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The effects of organisational capabilities on firm success

Evidence from Eritrean wood-and-metal-manufacturing firms

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Abstract

Purpose – The purpose of this paper is to examine the effects of organisational capabilities on the success of Eritrean wood- and metal-manufacturing firms. Specifically, the paper analyses the effects of owner-managers' innovativeness, personal relations and employees' technical skills on the firms' success.
Design/methodology/approach – The study entailed a survey of 287 wood- and metal-manufacturing small and medium enterprises, which were selected using stratified random sampling. Structural equation modelling was used to analyse the data and generate the findings presented in this paper.
Findings – The findings indicate that owner-managers' innovativeness and personal relations have a significant influence on the firms' success. However, although employees' technical skills relate positively to the firms' success, the relationship is statistically insignificant largely because of the limited participation of workers in designing and developing the products.
Practical implications – The paper can enlighten owner-managers about the value of innovativeness and relational capabilities for the success of their firms. It generates insights that can guide policy makers to promote innovation and relational capabilities in the wood- and metal-manufacturing sub-sector.
Originality/value – The paper contributes to the debate on firms' success by empirically testing the effect of the specific dimensions of organisational capabilities on the success of SMEs operating in a developing economy context. It widens the understanding of how organisational capabilities influence firm success.

Palabras clave Innovativeness, Employees' technical skills, Organisational capabilities, Personal relations, SMEs' success

Paper type Research paper

Introduction

The research interest in the determinants of firms' success is as old as the strategic management field, yet it is still relevant in current strategic management research. Although the extant literature has attempted to address the issue of firms' success, paying some attention to firm capabilities (Kraaijenbrink *et al.*, 2010; Menguc and Auh, 2006), there is no clear framework that explains how firm capabilities are connected to firm success (FS) (Leiblein, 2011; Garengo and Bernardi, 2007). For SMEs, the situation is even more critical because little attention has been given to their capabilities and how the capabilities determine their success. While the capabilities of SMEs differ from one sector to another (Islam *et al.*, 2011), mainly due to the peculiarities of different sectors (Kaplan and Norton, 2004), very few studies have covered how firm capabilities influence SMEs' success in specific sectors and sub-sectors. This is unfortunate for the

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sub-sectors which require high-level capabilities for their survival and growth. Two such sub-sectors entail wood- and metal-manufacturing firms, and this paper assesses the influence of organisational capabilities on their success in the context of a developing economy, in this case, Eritrea.

Drawing on the firm's internal perspective, it is argued that a significant amount of the variation in firms' success is explained by their capabilities (Galbreath and Galvin, 2008; Spanos *et al.*, 2004). However, reflecting on firm capabilities, Adner and Helfat, 2003 suggest that some capabilities are more critical than others in determining FS. Accordingly, studies on firm capabilities have largely shifted their attention from technological or research and development capabilities to organisational capabilities (Teece and Pisano, 1994; Leiblein, 2011). Organisational capabilities, consisting of routines and activities, embody individual, group and firm-wide know-how. Kaplan and Norton (2004) indicate that, given the firms' history and context, organisational capabilities are idiosyncratic and may exhibit a high degree of value, rareness, inimitability and non-substitutability. It is further argued that organisational capabilities entail a firm's ability to deploy a team of skilled employees to perform a set of tasks or activities (Sanchez, 2006).

Notwithstanding the recognised importance of organisational capabilities, the literature shows inconsistent results for some of the dimensions of organisational capabilities, and in terms of how they are linked to FS (Arend, 2006; Kraaijenbrink *et al.*, 2010). Among the variables of organisational capabilities that have been tested elsewhere and have generated conflicting results is innovativeness. In some studies, innovativeness is found to be strongly related to FS (Gunday *et al.*, 2011; Therrien *et al.*, 2011), whereas others show a weak relationship (Coad and Rao, 2008). Mendes and Machado, (2015) indicated the relevance of employees' technical skills to SMEs, but they do not clearly link them to the success of the firms. The relevance of relational capabilities to FS is also acknowledged though most studies do not identify the types of relational networks that influence FS in the SME context (Adler and Kwon, 2002). In addition, the capabilities of SMEs might differ from those of large firms. In view of this, we cannot rely fully on the studies focusing on large firms, mostly carried out in developed economies. Unlike that of large firms, SMEs' success may depend on their ability to respond to the changing environment through product innovation, employees' skills in manufacturing and their ability to develop personal relationships (Carmeli and Tishler, 2004; Helfat and Peteraf, 2015).

