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## THE ROLE OF RESOURCES IN THE INTERNATIONALISATION OF SMALL AND MEDIUM ENTERPRISES (SMEs)

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### ABSTRACT

*Using a cross-sectional survey, this study investigates the relationship between firm resources (human capital, organisational capital and physical capital) and internationalisation of Small and Medium Enterprises (SMEs). Data was collected from 248 SMEs using self-administered questionnaires. Data was analysed using correlations and regression models. The study has established that a positive change in human capital, organisational capital and physical capital leads to a significant change in the internationalisation of SMEs. It has also established that an increase in physical resources weakens the predictive power of organisational capital resources in the internationalisation of SMEs. This study contributes to the scanty body of knowledge in the area of SME internationalisation in a resource perspective by drawing on empirical evidence from a developed country context. SMEs need to understand how to utilise their resources and strategically plan on how to deploy them at the right time and in right quantities. Future research can undertake further exploration using a longitudinal methodology to examine the interaction of the resources in the international process.*

**Keywords:** Firm Resources, Internationalisation, SMEs, Uganda, Resource based view.

### INTRODUCTION

In the modern times of doing business, the need to improve competitiveness and stabilise business performance has become a core strategy of the Small Medium Enterprises (SMEs) sector. Although small businesses have their role to play in solving their “small problems”, most of them have intentions to grow into large companies (Ferreira & Azevedo, 2011). The growth of SMEs beyond their home boundaries has become an issue of concern in both developed and developing economies (Al-Hyari *et al.*, 2012). The business environment in the twenty-first century provides wide openings for SMEs that wish to widen their market scope. Because of globalisation, opportunities for internationalising operations by SMEs are abundant (Ruzzier *et al.*, 2007; Ahimbisibwe & Abaho, 2013).

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SME internationalisation can be seen in different contexts, namely, exporting, creating alliances across national borders as well as opening operational centres in foreign countries. Internationalisation of SMEs comes with the added advantage of increasing revenue in form of sales volume, as well as profits (Turcan, Gaillard, & Makela, 2004). Although the internationalisation of SMEs is a global need, it is necessary in emerging and fast developing economies (Al-Hyari *et al.*, 2012) because of the SMEs' role in providing employment, innovation and technology diffusion (Rammer & Schmiele, 2008), new product development and improved citizenry welfare. From a macro-economic viewpoint, SME participation in international business is crucial in enhancing the balance of payment and attracting quality international partnerships. This can only be achieved if the owners/managers of those SMEs commit their resources and engage in international relations to easily access competitive technology (Ahimbisibwe & Abaho, 2013).

In Uganda, SMEs account for over 90% of the private sector and employ between 2,500,000 and 4,000,000 people (Mbabazi, 2012; Kasekende & Opondo, 2003). However, there has been no deliberate effort by the SMEs or any government body to push the SMEs' operations beyond the confines of the national borders. Due to lack of support from governments, SMEs' competitiveness tends to lie in their resource abilities.

Wamono, Kikabi and Mugisha (2012) argue that one of the strongest predictors of the willingness for SMEs proprietors to invest internationally lies in the investment capital, access to credit and information, and ownership of fixed assets. Although it is always assumed that firms with a broader resource base find it easier to venture abroad (Westhead *et al.*, 2001) and that the larger and most productive firms are internationally active given their resource endowment (Bernard *et al.*, 2011; Boermans and Roelfsen, 2015), there is scanty evidence to affirm the effect of resource endowment on SME internationalisation. Moreover, empirical studies on firm size, resources and internationalisation have yielded contradictory results (Boermans & Roelfsen, 2015). Apparently, empirical literature on firm's resources and internationalisation of SMEs, especially in the least developed world, remains sparse. The little effort in this direction has been in the area of international entrepreneurship, but still most of the research output in this area has tended to focus on the big manufacturing firms and other perspectives such as business networks (Nicole & Hugh, 1997).

Thus, in the current study, we focus mainly on the resource theory of a firm (Penrose, 1959). Theoretically, the Resource Based View of the firm asserts that resources internal to the firm are sources of competitive advantage. Such resources should be rare, valuable, inimitable and difficult to substitute (Clulow, Barry, & Gerstman, 2007; Ferreira & Azevedo, 2007). The availability of such resources determines a particular firm's capability to undertake strategic actions such as internationalisation.

