

SMEs' Performance in Developing Countries: Suitability of Personal Wealth Measures

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Abstract

This study tested the suitability of personal wealth in measuring SMEs' performance as compared to already known firm growth measures. Guided by the knowledge-based view, the study aimed at determining the influence of learning orientation on SMEs performance under the mediation of competitive advantage using firm growth and personal wealth measures. A structured questionnaire was used to collect data from 300 owners-managers of welding industry SMEs located in Dar es Salaam, Mbeya, and Morogoro urban centres in Tanzania. Measurement and structural models were developed by the aid of SmartPLS 3 software through application of structural equation modelling technique. Determination of indirect influence of learning orientation on SMEs' performance through competitive advantage was accomplished by bootstrapping the original sample using 5000 samples. Findings inform that competitive advantage mediates the relationship between learning orientation and SMEs' performance for both firm growth and personal wealth performance measures. This study has contributed to the understanding that learning orientation influences SMEs' performance under the mediation of competitive advantage using personal wealth as measures of SMEs' performance. The findings imply that the knowledge-based view is suitable in describing not only physical resources but also intangible resources such as learning orientation. Literature will benefit from future studies that will investigate the influence of other constructs on SMEs' performance under the mediation of competitive advantage using the same firm growth and personal wealth performance measures. Such studies will ascertain whether the findings of this study are specific to learning orientation construct or applicable to other constructs as well.

Keywords: Competitive advantage, firm growth, learning orientation, personal wealth, SMEs' performance

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1. Introduction

SMEs' performance is an independent variable commonly used in entrepreneurship and strategic management studies. Despite its frequent use as a dependent variable, scholars have not yet agreed on its generic measures (Mahmood & Hanafi 2013a; Mahmood & Hanafi 2013b). As a result, measurement of SMEs' performance is still fragmented, the situation that leads to mixed results when studying the determinants or factors that influence SMEs' performance. Mixed results create an environment that pose threats towards comprehensive knowledge accumulation and theory building. However, financial performance measures such as growth in sales, number of employees, profit, assets and equity (Shepherd & Wiklund 2009) are commonly used in literature. In addition to firm growth measures, non-financial performance measures are also used, these include but not limited to customers' satisfaction, customers' referral rate, growth in customers' base and market share (Chong 2008).

Together with the widespread use of financial and non-financial performance measures which have been developed in western countries, their effective use in developing countries such as Tanzania may be questionable. The uncertainty is triggered by differences in motives for establishing enterprises in western world and developing countries. The western world perceives an entrepreneur as an individual capable of innovatively identifying and exploiting resources and opportunities to produce value-added products or services; while, entrepreneurs in the developing countries, use their enterprises to obtain their daily bread for their lives (Eijdenberg 2016). While earnings from enterprises in western world are used to boost the firm growth, part of earnings from enterprises in developing countries is used to maintain the lives of entrepreneurs. Therefore, a need arises to use personal wealth performance measures in developing countries. However, validation of personal wealth performance measures calls for empirical evidence. Unfortunately, past studies have not provided empirical evidence on the suitability of personal wealth as performance measures hence this study.

Through application of the knowledge-based view, this study tested the suitability of personal wealth as SMEs' performance measures. The study adopted learning orientation (Calantone *et al.* 2002), competitive advantage (Ramaswami *et al.* 2006), and SMEs' performance (Shepherd & Wiklund 2009; Eijdenberg 2016) as independent, mediating, and dependent variables respectively. The study concurrently used firm growth and personal wealth performance measures to facilitate comparison of results and hence establish whether personal wealth measures produce similar or different results as compared to already known firm growth performance measures.

The main objective of this study was to determine the influence of learning orientation on SMEs' performance under the mediation of competitive advantage using firm growth and personal wealth performance measures. Specifically, this study aimed (1) to determine the influence of learning orientation on competitive advantage, (2)

to determine the influence of competitive advantage on SMEs' performance using both firm growth and personal wealth measures, (3) to determine the mediating effect of competitive advantage on the influence of learning orientation on SMEs' performance using both firm growth and personal wealth measures, and (4) to ascertain the suitability of personal wealth as performance measures.

This study adopted the quantitative research paradigm with cross-sectional design to collect data from owners-managers of welding industry SMEs located in urban centres of Dar es Salaam, Mbeya and Morogoro in Tanzania.

2. Literature review

2.1 Theoretical review

The resource-based view suggests that a firm's competitive advantage and superior performance emanate from the firm specific resources and capabilities that are costly for copying by rivals, valuable, rare, imperfectly imitable, and non-substitutable (Barney 1991). Generally, it is widely agreed that the resource-based view is one of the substantial theories of strategic management (Akio 2005; Barney *et al.* 2011; Connor 2002). However, critiques on the resource-based view have alarmed that the view has over-looked the role of entrepreneurial strategies and abilities as one of the crucial sources of competitive advantage of the firm (Akio 2005; Priem & Butler 2001) and the view does not broadly explain how strategic assets are created or acquired (Connor 2002). Therefore, in order to alleviate the identified weaknesses of the resource-based view, the knowledge-based view has been introduced as its extension (Curado 2006).

The knowledge-based view basically insists on knowledge management through creation, storage, sharing, and deployment of knowledge across firm units (Theriou *et al.* 2009). Knowledge management can be achieved through learning, a process which is seen as a key element in creating competitive advantage and promotion of firm performance (Saarenketo *et al.* 2009; Al-Duwailah & Hashem 2019; Apriliadi & Adman 2019). Therefore, knowledge as a unique strategic resource creates and promotes firm performance.