In view of the above background, this paper examines the influence of organisational capabilities on the success of SMEs. Specifically, it examines the effects of owner-managers' innovativeness, personal relations and employees' technical skills on FS. From the theoretical perspective, the paper increases our understanding of organisational capabilities in the SME context from a developing economy's point of view. Empirically, it indicates that owner-managers' innovativeness and personal relations are related to FS while employees' technical skills are not. It also proposes a course of action regarding SMEs' capabilities that can be adopted by policy makers and owner-managers.

The empirical setting for the study was Eritrea, one of the developing countries in Sub-Saharan Africa. As in other poor countries in Africa, in Eritrea firms' motivation to grow was hampered for decades until market-oriented economic policy reforms were adopted in 1994 (Government of Eritrea, 1994). Although the ongoing reforms have opened up opportunities for firms, a World Bank (2009) report and a study by Tesfayohannes (1998) indicate that there are other environmental challenges, such as

the inefficiency of supporting institutions, a lack of institutional capacity in firms and insufficient access to credit, which constrain the development of SMEs in Eritrea. In such environmental conditions, the firms need to capitalise on their internal capabilities in general and on their organisational capabilities in particular, to succeed. In wood- and metal-manufacturing SMEs, whose customer needs are often unique and changing, and which lack institutional capacity (Tesfayohannes, 1998), organisational capabilities could be important for their success. However, studies on how organisational capabilities affect the success of firms in Africa are scant (Hansen and Schaumburg-Muller, 2010), and those in the context of the wood and metal sub-sectors in Eritrea are non-existent.

The remainder of the paper is structured as follows. The following section presents the theoretical and empirical perspective. The methodology used is described next, including the sampling procedure, measurements used and data analysis tools. This is followed by the results of the hypothesis testing, after which a discussion of the findings is presented. Finally, the paper offers conclusions and implications.

Theoretical and empirical perspective

Various theoretical perspectives have been proposed by the strategic management literature to explain variations in firm performance. One such theory that has received popular acceptance in the literature is the resource-based view (RBV) which principally theorises that internal resources explain the variations in performance among firms (Barney, 1991). Its proponents introduced the notion that firms should be analysed from the resource side at the level of the firm. Even though individual firm resources form a pool of assets for the firm (Grant, 2002), these resources are not productive on their own. It is the capability of the firm that makes use of the resources. Along these lines, researchers in the 1980s largely focused on the notion of technological capabilities. Studies in the 1990s turned their attention to organisational capabilities (Teece and Pisano, 1994; Leiblein, 2011) embedded in human beings (Adner and Helfat, 2003). Teece and Pisano (1994), for instance, argue that owning the right technological assets guarded by property rights does not guarantee FS. Technological assets such as other stock can be static factors of production. Firms in a better position to succeed are those that are able to exploit and coordinate their capabilities and focus on rapid and flexible product innovation.

A number of studies have identified various elements of organisational capabilities including the firm's formal reporting structure and controlling systems (Barney, 1991), organisational structure and culture (Tomer, 1995), and firm's leadership and employees' abilities (Kaplan and Norton, 2004). Due to their smallness and simple structure, organisational capabilities in SMEs are mostly associated with the owner-managers' decisions. Owner-managers are in charge of strategic change, building organisation resources and competences that affect firm abilities (Adner and Helfat, 2003). In manufacturing SMEs, organisational capabilities are most likely identified with the know-how of the firm embedded in the owner-managers' innovativeness, personal relations and employees' technical skills (Carmeli and Tishler, 2004). These skills may be particularly relevant to the wood- and metal-manufacturing SMEs in Eritrea simply because such firms lack formal management structures and are operating in a dynamic market with a short product life cycle. In a changing business environment, firm capabilities have to evolve over time to meet the emerging challenges or opportunities exposed by the environment. These may depend on the owner-managers' capacity to undertake mental and physical activities (Helfat and

Peteraf, 2015) and their ability to access resources through relationships and connections (Adler and Kwon, 2002). The three concepts (innovation, personal relations and employees' technical skills) are further discussed below.