Firm resources refer to assets, capabilities, knowledge and experience controlled by a firm (Alvarez & Busenitz, 2001). These resources include *Physical Capital Resources* such as technology, location and finances (Gashi, Hashi, & Pugh, 2013); *Human Capital Resources* such as experience and skills; and *Organisational Capital Resources* such as formal reporting structure (Barney, 1991). This paper emphasises that, despite the liability of smallness, SMEs from least developed regions can rely on their physical, human and organisational capital resources to extend their operations to the international arena.

## **THEORETICAL BACKGROUND AND REVIEW OF LITERATURE**

Most literature posits that the mainstream theory of internationalisation is based on three lines of thinking, namely, the process/stages theories (also commonly known as the Uppsala school of thought about internationalisation); the foreign direct investment (FDI) logic and the network perspective to internationalisation (Coviello & McAuley, 1999; Salmi, 2000; Yakhlef & Francine, 2004); and the International New Ventures (INV) theory advocated by the new school of thought to explain a phenomenon that is inconsistent with the traditional internationalisation process theories whereby “born globals” venture into international markets shortly after inception (Autio & Sapienza, 2000; Oviatt & McDougall, 1997). These theories have largely been geared towards explaining internationalisation of large manufacturing firms in the developed world (Alvarez-Gil *et al.*, 2003). On the other hand, theories to explain the internationalisation of SMEs are not well-documented.

In this regard, the neo-classical and industrial trade theories, which argue that for a firm to exploit the firm-specific advantage that they enjoy in a timely manner in a given market place before it is eroded, seem to provide a better explanation to SME internationalisation. This study, therefore, adopts the Resource Based View (RBV) theory by Barney (1991), commonly used to explain a firm’s performance, to try and predict the internationalisation of SMEs in a least developed country. In this study, internationalisation is attributable to the firm’s available resources, which are at the same time the firm’s strategic assets. Barney (1991) asserts that these assets are internally controlled and are strategic to the firm. Taking the RBV line of argument, internationalisation can be influenced by resources that are valuable, rare, non-substitutable and hard-to-imitate, which reside within an organisation (Barney, 1991). The RBV assumes that the firm is a pool of hard-to-copy resources and capabilities. Accordingly, the differences in SME internationalisation are construed to occur because of the varied distinctive resources at the disposal of these firms.

This study conceptualises resources to include all assets, capabilities, knowledge and experience (Raymond, St-Pierre, Uwizemungu, & Dinh, 2014; Gashi, Hashi, & Pugh, 2013) controlled by a given firm. A firm’s resources have been widely categorised as Physical Capital Resources, Human Capital Resources and Organisational Capital Resources. As several scholars such as

Decarolis and Deeds (2006), Becker and Gerhart (1993) have posited, the importance of human capital resources such as knowledge stock among firms, confidence, wisdom, experience, education and the ability to create and apply the knowledge cannot be underestimated. A wise, educated and knowledgeable human resource is more creative, productive and efficient. These resources are, therefore, highly instrumental and necessary in fostering SME internationalisation.

Schroeder, Bates and Junttila's (2002) investigation of the performance in the manufacturing sector has established that the competitive advantage in manufacturing arises from proprietary processes and equipment that a specific firm owns. Physical resources are used in the production of goods and services and superior physical resources allow the firm to produce goods or services more effectively than its competition (Jain, Kundu, & Newburry, 2014). Although firm resources may generally provide competitive advantage (Raymond *et al.*, 2014), internationalisation requires a different approach to the use of these resources depending on the market environment (Sui & Baum, 2014).

Another key dimension of key firm resources is human capital (Ruzzier *et al.*, 2007). Human capital (HC) refers to the know-how, information, relationships, and general capabilities that individuals bring to bear on behalf of the firm (Galunic & Anderson, 2000, p. 3). Most of the HC aspects emerged from the entrepreneurial resource perspective through international business skills, international orientation, environmental perception, and management know-how (Ruzzier *et al.*, 2007). HC resources have also been viewed in terms of experience, judgment, intelligence, relationships and insight of owners, managers and workers in a firm (Barney, 1991).

In a firm, managers or entrepreneurs become essential factors in the internationalisation of SMEs (Sari *et al.*, 2008). The entrepreneur is regarded as an important element in SME internationalisation and is central in explaining a firm's international behaviour (Andersson, 2000; Kaur & Sandhu, 2014). In an SME, the personal resources of an entrepreneur become crucial since the internationalisation process often centres around one such key person, especially his or her knowledge and experience as well as his or her network of relationships (Federico *et al.*, 2009; Kaur & Sandhu, 2014; Ruzzier, Hisrich, & Antoncic, 2006). These networks help to cultivate local trust and ease of access to the markets in addition to strengthening entrepreneurial self-efficacy of the enterprising firms (Stuart & Abetti, 1990; Federico *et al.*, 2009).