In an attempt to operationalize knowledge management, this study found that learning orientation is an appropriate construct that can describe knowledge as a unique resource that is capable of creating competitive advantage to promote firm performance. Learning orientation refers to organization-wide activity of creating and using knowledge to enhance competitive advantage; it is a firm's degree of commitment to learning, shared vision, open-mindedness, and intra-organisational knowledge sharing (Calantone *et al.* 2002). Measures for competitive advantage were adopted from Ramaswami *et al.* (2006), Mahmood & Hanafi (2013a), and Mahmood & Hanafi (2013b). Firm growth measures were adopted from Sheperd & Wiklund (2009) and personal wealth measures were adopted from Eijdenberg (2016). Figure 1 shows the conceptual framework that depicts the influence of learning orientation on SMEs' performance under the mediation of competitive advantage.

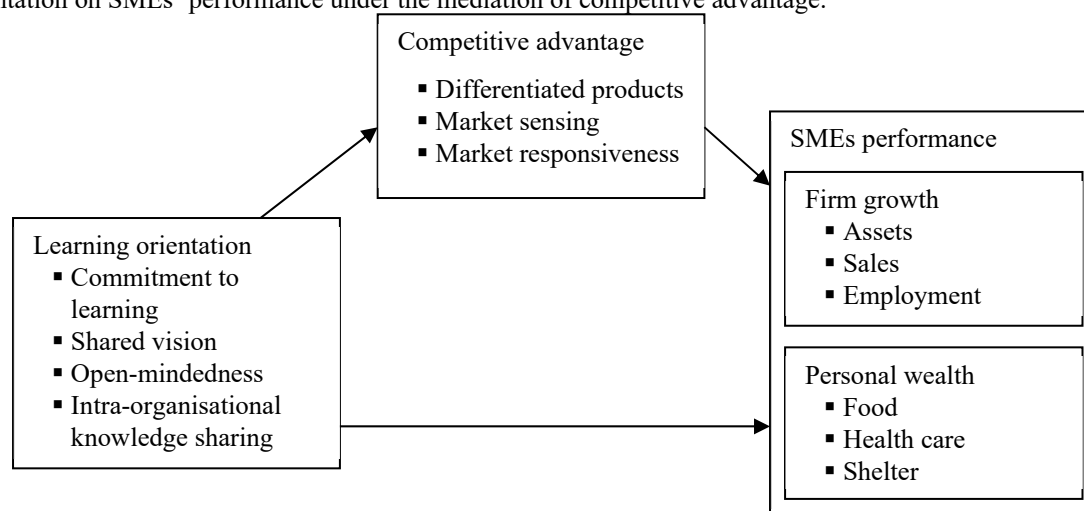


Figure 1. Conceptual framework

Source: Researchers' construct based on literature review

2.2. Empirical review

Firm resources include among others organizational processes that enable the firm to conceive a strategy that when implemented is able to improve the firm's efficiency and effectiveness (Barney, 1991). Learning orientation is a firm resource in form of processes which include creation and usage of knowledge for the sake of obtaining competitive advantage for superior performance. Learning orientation is normally measured using three dimensions which are commitment to learning, open-mindedness, and shared vision (Serna *et al.* 2018). In addition,

intra-organisational knowledge sharing is another dimension of learning orientation which is used concurrently with the common three aforementioned dimensions (Calantone *et al.* 2002).

Although past studies have attempted to investigate the influence of learning orientation on SMEs' performance, consistency of results has not been achieved due to use of heterogeneous performance measures. For example, Yeni (2015) measured performance using five items which are increase in product volume, increase in profit, new product success in market, new entry to market places, and increase in number of customers for the past three years. Recently, Petty *et al.* (2019) measured performance using three items which are sales, assets, and number of employees for the past three years. Martinez *et al.* (2020) measured performance using items such as increase in sales, level of return on investment, level of benefits, customers' satisfaction, and employees' satisfaction for the past two years. In another study, Sawaeen & Ali (2020) measured performance using financial and operational measures. These few examples demonstrate that the scale of performance is fragmented which may be a possible cause for mixed results among studies investigating the relationship between learning orientation and SMEs' performance.

Despite the use of heterogeneous performance measures, positive and significant influence of learning orientation on SMEs' performance has been found in Yeni (2015), Hussain *et al.* (2018), Petty *et al.* (2019), and Sawaeen & Ali (2020). The work of Martinez *et al.* (2020) investigated the individual influences of learning orientation dimensions on SMEs' performance, findings inform that open-mindedness and commitment to learning dimensions positively and significantly influenced SMEs' performance while shared vision dimension of learning orientation negatively and significantly influenced SMEs' performance. While most past studies reported positive and significant influence of learning orientation on SMEs' performance, other studies like Serna *et al.* (2016) and Beneke *et al.* (2016) reported insignificant influence of learning orientation on SMEs' performance.

Although the mediating effect of competitive advantage on the relationship between learning orientation and SMEs performance is not yet extensively studied (Mahmood & Hanafi 2013b), it has been shown that competitive advantage of a firm is positively and significantly influenced by learning orientation (Martinette & Obenchain-Leeson 2012). Furthermore, positive and significant influence of competitive advantage on SMEs performance has been reported (see for example Ismail *et al.* 2010; Majeed 2011; Muafi & Roostika 2014; Wijetunge 2016; Zhou *et al.* 2009).