According to Menguc and Auh (2006), innovativeness is defined as the notion of openness to new ideas, new ways to do things and creativity in its methods of operation to meet market needs. In SMEs, innovativeness implies a willingness of the owner-manager to learn about and adopt innovation (Zatezalo and Gray, 2000). A greater degree of innovativeness leads owner-managers to use customer and competitor knowledge in more creative ways, which result into new and innovative products (Vicente *et al.*, 2015). A study by Atalay *et al.* (2013), indicate that in times of fierce competition and short product life cycles, a firm's ability to generate innovative products becomes more important than ever for improving its performance. Related to this, Therrien *et al.* (2011) in his study on the impact of innovativeness on FS found the introduction of new products with a high level of novelty produce more sales. However, some weak results have been reported on the relationship between innovativeness and FS (Coad and Rao, 2008). Some authors indicate that innovative firms fail to gain from innovation due to the costs they incur, while imitators easily benefit from it. For instance, Kafetzopoulos and Psomas (2015) showed that innovative capability has no direct impact on manufacturing firms' financial performance, although it contributes to product quality. However, in Eritrea, innovativeness in wood- and metal-manufacturing SMEs may be relevant for three reasons. First, most of these firms are involved in the manufacturing of unique products based on individual customer needs that require innovative skills. Second, due to the changing needs of customers the firms' products have short life cycles which may drive the firms to focus on innovative products. Third, studies on the relationship between innovativeness and FS in Eritrea are non-existent. Based on this, the following hypothesis is formulated:

H1. Owner-managers' innovativeness is positively related to FS.

A firm's relational capabilities determine the acquisition and sharing of resources and information, and the ease of monitoring the marketplace situation (Ngugi *et al.*, 2010). According to the authors, relational capabilities reduce uncertainty through better information flow between firms in a chain, and they reduce the cost of dealing with the same clients and suppliers, which in turn may lead to FS. Zohdi *et al.* (2013) found significant positive correlation between relational capabilities and firm performance. The literature identifies three forms of relationships, namely, personal contacts (Johannisson, 1995), communication networks with government and other institutions (Plahshappa and Gorden, 2007), and business relations (Peltier and Nadu, 2012). Although these studies indicate the relevance of relational capabilities to FS, they do not show which networks influence FS in the SME context. Due to the smallness of SMEs, they may not have the capacity to make formal relationships. A study by Anderson and Jack (2002), for instance, suggests that, in the absence of a formal network, firms are mostly involved in informal relationships which the owner-managers make with other firms' owner-managers to access resources and market information. In Eritrea, the wood- and metal-manufacturing SMEs' owner-managers are constrained by a lack of institutional capacity and are less likely to make formal business-to-business relationships. In addition, most firms lack access to raw materials, such as lumber and iron bars, due to a shortage of the foreign currency needed to import them. In times of shortages of raw materials, firms may need to form informal relations with suppliers to secure their material needs. In these situations, personal

relationships may be more relevant to firms than other types of relationships. Accordingly, the following is hypothesised:

H2. There is a positive relationship between owner-managers' personal relations and FS.

Spanos and Lioukas (2001), in their study of Greek small and medium-sized firms, found that capabilities, including managerial competences, the skills of employees and the ability to attract creative employees, have a significant and direct impact on market performance. Empirical work on large firms by Smith *et al.* (2005) found that non-managerial employees' human capital has a positive impact on firms' knowledge-creating capability. SME owner-managers consider non-managerial employees an important resource and a prerequisite for product innovation (Klaas *et al.*, 2010). Mendes and Machado (2015) showed that employees' skills directly influence new product, volume and mix flexibility, which in turn influence business performance. However, while these studies underline the relevance of employees' skills to SMEs' human capital, they do not clearly link the availability and application of the employees' technical skills to the success of the firms, particularly in the manufacturing industry. Even within the manufacturing industry, employees' technical skills may be more crucial in wood- and metal-manufacturing SMEs in developing countries such as Eritrea that use basic hand tools and whose manufacturing operations are more labour intensive. It is against this background that the following hypothesis is formulated:

H3. Employees' technical skills are positively related to FS.