Although HC drives other resources, literature suggests another key dimension—organisational capital (OC) resources. These resources include a firm's reporting structure, formal and informal planning, controlling and co-ordinating systems, as well as informal relations among groups within a firm and between a firm and others in the internal environment (Federico *et al.*, 2009; Barney, 1991).

Organisational resources enable SMEs to co-ordinate work towards expansion (Edelman, Brush, & Manolova, 2005). This is done by increasing awareness and conducting transactions beyond the borders of a firm's home country (Beamish, 1990).

#### *Internationalisation of SMEs*

Internationalisation has been conceptualised by Johanson and Vahlne (1977) as a sequential and orderly process of increased international involvement and associated changes in organisational forms. Under SME internationalisation, firms expand their operations beyond domestic markets to serve markets in other countries by increasing awareness and conducting transactions beyond the borders of the firm's home country (Beamish, 1990). SME internationalisation is composed of multiple elements related to product, time, market, and operation (Chetty, 1999; Luostarinen, 1979; Welch & Welch, 1996; Ruzzier, Hisrich, & Antoncic, 2006).

SME internationalisation is an important element of economic development and growth of firms (Jaffe & Pasternak, 1994; Federico *et al.*, 2009; Ruzzier *et al.*, 2007). Available literature suggests that more SMEs are increasingly becoming involved in internationalisation activities and displaying behaviour hitherto absent (Bell, 1995) partly due to competition and inter-firm business rivalries (Abdullah & Zain, 2011). From an academic perspective, the question of whether the internationalisation of SMEs is important or not has been answered. According to Anzengruber (2015), the SME internationalisation is not a function of a single source but rather stems from a combination of the entrepreneur, the company and the environment. More particularly, Anzengruber (2015) recommends that further research should examine the antecedent role of a firm's resources for an SME to start engaging in geographical expansion of activities over a nation's borders.

The primary motive of internationalisation of SMEs is growth to maximise returns on investment (Jain *et al.*, 2014), advancement in technology and utilisation of human capital available in other countries which might not be in the parent country of the firm (Sui & Baum, 2014). This internationalisation of SMEs is mostly driven by interactive, pull and push factors (Etemad, 2004). The pull factors are outside the firm and may lure the organisation to invest overseas. Such factors may include the liberalisation of international markets and advancements in technologies (McNaughton & Bell, 2000) and the attractiveness of the international markets as well as bargaining power from other players (Etemad, 2004). The push factors are within the firm and include factors such as competitive and strategic factors in the home market (Mathew, 2003), orientation of the management team (Madsen & Servais, 1997), operational economies (Coviello & McAuley, 1999), investment in research and development (Coviello & McAuley, 1999), attributes in markets and products on offer and restriction of resources (Etemad, 2004).

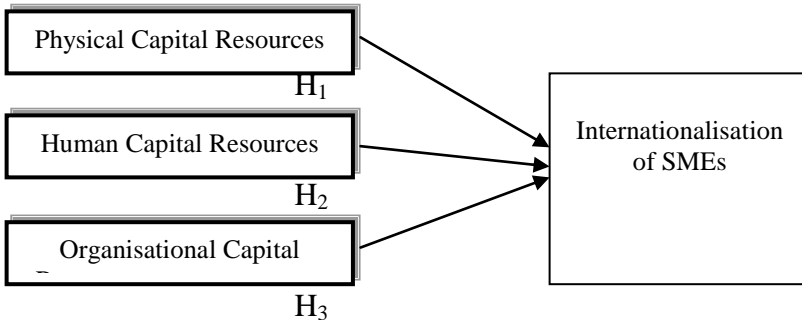
### *Firm Resources and Internationalisation of SMEs*

There is a raging debate that advances the view that a firm's resources influence the internationalisation of SMEs. A Spanish study by Melia', Perez, and Dobon (2010) on the internationalisation of SMEs argues that innovation orientation resources that are internal to a particular SME can accelerate the time a given company takes to internationalise. The results from the study suggest that two different models of internationalisation are possible: firms either adopt a gradual process or attempt to benefit from a rapid transition period of internationalisation. Stoian (2007) established that an increase in human capital through high educational level, language skills, high risk tolerance, innovativeness as well as positive attitude towards export accelerates the internationalisation of SMEs in a number of European states. Eberhard (2013) also found evidence of a curvilinear moderating effect of recoverable firm resources on the relationship between formal inter-personal networks and SME internationalisation.