Based on the findings of theoretical and empirical literature review, this study hypothesizes that:

- H₁: Learning orientation positively influences competitive advantage,
- H₂: Competitive advantage positively influences SMEs' performance, and
- H₃: Competitive advantage mediates the relationship between learning orientation and SMEs' performance.

3. Methodology

3.1 Research design

This study was conducted in Dar es Salaam, Mbeya and Morogoro urban centres of Tanzania. Data were collected from owners-managers of welding industry SMEs. The welding industry was selected due to its importance in joinery of metal and alloy materials (American Welding Society 2011). It produces together with other things grills for windows, doors, fence walls, and entrance gates in building construction works. Past studies on welding industry have addressed the technical and social aspects of the industry (Alkahla & Pervaiz 2017) but literature on business aspect of the industry especially on strategic and entrepreneurial perspectives is still scanty not only in Tanzania but also worldwide. The study adopted a cross-sectional design with survey method. The sample size was determined by a rule of thumb based on the requirements of structural equation modelling and factor analysis techniques. Hair *et al.* (2010) suggested that a sample size of 120 subjects is sufficient for factor loadings ± 0.5 or above. Furthermore, when structural equation modelling technique is used, each independent variable or predictor requires 15-20 observations (Hair *et al.* 2010).

This study used learning orientation and competitive advantage constructs as predictors of SMEs' performance. In addition, learning orientation construct was used as a predictor of competitive advantage construct. Learning orientation has 17 items and competitive advantage has 12 items. Thus, 17 is the highest number of items in the model. Multiplying 17 by a minimum number of observations (subjects), which is 15 yielded a minimum sample size of 255 subjects. Generally, the sample size between 100 and 400 subjects is deemed suitable for models that are developed using structural equation modelling (Hair *et al.* 2010). Thus, by using the rule of thumb, based on structural equation modelling and factor analysis requirements, a sample size of 300 subjects was considered sufficient for this study.

3.2 Measurements of variables and data collection

Measurement and structural models were developed using three constructs, these are learning orientation, competitive advantage and SMEs' performance. However, in order to enable comparison of results, SMEs' performance was measured using firm growth and personal wealth performance measures. Measurements of constructs were adopted from past studies as shown in Table 1.

A structured questionnaire was used to collect data from owners-managers of welding industry SMEs in the research area. Constructs were measured using five points Likert scale. Respondents were asked to rate their agreement or disagreement to the questions (from “strongly disagree” = 1 to “strongly agree” = 5) for learning orientation, competitive advantage, and SMES’ performance using firm growth measures for the past five years to December, 2016 as a base year. Furthermore, respondents were asked to rate the level of change of personal wealth measures for the past five years to December, 2016 using a five points scale from “a lot less” = 1 to “a lot more” = 5.

Table 1. Measurement of model variables

Construct	Dimension	Number of items	Source
Learning orientation	Commitment to learning	Four	Calantone <i>et al.</i> (2002)
	Shared vision	Four	
	Open-mindedness	Four	
	Intra-organisational knowledge sharing	Five	
Competitive advantage	Differentiated products	Three	Ramaswami <i>et al.</i> (2006)
	Market sensing	Four	
	Market responsiveness	Five	
SMEs’ performance (Growth measures)	Growth in assets	One	Shepherd & Wiklund (2009)
	Growth in sales	One	
	Growth in number of employees	One	
SMEs’ performance (Personal wealth measures)	Food purchasing capability	One	Eijdenberg (2016)
	Health care paying capability	One	
	Shelter acquisition capability	One	

Source: Researchers’ tabulation based on literature review

3.3 Data analysis

Learning orientation and competitive are second order constructs and their dimensions are first order constructs (see Table 2). Total scores for dimensions of learning orientation and competitive advantage were computed using a statistical package for social sciences (SPSS) computer software for the sake of reducing the model complexity. The computed total scores transformed the dimensions into observed or manifest variables while learning orientation and competitive advantage were transformed into first order constructs. SMEs’ performance measures for both firm growth and personal wealth are observed variables hence were not transformed. Table 2 shows the transformed variables and the associated abbreviations for total scores.

Aided by SmartPLS 3 computer software, this study developed two measurement models, one for firm growth performance measures and the other for personal wealth performance measures using confirmatory factor analysis (CFA) technique. Subsequently, two structural models, one for firm growth performance measures and the other for personal wealth performance measures were developed using structural equation modelling (SEM) technique.

Table 2. Transformed model constructs

First order construct	Observed dimension	Abbreviation
Learning orientation (LO)	Commitment to learning	Total CLE
	Shared vision	Total SVI
	Open-mindedness	Total OMI
	Intra-organisational knowledge sharing	Total IOR
Competitive advantage (CA)	Differentiated products	Total DPR
	Market sensing	Total MSE
	Market responsiveness	Total MRE

Source: Researchers’ tabulation based on literature review

In addition, sample data were bootstrapped using 5000 samples to determine the direct influence of learning orientation on competitive advantage, the direct influence of competitive advantage on SMEs’ performance, and the indirect influence of learning orientation on SMEs’ performance through competitive advantage.

