up growth stage to current stage *'the calendar year 2011 where information for this paper were collected'*. Therefore, starting with the Figure 4a, it demonstrates that, the survival curve has ended to zero (0) at point year 43 of experimental time *'2025'*. This implies a point of time where the last enterprise that had not attained set revenue growth value would probably attain it at such particular year. This can also be interpreted that, those enterprises (110) which did not attain the set growth level of monthly revenue requires probably 14 years more from year 2011 to be at a position of receiving TZS 357,743.00 per month, on average. This is conditional on covariates included in the revenue growth function and same business environment prevailed up to time when their data for this paper were collected.

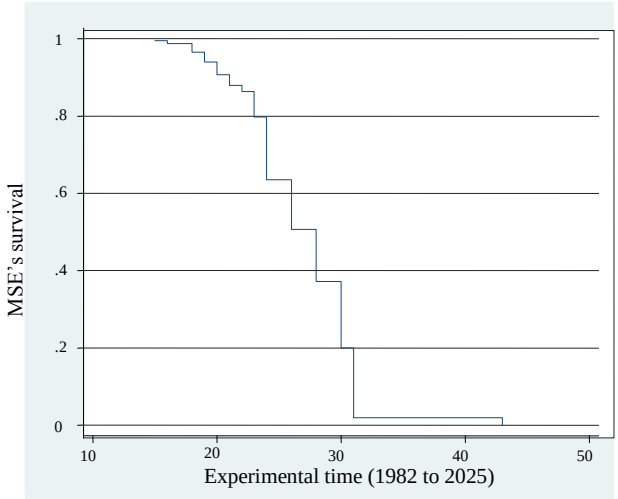

Figure 4a. Survival function curve

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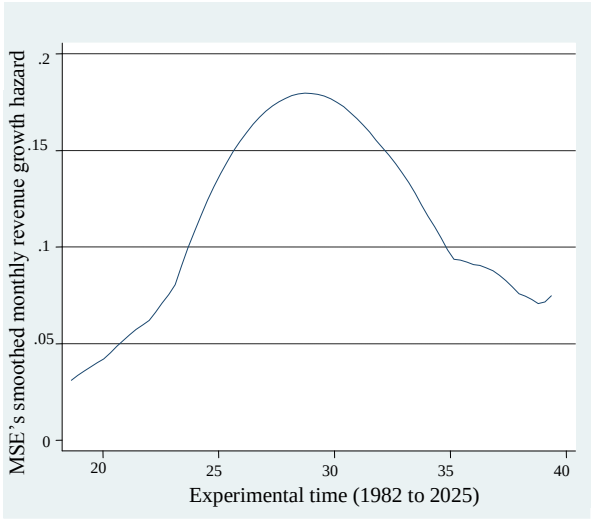

Figure 4b. Monthly revenue growth function curve

Figure 4a,b. MSE's Survival and monthly revenue curves at mean of covariates (n=140)
Source: This research's field data, 2011

In addition, the MSE's growth was analysed using another yardstick to define micro, small, medium and larger scale enterprises (MSMEs). This is capital investment in terms of machinery. In determining how long will take for sampled MSEs to attain set capital investment in machinery growth value. The following survival and smoothed hazard curves presented in Figure 4c below is used for time prediction.