Under the RBV theory, a firm's internationalisation is directly proportional to the internal resource base accumulated and possessed by the firm. These resources are perceived as a sustainable competitive advantage to the SMEs, especially when they are of value, they are rare, inimitable, and non-substitutable (Barney, 1991). Thus, a general hypothesis is made: The physical, human and organisational capital resources of a firm are instrumental in explaining the internationalisation of SMEs.

### **Conceptualisation**

The key constructs that emanate from literature and theoretical framework are Firm Resources (physical capital resources-**PC**, human capital resources-**HC**, and organisational capital resources-**OC**) and internationalisation of SMEs (product, market, operation, and time). The conceptual framework for these relationships is as hypothesised and objectified is diagrammatically presented in Figure 1.



Source: *Synthesised from literature*

**Figure 1.1: Conceptual Framework**

## METHODOLOGY

This is a cross sectional quantitative study. Cross-sectional studies collect information which represents only what is going on at one point in time (Shaughnessy *et al.*, 2008). Such studies are common in the Social Sciences domain under which the current study falls.

### *The population and sample*

Although Beyene (2002) argues that there is no universally-accepted definition of an SME, SMEs are widely defined in terms of their characteristics, namely, the size of their capital investment, their number of employees, their turnover and their market share. In this regard, country context factors play a major role in determining the nature of these characteristics, especially, the size of investment in capital accumulation and the number of employees a given SME has (Kasekende & Opondo, 2003). In Uganda, SMEs refer to business firms that employ between five and 50 people (as small scale), those that employ between 51 and 500 people as medium scale, with the value of assets, excluding land, building and working capital of less than Uganda Shillings 50 million (US\$ 13,500) with an annual income turnover of between Uganda Shillings 10 and 50 million (US\$2,700- 133,500) (Kasekende and Opondo, 2003).

This study was based on survey data collected from a sample of 282 SMEs that were selected across different industry groupings of SMEs in Jinja Municipal Council in Uganda from the district's three administrative divisions (Central, Walukuba-Masese, & Mpumudde) as presented in Table1:

**Table 1: Sample Size Determination**

	SME Type	SMEs No.	Proportionate Sampling	Random Sampling
1.	Hardware Shops	300	$\frac{300}{950} \times 282$	089
2.	Hotel and Restaurants	80	$\frac{80}{950} \times 282$	024
3.	Furniture Marts	200	$\frac{200}{950} \times 282$	059
4.	Wholesale Outlets	370	$\frac{370}{950} \times 282$	110
<b>Total</b>		<b>950</b>		<b>282</b>



The study used Yamane’s (1967) formula to determine the sample size thusly:

$$n = \frac{N}{1 + N(e)^2}$$

**Where:**

$n$ = Sample Size;  $N$  = Total Sampled Population;  $(e)^2$  = A 95% Confidence Level, with  $p = .05$

This helped to derive a sample of 282 by using probability sampling technique, an approach that provides for fair representativeness of sample cases selected for study (Kothari, 2004). Given that we had to sample from different strata, random sampling was applied to select samples of SMEs. This was done with the aid of simple random sampling using four (4) sugar bowls, each representing a specific study case numbered 1 - 4 (hardware shops, hotels and restaurants, furniture marts, and wholesale outlets). The SME types and names were obtained from Jinja Municipal Council’s Tax Department. These were assigned numbers to be used in the sampling process. These numbers were written on pieces of paper. The pieces of papers were then folded, placed in a specific sugar bowl and shuffled. Then randomly one piece of folded paper was picked at a ago till the allocated slot for that particular type of SMEs was exhausted. The selected pieces of papers with their details such as names were the SMEs that took part in the study.

Table 2 presents the operational definitions of the concepts in the study. The inclusion of how variables are measured in any research undertaking is cardinal to guiding the type of statistical analyses to be conducted as well as the discussions and relevant conclusions that can be drawn from the study results.