4. Results

4.1 Development of measurement models

Measurement models for reflective indicators were developed using four stages, which include assessment of factor loadings, internal consistency reliability, convergent validity, and discriminant validity (Richter *et al.* 2016; Ali *et al.* 2018; Hair *et al.* 2019; Benitez *et al.* 2020). Two measurement models were developed, one for firm growth performance measures and the other for personal wealth performance measures.

4.1.1 Factor loadings

Assessment of factor loadings on each construct revealed that differentiated products (Total DPR) dimension of competitive advantage (CA) had a factor loading of 0.242 for firm growth measures and 0.301 for personal wealth measures. Since the minimum acceptable factor loading is 0.708 (Hair *et al.* 2019; Benitez *et al.* 2020), the dimension was deleted from both models. The remaining factor loadings were higher than 0.708 except for shared vision (Total SVI) dimension of learning orientation (LO) which was 0.670 for firm growth measures and 0.666 for personal wealth measures. However, these values were not far away from the threshold value of 0.708 hence their deficiencies were ignored. Therefore, in exception of Total DPR dimension, all other dimensions were considered for further analysis for both measurement models. Factor loadings are shown by single headed arrows originating from each construct to observed items (dimensions), for example, the factor loading for Total CLE dimension of learning orientation construct is 0.788 in a firm growth measurement model (see Figure 2) and 0.793 in a personal wealth measurement model (see Figure 3).

4.1.2 Internal consistency reliability

Internal consistency reliability is normally assessed using Cronbach's alpha (α), Dijkstra and Henseler's rho-A (ρ_A), and composite reliability (CR). The precision of Cronbach's alpha as a measure of internal consistency reliability is low as compared to ρ_A as the items are unweighted (Hair *et al.* 2019; Benitez *et al.* 2020). Despite its weakness, Cronbach's alpha can be used as a lower bound and composite reliability as the upper bound while ρ_A is the most likely value of internal consistency reliability (Hair *et al.* 2019; Benitez *et al.* 2020). Suitable reliability values range from 0.70 to 0.90 as too high values more than 0.95 are problematic and indicative of redundant items in the model (Hair *et al.* 2019). This study assessed internal consistency reliability using all three indicators that is Cronbach's alpha, rho-A, and composite reliability. Findings show that all values ranged between 0.617 and 0.916 (Table 3). It is interesting to note that all ρ_A values were within a range of 0.70 and 0.90 hence internal consistency reliability was achieved in both firm growth and personal wealth measurement models.

Table 3. Construct internal consistency reliability and convergent validity

Construct	Firm growth measures				Construct	Personal wealth measures			
	α	ρ_A	CR	AVE		α	ρ_A	CR	AVE
CA	0.617	0.832	0.775	0.582	CA	0.817	0.820	0.916	0.845
LO	0.816	0.847	0.878	0.646	LO	0.816	0.846	0.878	0.645
PER	0.830	0.848	0.899	0.750	PER	0.771	0.771	0.869	0.689

Source: SmartPLS 3 software output (Ringle *et al.* 2015)

4.1.3 Convergent validity

Construct convergent validity is the measure of the extent to which certain items measure the same underlying construct (Benitez *et al.* 2020). This study assessed construct convergent validity using average variance extracted (AVE) values. AVE values greater than 0.5 indicate good construct convergent validity (Hair *et al.* 2019; Benitez *et al.* 2020). Findings show that AVE values were between 0.582 and 0.845 which provide evidence that convergent validity was achieved for all constructs using both firm growth and personal wealth measures (see Table 3).