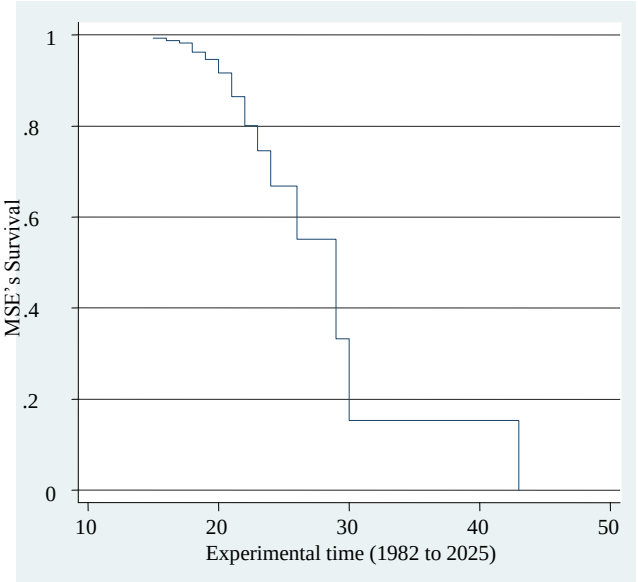

Figure 4c: Survival function curve

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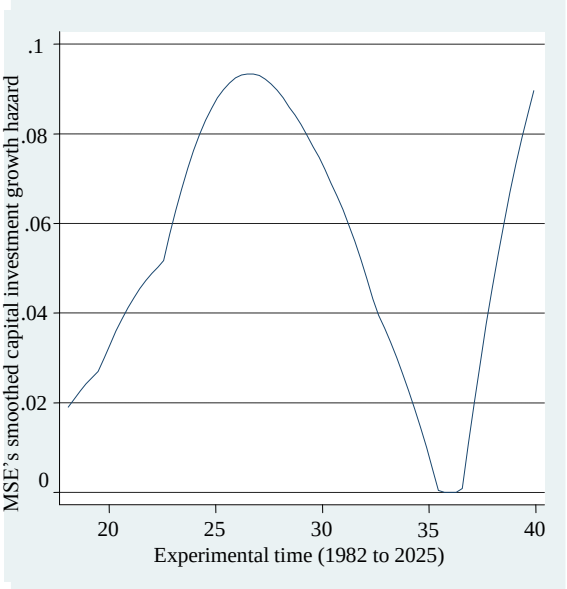

Figure 4d: Capital investment growth function curve
Figure 4c,d: MSE's Survival and capital investment curves at mean of covariates (n=140)
Source: This research's field data, 2011

The curves in Figure 4c above implies that, probability (15%) of all sampled FVP enterprises to comprise of capital in machinery of average value TZS 1,812,403.00 is at 43rd year in experimental time. That means, is 43 years from initial calendar year of experiment which was a year 1982. As noted earlier in revenue growth discussion, the results predicted herein represent situations that would probably happen after operational calendar year 2011. Thus, survival curve in the Figure 4c above indicates attainment of capital investment value equals or more than 1,812,403 for all sampled MSEs is at calendar year 2025. That means sampled enterprises (120) which had capital in terms of machinery of value less than TZS 1,812,403.00 also requires 14 years after the calendar year 2011 to attain set capital in machinery growth value. Remember, that is conditional to same business environment prevailed up to data correction time and covariates incorporated in the Cox PH capital investment growth analysis function.

Generally, the slope of hazard functions in Figure 4b,d has important implication on probability of sampled enterprises growth ending. Which may be depending on length for set growth events to occur? The first derivative of, h*(t)*, with respect to time ,*t*, provides hazard function slope. Slope gives information about duration dependence. The, monthly revenue and capita investment in machinery growth hazard curves are non-monotonic and have dh(t)/dt >0 and dh(t)/dt <0 depending on duration. It means probabilities of sampled MSEs to attain set monthly revenue and capita investment in machinery growth values increases and decreases in duration. That implies $dh_{gr}(t)/dt > 0$ and $dh_{gc}(t)/dt < 0$ at time point until all sampled MSEs attained set revenue and capital investment growth values respectively. It indicates that, the sampled MSE's growth hazards *'monthly revenue and capital investment increase'* have positive and negative duration dependence for all time points up to year attain set growth events.

However, it is true that the set monthly revenue and capital investment in machinery growth values are not universal and Tanzanian growth values respectively. Rather are values that were set to analyse growth of sampled MSEs. Authenticity, the EC minimum monthly revenue for enterprise to be counted as medium and larger scale enterprises are equal or above TZS 1.36 billion (bil) and TZS 7.02 bil respectively (USAID, 2007). Under currency

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exchange rate of year 2007: $ 1 is equivalent to € 0.7322; and TZS 1,256.74, on average (Gocurrency.com, 2001-2013). On the other hand, Tanzanian SME's policy defined medium and large scale enterprises as those enterprises having maximum capital investment in machinery of TZS 200 mil and 800 TZS and above.

Therefore, the time required by all sampled enterprises to attain EC standard monthly revenue and Tanzanian capital investment in machinery values of LEs are estimated in this paper by making simple logics presented as,

'If the probability (25%) of all sampled MSEs to attain set monthly revenue average of equal or more TZS 357,743.00 and average capital investment of value TZS 1.8 mil or more (16%) is in the year 2025. That means 14 years after year 2011. Then, it is herein estimated that for all sampled enterprises, with more or less same growth rate requires centuries to grow and attain categories of EC and Tanzanian medium as well as LEs growth levels. That mean on average monthly revenue equals or above TZS 1.36 bil and TZS 7.02 bil and capital investment in machinery value of TZS 200 mil and TZS 800 mil respectively. That is if there are no significant changes made in studied FVP MSE's sub-section'.

8. Conclusion and recommendations

Above results reflects status of studied part of Tanzanian private sector, particularly micro and small scale FVP sub-section. To which majority of people and Tanzanian government is depending on for livelihood and economic growth respectively. The predicted time is long period duration. The sampled MSE's growth provides important insight in duration process being modelled. Findings show that, growth performance of studied MSEs is not promising, means their unilateral mode of operation influence poorly their growth performance. The situation might hinder earlier realisation of Tanzanian government hope of transforming less agricultural productive economy to semi-industrial productive economy. That at end constitutes economic development vision of having strong economy to be less likely realised by year 2025. That is only if Tanzania's economy relies on agriculture sector, particularly MSME's sub-sector.