**Table 2: Measurement and Operationalisation of Variables**

Variable	Variable Meaning	Measure	Definition	Source(s)
Firm’s Resources	Firm’s Resources refers to all assets, capabilities, knowledge and experience controlled by a firm.	Physical Capital Resources	<i>Physical capital resources</i> include the physical technology, the firm’s plant and equipment, its geographic location and its access to raw materials	Barney,(1991).

Variable	Variable Meaning	Measure	Definition	Source(s)
		Human Capital Resources	These include training, experience, judgment, intelligence, relationships and insight of individual managers and workers in a firm	
		Organisational Capital Resources	These include a firm's formal reporting structure, its formal and informal planning, controlling and coordinating systems, as well as its informal relations among groups within a firm and between a firm and others in its environment	
Internationalisation of SMEs	Internationalisation as the outward movement in a firm's international operation	Operation Mode	It measures whether or not a firm was engaged in any of the following activities: import; direct export; export through an intermediary; solo venture direct investment; joint venture direct investment;	Luostarinen (1979); Chetty (1999); Welch and Welch (1996); Ruzzier and Konečnik (2006).; Manolova <i>et al.</i> (2002); Reuber and Fischer (1997).; Manolova <i>et al.</i> (2002). Reuber and Fischer (1997); Turnbull (1987)

Variable	Variable Meaning	Measure	Definition	Source(s)
			licensing of a product or service; contracting; franchise; or any other international activity	
		Market	Deals with the number of trading countries and measured the geographical scope of foreign sales by asking which regions the SME made sales to	
		Product	Deals with whether a product meets local and international standards	
		Time	Deals with the question on the delay of starting international activities from the inception of SME.	

*Instrument validity and reliability*

Reliability and validity have been reckoned as very important measures of reducing measurement errors in scientific investigations (Rubio *et al.*, 2003; Nunnally, 1978). Reliability is the “degree of consistency with which an instrument measures what it is measuring” (Yount, 2006). Reliability is one of the most common indicators of internal consistency of a scale (Pallant, 2007; Black, 1999). Initially, to test for reliability of the scale, the study used the *Cronbach’s alpha* ( $\alpha$ ), rated as one of the most common indicators that measure the internal consistency of a scale (Pallant, 2007; Black, 1999), as indicated in Table 3:

**Table 3: Pre-test Reliability and validity Scores**

Variable	Measures	Pilot study $\alpha$	Content Validity Index
Firm's Resources	Physical Capital Resources	.636	0.70
	Human Capital Resources		
	Organisational Capital Resources		
Internationalisation of SMEs	Operation Mode	.522	0.90
	Market		
	Product		
	Time		

Validity, on the other hand, refers to the degree to which a test or measuring instrument actually measures what it purports to measure or how well a test or a meaning instrument fulfils its function (Anastasi & Urbina, 1997). In this study, *Content Validity Index* was also performed. Towards this end, questionnaire items derived from the literature surveyed combined with recommendations from the volunteer evaluators' (4 academic experts: who have published in the area of firm internationalisation and 2 Chief Executive Officers of SMEs whose routine work involves making strategic decisions) were taken into account. Each of the volunteers rated the questions on a two-point rating scale of *Relevant (R)* and *Irrelevant (IR)*.

#### *Data quality management*

All the data were entered into the computer for analysis using the Statistical Package for Social Sciences (SPSS) version 20.0. Frequencies of all items were examined to detect any missing data or error in data entry. Detection of outliers was conducted by examining several graphical outputs including histograms, box plots and normal P-P plots. In addition, this study adopted the benchmark of Hair *et al.* (2006) in identifying outliers (standardised scores exceed  $SD + 3$ ). In terms of multivariate outliers, the study employed a Mahalanobis distance ( $D^2$ ) (Hair *et al.*, 2010; Tabachnick and Fidell, 2007), which allows for multivariate outlier assessment whenever several variables are combined.

Subsequent to outlier detection, the study tested for the normality of the data to ascertain whether it satisfies the requirements for parametric tests. The tests included comparing the original mean and five percent trimmed mean of each variable as well as the examination of skewness and kurtosis values. The data does not extremely violate normality if the difference between the two means is not significant (Pallant, 2007). Examining the values of skewness and kurtosis also serve as a complementary check for the normality of the data. Any values of kurtosis were regarded as extreme whenever the kurtosis statistic was above 2.0

or below -2.0 and the value of skewness was regarded as extreme whenever the skewness statistic was above 8.0 or below -8.0 (Kline, 2005).