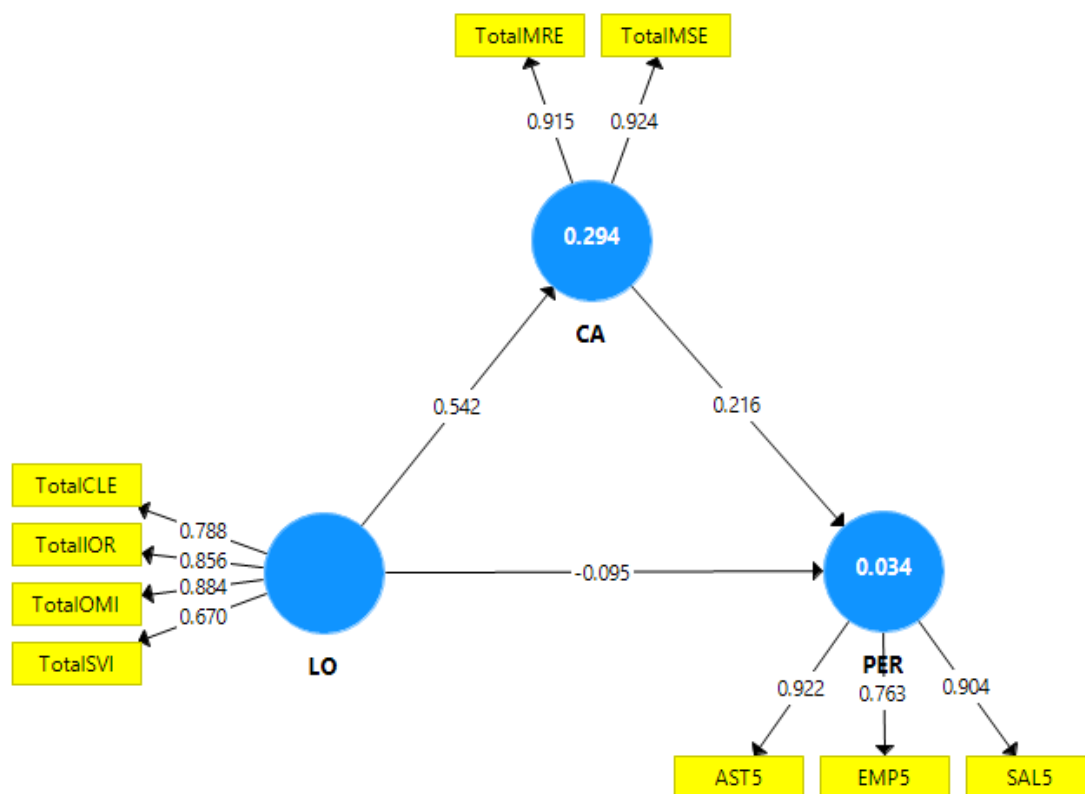


Figure 2. Measurement model for firm growth measures
 Source: SmartPLS 3 software output (Ringle *et al.* 2015)

4.1.4 Discriminant validity

Assessment of discriminant validity ascertains whether one construct is distinct from another construct or not. Traditionally, the Fornell-Lacker criterion has been in use for a long time. However, recent studies have suggested that the criterion does not perform well when the factor loadings differ slightly, for example when factor loading range between 0.65 and 0.85 (Hair *et al.* 2019). Use of heterotrait-monotrait (HTMT) ratio of the correlations has been recommended to assess construct discriminant validity in lieu of the Fornell-Lacker criterion (Richter *et al.* 2016; Ali *et al.* 2018; Hair *et al.* 2019; Benitez *et al.* 2020). The HTMT is “the mean value of then item correlations across constructs relative to the (geometric) mean of the average correlations for the items measuring the same construct” (Hair *et al.* 2019, p. 9). Discriminant validity between any two constructs is achieved when the HTMT ratio of less than 0.90 exists (Hair *et al.* 2019; Benitez *et al.* 2020). Pursuant to the recent suggestions from extant literature, this study assessed construct discriminant validity using the HTMT ratio. Findings show that all HTMT ratios for all constructs for both firm growth and personal wealth measures were less than 0.90 confirming that constructs are unique or distinct from each other (Table 4).

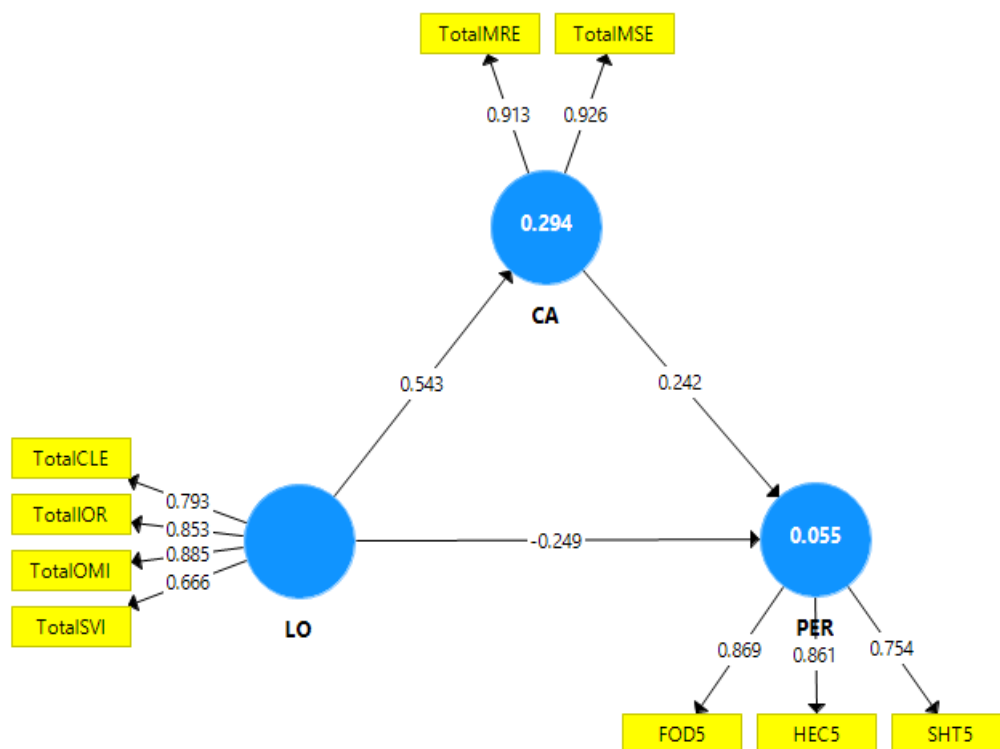


Figure 3. Measurement model for personal wealth measures
 Source: SmartPLS 3 software output (Ringle *et al.* 2015)

Table 4. Construct discriminant validity using HTMT ratio

Construct	Firm growth measures			Construct	Personal wealth measures		
	CA	LO	PER		CA	LO	PER
CA	-			CA	-		
LO	0.699	-		LO	0.649	-	
PER	0.219	0.076	-	PER	0.136	0.152	-

Source: SmartPLS 3 software output (Ringle *et al.* 2015)

4.2 Hypotheses testing

Aided by the SmartPLS 3 computer software, this study developed two structural measures, one for firm growth and the other for personal wealth performance measures. The models facilitated determination of the influence of learning orientation on competitive advantage and the influence of competitive advantage on SMEs' performance. Furthermore, the original sample was bootstrapped using 5000 samples to determine the mediating effect of competitive advantage on the relationship between learning orientation and SMEs' performance.