The results also suggest importance of studied enterprises to merge. Where, it has been observed in Table 4 above that, the multi-owned enterprises, MSE's with large capital, and staff-size performs grows reasonably better. Therefore Tanzanian SME's policy should facilitate studied entrepreneurs to re-organise their activities and form cooperative as their appropriate operational mode. That is essential to raise capital share in market which is crucial for benefits, competitiveness, and economic growth.

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References

Calice, P., Chando,V.M., Sekioua, S. 2012. Bank Financing to Small and Medium Enterprises in East Africa: Findings of A Survey in Kenya, Tanzania, Uganda and Zambia, *Working Paper Series* 146, African Development Bank, Tunis, Tunisia.

Central Intelligence Agency (CIA), 2012. World Factbook. Retrieved from https://www.cia.gov/library/publications/rss-updates/september-27-2012.html. Retrieved on 27.08.2013.

Degenhardt, S. S., Stamm, A., Zehdnicker, M. 2002. The Growth Gap: A Small Enterprise Phenomenon, Synthesis Document. *The Donor Committee for Enterprise Development German,* 1-17.

Eskola, E. 2005. Agricultural Marketing and Supply Chain Management in Tanzania: ESRF Study on Globalisation and East Africa Economies. *A Case Study Working Paper Series* 16.

Gocurrency.com, 2001-2013. Retrieved from, http://www.gocurrency.com.htm. Retrieved on 09.02.2013.

Goncalves M., Nunes P. M., Serrasqueiro, Z. 2011. The Influence of Age on SMEs' Growth Determinants: Empirical Evidence. *First Journal of Small Business Economics*, 1-24.

Hensher, D.A., Mannering, F.L. 1994. Hazard-Based Duration Models and Their Application to Transport Analysis. *Transport Reviews* 14:1, 63-82.

International Labour Organisation (ILO). 2003. *Tanzanian Women Entrepreneurs: Going for Growth*. Geneva, ISBN 92-2-113731-7.

Liedholm, C. 2001. Small Firm Dynamics: Evidence from Africa and Latin America. *World Bank Institute Working Papers Stock* 37189, 1-24.

Mabert, A.V., Modi, B.S. 2010. Exploring the Relationship Between Efficient Supply Chain Management and Firm Innovation: An Archival Search and Analysis. *Journal of Supply Chain Management* 46:4, 81-94.

Maliti, E., Mnenwa, R. 2008. The Role of Small Business in Poverty Reduction: The Case of Dar es Salaam. *Research Report* 08.2.

Mao, H. 2009. Review on Enterprise Growth Theories. *International Journal of Business and Management* 4:8, 20 -22.

Milanzi, M., Ngowi, P. H., Ogutu, F. 2006. SME Competitiveness facility (SCF) SME Export Market Prospects Desk Study Volume II. *Study report*.

Nelson, R. R. 1998. The Agenda for Growth Theory: A Different Point of View. *Cambridge Journal of Economics* 224, 497 - 520.

Nkya, J.E. 2003. Institutional Barriers to Small-scale Business Development: A Need for Flexibility in Tanzanian Tax and Regulatory Systems. *Journal of Entrepreneurship* 12:1, 43-73.

 ISSN 1927-033X

Olomi, D. 2006. Policy Dialogue on Opportunities and Challenges for Rural smes Development in Tanzania. *Seminar Paper*.

Ruteri, J.M.; Xu, Q. 2009. Supply Chain Management and Challenges Facing the Food Industry Sector in Tanzania. *International Journal of Business and Management* 4:12, 70-80.

United Republic of Tanzania (URT). 2003. *Small and Medium Enterprise Development Policy*. Ministry of Industry and Trade, Dar es Salaam.

United Republic of Tanzania (URT). 2009. SMEs Market Access Through Private and Public Procurement and Linkages, *Policy position paper Confederation of Tanzania Industries*.

United States Agency for International Development (USAID), 2005. Understanding Micro and Small Enterprise Growth. *MicroReport* 36.

United States Agency for International Development (USAID). 2007. *Booklet of Standardized Small and Medium Enterprises Definition. Sustainable Achievement of Business Expansion and Quality (SABEQ),* Bearing point, Inc, USAID/Jordan economic opportunities Office (EO).

United States Department Of Agriculture (USDA), 2005. Electronic Report from the Economic Research Service Agriculture Information. *Bulletin* 794. Retrieved from http://web.ers.usda.gov.htm. Retrieved on 12.10.2010.

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