### **ANALYSIS AND INTERPRETATION OF FINDINGS**

This section presents sample characteristics and correlation results. Whereas Table 4 presents sample characteristics, Table 5 presents descriptive and correlation results. In Table 6, hierarchical regression analysis shows how the control variables of SME size, SME years of operation and SME type explain the variation in SME internationalisation.

**Table 4: Sample Characteristics/sample description**

<i>Variable/values</i>	<i>(N = 282)</i>	<i>Freq.</i>	<i>%</i>
<i>Ownership status of SME:</i>			
Local owned (100%)		217	77
Foreign owned (100%)		42	15
Jointly owned		23	8
<i>Age of SME (no. of years in operation):</i>			
Less than 3 years		163	58
3 – 5 years		67	24
6 – 10 years		33	12
More than 10 years		19	7
<i>Size of SME (no. of fulltime employees)</i>			
Less than 5 employees		44	16
5 – 10 employees		204	72
11 – 20 employees		25	9
Above 20 employees		9	3
<i>Form of SME</i>			
Sole proprietor		189	67
Partnership		37	13
Ltd. Company		56	20
<i>Annual turnover of SME (in Ug. Shs. Per annum)</i>			
Less than shs. 50 millions		198	70
51 – 100 millions		72	26
Above 100 millions		12	4

Table 4 shows that 77% of the SMEs were locally owned whereas 15 % were foreign owned. The smallest percentage (8%) was of SMEs jointly owned by both foreign and local business. Of the sampled SMEs, the majority (58%) had been in operation for less than three (3) years whereas the smallest percentage (7%) had been in business for more than 10 years. We also had interest in establishing the staffing levels of the SMEs. We found that the majority (72%)

had between five to 10 fulltime employees. A very small percentage (3%) of these had above 20 employees. It was also established that most of the SMEs (70%) were recording less than Uganda Shillings 50,000,000 (Approximately USD. 13,500). Those SMEs, which earned above Uganda Shillings 51,000,000 but below Uganda Shillings 100,000,000, accounted for 26%. Only 4% of the SMEs managed to earn above Uganda Shillings 100,000,000. This implies that the SMEs in the Jinja region are still small and young.

**Table 5: Correlation between the study variables**

	Mean	S.D		Internationalisation
Human Capital	2.80	.493	Correlation	.289**
Organisational capital	2.92	.533	Correlation	.269**
Physical capital	2.99	.459	Correlation	.477**
***. Correlation is significant at the 0.01 level (2-tailed).				

Table 5 presents the relationship between the study variables as well as descriptive statistics. The means, based on a five-point scale, indicate moderate levels of human capital, organisational capital as well as physical capital among the SMEs in Uganda. All the firm’s resources positively and significantly correlated with SME internationalisation. Human capital significantly and positively correlated with internationalisation ( $r = .289, p < .01$ ), meaning that as human capital of an SME improves the level / degree of internationalisation of that SME will also increase. Organisational capital positively and significantly correlated with SME internationalisation ( $r = .269, p < .01$ ), implying that as the organisational capital of an SME increases the level or degree of internationalisation of that SME will also increase. Furthermore, physical capital also positively and significantly correlated with SME internationalisation ( $r = .477, p < .01$ ), meaning that as the physical capital of an SME increases or improves the level of internationalisation of that SME will also increase.

**Table 6: Hierarchical regression with internationalisation as the dependent variable**

Variable	Model 1		Model 2		Model 3		Model 4	
	B	Sign	B	Sign	B	Sign	B	Sign
Constant	2.616	.000	1.965	.000	1.565	.000	1.108	.000
SME size	.130	.056	.110	.092	.109	.087	.070	.240
Yrs in operation	.103	.130	.092	.157	.083	.193	.068	.251
SME type	.054	.422	.056	.393	.069	.282	.057	.335
HC			.279**	.000	.231**	.000	.126*	.048
OC					.216**	.000	.100	.121
PC							.382*	.000
F change	2.216		18.388		10.973		32.498	

Sig. F change	.087 .174	.000 .327	.001 .389	.000 .514
R <sup>2</sup>	.030	.107	.151	.264
R <sup>2</sup> change	.030	.077	.044	.113
Adjusted R <sup>2</sup>	.017	.090	.131	.244

\*\*Significant at the 0.01 level ( $p < .01$ ); \*Significant at the 0.01 level ( $p < .05$ )

The four (4) models in the table above are specified / defined by the following regression equations:

Model 1:  $Int. = \beta_0 + \beta_1S + \beta_2Y + \beta_3T + \epsilon$

Model 2:  $Int. = \beta_0 + \beta_1S + \beta_2Y + \beta_3T + \beta_4HCR + \epsilon$

Model 3:  $Int. = \beta_0 + \beta_1S + \beta_2Y + \beta_3T + \beta_4HCR + \beta_5OCR + \epsilon$

Model 4:  $Int. = \beta_0 + \beta_1S + \beta_2Y + \beta_3T + \beta_4HCR + \beta_5OCR + \beta_6PCR + \epsilon$

Where:

Int. = Internationalization of SME

$\beta_0$  is a constant

$\beta_1S$  is the unstandardised B coefficient of SME size

$\beta_2Y$  is the unstandardised B coefficient of SME years of operation

$\beta_3T$  is the unstandardised B coefficient of SME type

$\beta_4HCR$  is the unstandardised B coefficient of Human Capital Resources

$\beta_5OCR$  is the unstandardised B coefficient of Organizational Capital Resources

$\beta_6PCR$  is the unstandardised B coefficient of Physical Capital Resources

$\epsilon$  is the error term

In the hierarchical regression presented in Table 6, the results indicate that the control variables of SME size, SME years of operation and SME type explain just 3% of the variation in SME internationalisation. This explanatory power is insignificant. These control variables were all found not to have a significant effect on SME internationalisation (insignificant beta values of .130, .103 and .054 for SME size, SME years in operation and SME type respectively;  $p > .05$  for all the three control variables). This suggests that the effect of these three variables on internationalisation of SMEs is of no consequence.

In Model 2, the addition of HC Resources to the equation accounts for an additional 7.7% of the variance in SME internationalisation. HC Resources indicate a statistically significant effect on SME internationalisation (beta = .279,  $p < .01$ ; F change = 18.388,  $p < .01$ ). The addition of OC Resources in Model 3 accounts for an additional 4.4% of the variation in SME internationalisation, and OC resources revealed a statistically significant effect on SME internationalisation (beta = .216,  $p < .01$ ; F change = 10.973,  $p < .01$ ).

In Model 3, PC Resources to the equation were added, which revealed an additional 11.3% variation in SME internationalisation. Physical capital resources had a statistically significant effect on SME internationalisation (beta = .382,  $p < .01$ ; F change 32.498,  $p < .01$ ). However, it is worth noting that in Model 3, when PC resources are added, OC resources cease to be statistically significant. In other words, PC resources take away the predictive power of OC resources in the third model. This suggests a mediation effect of PC resources on the relationship between organisational capital resources and internationalisation of SMEs. This may also mean that with strong PC resources, OC resources may have no direct effect on SME internationalisation.

All the variables in the model explained 26.4% of the variation in SME internationalisation, and the overall model is statistically significant. PC resources accounted for the largest effect on SME internationalisation, followed by HC resources and the least were OC resources of these three variables.

## **DISCUSSION OF THE FINDINGS**

From the theoretical perspective, SMEs with a strong resource base are likely to have a strong desire to internationalise. During correlational analysis, we observed that an improvement in human capital through increased training, experience, international business intelligence and individual networks in the international arena leads to a significant positive change in the drive towards internationalisation of SME operations. In this regard, the study established that Human capital elements such as personal networking are crucial in SME internationalisation. Indeed, it is through networks that entrepreneurs get access to resources and information for entrepreneurial actions (Ruzzier, Hisrich, & Antoncic, 2006).

On the other hand, it is noted in literature (Onkelinx, Manolova, & Edelman, 2015) that human capital as a resource has limitations because there is a threshold above which additional human capital endowments stop enhancing internationalisation. Onkelinx, Manolova and Edelman (2015) relate this deficiency to an optimum level of human capital accumulation which when reached makes human resources unproductive because they start to develop negative association with the export intensity of the firm. Even with the limitations of deficiencies associated with the declining significance of HC, a contextual conclusion can be made to the effect that human capital from the resource context is significant in influencing SMEs' participation in internationalisation by connecting SMEs through networks with other companies in the same industry and the wider international environment.

For the Physical capital resources, it is observed that there is a significant likelihood of quickly internationalising firm's operations for SMEs with relatively sufficient resources such as technology in form of modern and unique plant and equipment. This internationalisation of these SMEs occurs because with better technology such as an optimised website and social networking gear



enhances communication and the SMEs' visibility in the market. In the advent of modern state of the art technology, many SMEs start to produce better quality products with easy compliance to the quality standards of the foreign markets. Anzengruber (2015) argues that SMEs with a technological edge have an advantage in the internationalisation of their products because such SMEs are easy to recognise in international markets than their competitors.