4.2.1 Assessment for collinearity

Prior to testing research hypotheses, structural models were assessed for collinearity (correlations among predictor variables) using variance inflation factor (VIF). Collinearity problems (multicollinearity) normally occur when VIF values are higher than 5 but the same may exist for VIF values between 3 and 5 (Hair *et al.* 2019; Benitez *et al.* 2020). Presence of multicollinearity among predictor variables may lead to insignificant path estimates and unanticipated weight signs (Benitez *et al.* 2020). Findings in the current study inform that all VIF values for all dimensions (items) for learning orientation and competitive advantage constructs were less than 3 hence no threat for presence of multicollinearity (Table 5).

Table 5. Assessment of collinearity

Construct	Dimension (item)	Abbreviation	VIF
Learning orientation	Commitment to learning	Total CLE	1.616
	Shared vision	Total SVI	1.392
	Open mindedness	Total OMI	2.307
	Intra-organizational knowledge sharing	Total IOR	2.068
Competitive advantage	Market sensing	Total MRE	1.911
	Market responsiveness	Total MSE	1.911

Source: SmartPLS 3 software output (Ringle *et al.* 2015)

4.2.2 Path analysis on structural models

The structural model for firm growth performance measures (Fig. 4) and personal wealth performance measures (Figure 5) show t-values for factor loadings and path coefficients. The factor loading or path coefficient is significant when the t-value is greater than 1.96 (the standardized t-value at 5% level of significance). Results show that all factor loadings for all constructs have t-values greater than 1.96 hence significant. Path coefficients have t-values that are significant except the path between learning orientation and SMEs' performance whose t-value is less than 1.96 for firm growth measures but the same path has t-value that is significant for personal wealth measures (see Figure 4 and Figure 5). Table 6 summarizes the hypotheses testing results.

Table 6. Hypotheses testing results for firm growth and personal wealth measures

No.	Hypothesis	Firm growth measures			
		Coefficient (β)	t-statistic	p-value	Decision
H ₁	LO→CA	0.542	12.532	0.000	Supported
H ₂	CA→PER	0.220	2.961	0.003	Supported
H ₃	LO→CA→PER	0.119	2.883	0.004	Supported
No.	Hypothesis	Personal wealth measures			
		Coefficient (β)	t-statistic	p-value	Decision
H1	LO→CA	0.543	12.539	0.000	Supported
H2	CA→PER	0.243	3.027	0.002	Supported
H3	LO→CA→PER	0.132	2.898	0.004	Supported

Source: SmartPLS 3 software output (Ringle *et al.* 2015)

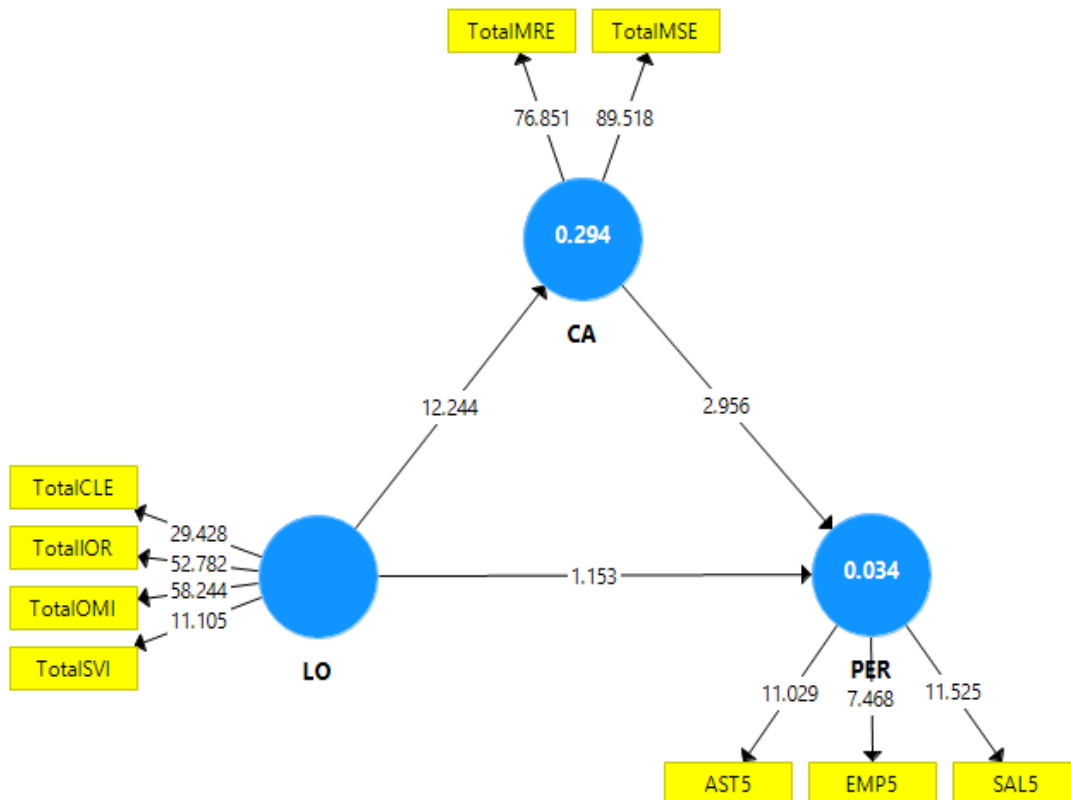


Figure 4. Structural model for firm growth measures

Source: SmartPLS 3 software output (Ringle *et al.* 2015)

This study formulated three hypotheses, these are: first, learning orientation positively influences competitive advantage, second, competitive advantage positively influences SMEs' performance, and third, competitive advantage mediates the relationship between learning orientation and SMEs' performance.