The findings also support earlier research such as Basile's (2012) which found that that an SME's internal resources are drivers towards internationalisation, survival and competitiveness. In other studies, the debate on SME internationalisation has been linked to the resource base theory of a firm and similar findings have been observed. Stoian (2007) and Eberhard (2013) also found a strong relationship between HC and internationalisation of SMEs in a number of European states. In relation to this study, prior studies (Raymond *et al.*, 2014; Gashi *et al.*, 2013; Ruzzier *et al.*, 2007; Galunic & Anderson, 2000) had found that firm resources such as knowledge and experience in the international markets are instrumental in SME internationalisation. Barney (1991) contends that PC resources such as technology and equipment and geographical location play a crucial role in the internationalisation efforts of SMEs. In this regard, a firm located near the coast or at the international borderline finds it easier to move to the neighbouring country than one located far from these areas. This study affirms that, indeed, SMEs resource endowment is a strong pre-requisite to internationalisation.

Although the availability of resources to an SME is significantly related to internationalisation, Sui and Baum (2014) caution that SMEs need to approach the combinations of these resources strategically to get more value and productivity in the internationalisation process. This view is supported by the resource based view of the firms (Penrose, 1959) as the availability of resources alone cannot provide a reasonable justification for internationalisation; in this regard, what is also essential is the strategic usage of these resources depending on the market environment. Since SMEs rely more on the owners, the entrepreneur as a human resource is crucial. After all, the internationalisation process often centres around one such key person and his or her knowledge, experience, and network of relationships (Federico *et al.*, 2009; Kaur & Sandhu, 2014; Ruzzier, Hisrich & Antoncic, 2006).

With regard to organisational capital (OC) and SME internationalisation, the study has observed that an increase in the level of the dimensions of OC leads to a significant increase in the internationalisation efforts of an SME. In the context of this study, OC is viewed in terms of a firm's formal reporting structure, planning, controlling and co-ordinating systems. In other words, SMEs which operate formally with and clear reporting structure have a higher probability of internationalising their operations than those that do not do so.

## **CONCLUSIONS AND IMPLICATIONS**

The empirical findings of this study provide evidence that a firm's resources play a pivotal role in the internationalisation process. The human capital (HC), organisational capital (OC) and physical capital (PC) resources influence the level/degree of internationalisation of SMEs. Thus when a firm accumulates superior PC resources, OC resources cease to be relevant in the internationalisation efforts of an SME. In other words, PC resources take away the predictive power of OC resources because of increased engagement of external experts that accompany PC resources. In this regard, the study supports and extends the resource based view of a firm because it indicates a significant correlation between SME internationalisation and the resources these firms control.

This study contributes to international business literature as well as management practices of SMEs in relation to internationalisation. At the managerial level, SME managers should explore how they can benefit from their human, physical and organisational resources to trigger their international operations. It is also imperative that managers observe the resource trends, especially between organisational capital and physical capital resources since the latter resources are superior to the former resources. Based on the findings and conclusion of the study, it is recommended that for SMEs to internationalise and participate fully in the internationalisation process, they should acquire the resources they need to establish themselves on the international stage. In this regard, the SMES should acquire and develop the physical capital, human capital and organisational capital resources not only for the betterment of their operations but also to reap the optimum benefits of internationalisation.

### **FURTHER RESEARCH**

Although this study makes several contributions to international business research, it has several limitations. To begin with, the study generates data using self-rated method of questionnaires where respondents rate themselves on the questions posed. Podsakoff, MacKenzie and Podsakoff (2003) argue that such approaches lead to the emergence of Common Methods Variance (CMV). This study falls short on this aspect. Path analyses, if used in positivistic studies, have the ability of allowing a researcher to specify and test the pattern and direction of causal relationship among the study variables where mediated effects are predicted. Furthermore, they may also be used when observations are at a single point in time (Larose, Eastin, & Gregg, 2001). Cognisant of this fact, this study was partly cross-sectional in terms of time specification; it had a default in design where it ignored the application of path analysis to explicate the linear relationships among the study variables. It is not clear how the different paths estimated in the research model would behave statistically if observed empirically. This is another undoing of this investigation worth further investigation.

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