Findings show that regression coefficients for the direct influence of learning orientation on competitive advantage for firm growth and personal wealth performance measures are positive and significant, likewise, the regression coefficients for the influence of competitive advantage on SMEs' performance for firm growth and personal wealth performance measures are positive and significant and finally, the indirect influence of learning orientation on SMEs' performance through competitive advantage for firm growth and personal wealth performance measures are also positive and significant. These findings inform that hypotheses H₁, H₂, and H₃ are all supported by the collected data.

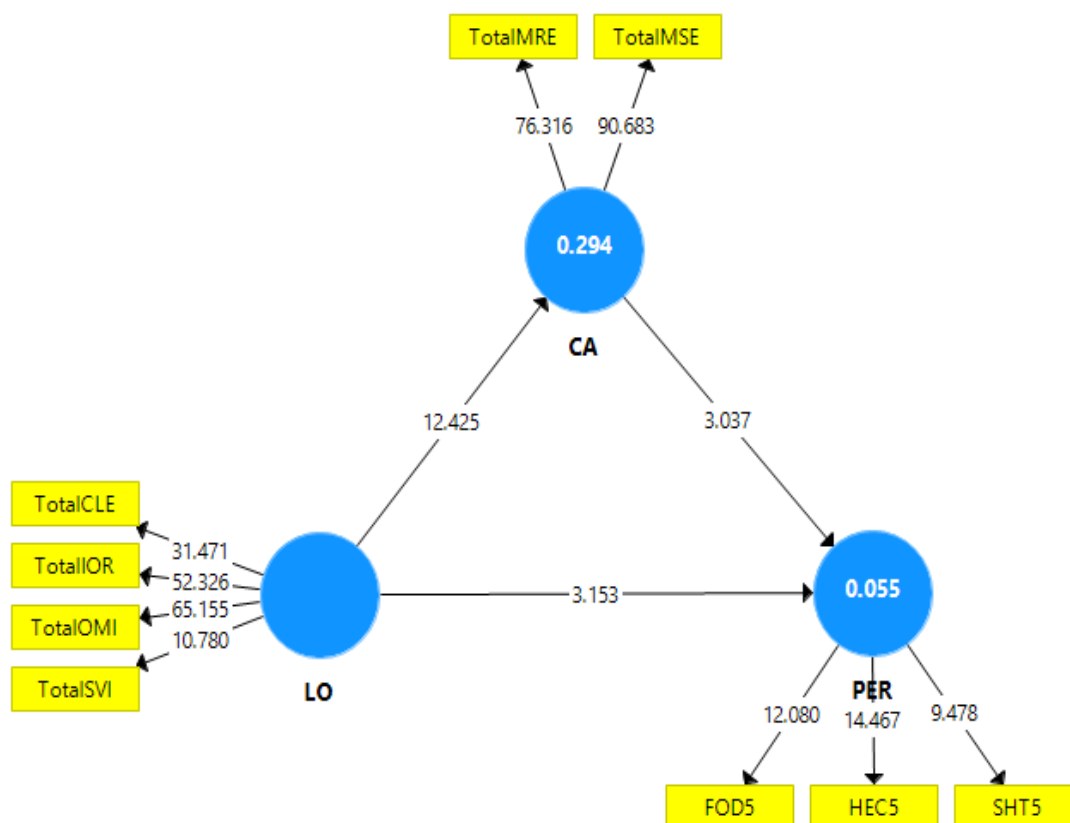


Figure 5. Structural model for personal wealth measures
 Source: SmartPLS 3 software output (Ringle *et al.* 2015)

5. Discussion

This study aimed at determining the influence of learning orientation on SMEs' performance under the mediation of competitive advantage using firm growth and personal wealth performance measures. Use of firm growth and personal wealth performance measures facilitated comparison of the research findings to ascertain the suitability of personal wealth as SMEs' performance measures.

Guided by the knowledge-based view, the study developed a conceptual framework and eventually formulated three research hypotheses which were tested at 5% level of significance using both the original sample and bootstrapped samples. In the first instance, learning orientation positively and significantly influenced competitive advantage. This finding is similar to the findings obtained by Martinez *et al.* (2020) in which open-mindedness and commitment to learning dimensions of learning orientation positively and significantly influenced competitive advantage. The findings are also similar to the findings of Martinette & Obenchain-Leeson (2012), and Mahmood & Hanafi (2013b). These findings confirm that a firm that implements learning orientation creates competitive advantage over business rivals as per postulation of the knowledge-based view (Theriou *et al.* 2009).

In the second instance, this study found the positive and significant influence of competitive advantage on SMEs' performance using both firm growth and personal wealth measures. Based on firm growth performance measures, these findings are similar to those obtained in Ismail *et al.* (2010), Majeed (2011), Muafi & Roostika (2014), Wijetunge (2016), and Zhou *et al.* (2009). These findings inform that the firm that creates competitive advantage promotes SMEs' performance for its survival and business excellence. These findings are in line with the knowledge-based view which suggests that competitive advantage is an important factor in promoting firm performance (Theriou *et al.* 2009). However, this study was unable to compare the personal wealth findings from past studies due to lack of studies that used such kind of SMEs' performance measures.

In the third instance, this study found that competitive advantage positively and significantly mediates the relationship between learning orientation and SMEs' performance. Based on firm growth performance measures, these findings have also been reported by Mahmood & Hanafi (2013b). Likewise, this study was unable to compare the personal wealth findings from past studies due to lack of studies that used such kind of SMEs' performance measures.

Comparison of the findings derived from firm growth and personal wealth performance measures in this study informs that, the influence of learning orientation on competitive advantage, the influence of competitive advantage on SMEs' performance, and the indirect influence of learning orientation on SMEs' performance

through competitive advantage are not far away for the two types of SMEs' performance measures (see Table 5). The coefficient values for all hypotheses are all positive and significant in both cases when firm growth and financial performance measures were used. The findings confirm that firm growth performance measures and personal wealth performance measures produced similar results, thus, it is evident that in addition to firm growth measures, personal wealth performance measures can be used in developing countries to measure SMEs' performance as proposed in Eijdenberg (2016).

5. Conclusion, implication, and recommendations

5.1 Conclusion

Analysis of original sample and bootstrapped samples produced similar results when firm growth and personal wealth performance measures were used. Therefore, this study concludes that when both firm growth and personal wealth measures were used to reflect SMEs' performance: first; learning orientation positively and significantly influenced competitive advantage, second; competitive advantage positively and significantly influenced SMEs' performance, and third; competitive advantage mediated the influence of learning orientation on SMEs' performance. It is not disputed that firm growth performance measures have been developed and mostly used in western world, this study has confirmed that the measures are also applicable in developing countries like Tanzania. Although use of personal wealth performance measures seem to be a new approach in measuring SMEs' performance in developing countries, this study has produced empirical evidence that the measures are equally suitable like the firm growth measures.

5.2 Contribution of the study

Guided by the knowledge-based view, this study determined the influence of learning orientation on SMEs' performance under the mediation of competitive advantage. This study used firm growth and personal wealth measures to measure SMEs' performance in Tanzania's welding industry. Similar results were found for firm growth and personal wealth measures. Therefore, the study has contributed to the understanding that personal wealth measures comprising of food purchasing, health care paying, and shelter acquisition capabilities items are suitable in measuring SMEs' performance. Prior to the current study, to the best knowledge of the authors, past studies have not addressed this knowledge gap.

5.3 Implication of the findings

In accordance with the knowledge-based view, this study adopted learning orientation as a firm resource in form of processes (Barney 1991). Findings have shown that the influence of learning orientation on SMEs' performance is mediated by competitive advantage. The findings inform that the knowledge-based view is not only suitable in described tangible resources such as physical assets but also intangible resources such as learning orientation. In practice, intangible resources seem to drive firm performance much more than physical resources (Connor 2002). Therefore, in modern business, firm owners who invest not only in physical resources such as machineries but also in intangible resources such as learning orientation are likely to obtain competitive advantage for better performance.

Since SMEs in developing countries are established as an alternative to formal employment, most entrepreneurs depend on the firm earnings to sustain their lives and the associated accumulation of wealth as opposed to western world where entrepreneurs are driven by opportunities to be exploited (Eijdenberg 2016). Thus, measurement of SMEs' performance based on traditional indicators such as growth in sales, assets and number of employees may be supplemented by personal wealth performance measures. Having demonstrated that personal wealth performance measures are equally suitable just like firm growth performance measures, the findings of this study are expected to spark debates on the suitability of personal wealth as SMEs' performance measures across various industries and countries.

5.4 Limitation of the study

This study adopted a cross-sectional design by collecting data from owners-managers of welding industry SMEs' in Tanzania, thus, the findings are specific to the welding industry and cannot be generalized beyond it. Although competitive advantage can be defined using various dimensions, its definition in this study is limited to differentiated products, market sensing, and market responsiveness. Likewise, the definition of SMEs' performance is limited to the used firm growth (assets, sales, and employees) and personal wealth (food purchasing, health care paying, and shelter acquisition capabilities) measures.

5.5 Recommendations

The findings from this study have unveiled the suitability of personal wealth measures in measuring SMEs' performance in conjunction with firm growth measures. The study has demonstrated that personal earnings emanating from enterprises owned and managed by entrepreneurs are reliable measures of SMEs' performance.

Therefore, the study recommends use of personal wealth measures in addition to well established firm growth measures. Use of personal wealth measures in developing countries is justified under the fact that entrepreneurs in those countries establish enterprises as an alternative to formal employment to sustain their daily lives.

Furthermore, this study investigated the influence of learning orientation on SMEs' performance under the mediation of competitive advantage using firm growth and personal wealth performance measures. Literature will undoubtedly benefit from future studies that will investigate the influence of other constructs on SMEs' performance under the mediation of competitive advantage using the same firm growth and personal wealth performance measures. Such studies will ascertain whether the findings of the current study are specific to learning orientation construct or applicable to other constructs as well. Additionally, research in other industries will also ascertain whether the findings of this study are specific to the welding industry or applicable to other industries as well.

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