Methodology

Sampling procedure and sample size

The population of the study comprised wood- and metal-manufacturing SMEs in Eritrea. A nationally accepted definition of SMEs has not yet been worked out in Eritrea. However, Fessaha (1996), in his study on the private sector in Eritrea, classified firms with less than three employees as micro, firms with three to ten employees as small, firms with 11-25 employees as medium and firms with 26 employees and above as large. Based on this classification, in Eritrea there are 962 wood- and metal-manufacturing firms in the three regions of Maekel, Debub and Anseba where the majority of such firms are found (Ministry of Trade and Industry, 2013). Stratified random sampling was used to extract the sample observations from each region. In order to meet the requirements for structural equation modelling (SEM) sample size, namely, 200 or more observations (Hair *et al.*, 2010), a total of 300 SMEs were included in the survey, from which 287 questionnaires were analysed after the data were cleaned.

Variables and their measurement

FS has been measured by financial and non-financial measures. In developing economies' SMEs, objective measures of FS are difficult to find because the firms rarely keep proper records (Spanos and Lioukas, 2001). Due to this, questions that captured perceived financial performance were used to measure the dependent variable, FSFS. The measure was adopted from Govindarajan and Gupta (1985) and Hoque (2004). The variables were increased sales, cash flow from operations, market share, customer satisfaction, firm growth and increased profits.

A modified version of Akman's (2008) instrument was used to measure innovativeness (INOV), in which the variables used were emphasis on product design, work system improvement and focus on quality. Peltier and Nadu's (2012) instrument was used to measure personal relations (RELN), the main variables being relations with suppliers, customers, and similar firms in the sector. To measure employees' technical skills (EMPS), Bacon's (2001) instrument was used, in which the variables were initiative, training, teamwork and technical know-how. A five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used to measure the variables.

Data analysis

The study used SEM for the statistical modelling and descriptive statistics to complement the model. Cronbach's α was used to test the reliability of the instrument (see Table I) and Kaiser-Meyer-Olkin was used to test the sample adequacy (see Table II). The test results were found to be adequate to ensure conformity to the requirements for using SEM. The statistics used in the SEM model included the normed fit index (NFI), the incremental fit index (IFI), the comparative fit index (CFI) and the root mean square error of approximation (RMSEA).

Results of hypothesis testing

Before the results of testing the hypotheses, the descriptive statistics including the demographic profiles of the SME owner-managers and the scores for the independent and dependent variables are presented. As shown in Table III, the majority (42.9 per cent) of the owner-managers had more than 20 years of experience, with the next most common those who had 11-15 years of experience (19.5 per cent). Most owner-managers had obtained junior high school and high school education (67.2 per cent), with a further 12.9 per cent having elementary education. This shows that experience has more value than education in the firms studied. This indicates the sector requires manufacturing skills that are developed through on-the-job training which made the owner-managers to pay little focus on education.

The results in Table IV indicate a mean score of 3.74 for innovativeness, indicating that most of the owner-managers are innovative, while personal relations exhibit a mean score of 3.20, showing the relevance of personal relationships. Employees' technical skills present a mean score of 3.70, indicating that most of the firms'

Construct	No. of items	Cronbach's α coefficient
Innovativeness	5	0.785
Employees' technical skills	4	0.868
Personal relations	4	0.713
Firm success	5	0.864

Table I. Reliability test

Variables	KMO	Determinant
Organisational capabilities	0.865 ($p < 0.000$)	0.027 ($p > 0.05$)
Firm success	0.809 ($p < 0.000$)	0.090 ($p > 0.05$)

Table II. Construct validity

Characteristics	%
Gender	
Male	87.8
Female	12.2
Work experience (years)	
Less than 6	6.6
6-10	17.1
11-15	19.5
16-20	13.9
More than 20	42.9
Education	
No formal education	1.0
Primary school	12.9
Junior secondary school	33.6
Secondary school	33.6
Diploma	18.2
Degree	0.7

Table III. Demographic profile of the owner-managers

	n	Minimum	Maximum	Mean	SD
Independent variables					
Innovativeness	287	1.25	5.00	3.7439	0.71155
Personal relations	287	1.00	5.00	3.2030	0.84273
Employees' technical skills	287	1.00	5.00	3.7027	0.71765
Dependent variable					
Firm success	287	1.00	5.00	3.1385	0.72705

Table IV. Statistical scores for the independent and dependent variables

employees are skilled. The dependent variable, FS, has a mean score of 3.14, implying that most of the owner-managers perceived their firms as successful.

The test statistic used to test the hypotheses is the critical ratio (CR). Based on a level of 0.05, the test statistic needs to be greater than 1.96 for the null hypothesis to be rejected (Hair *et al.*, 2010)

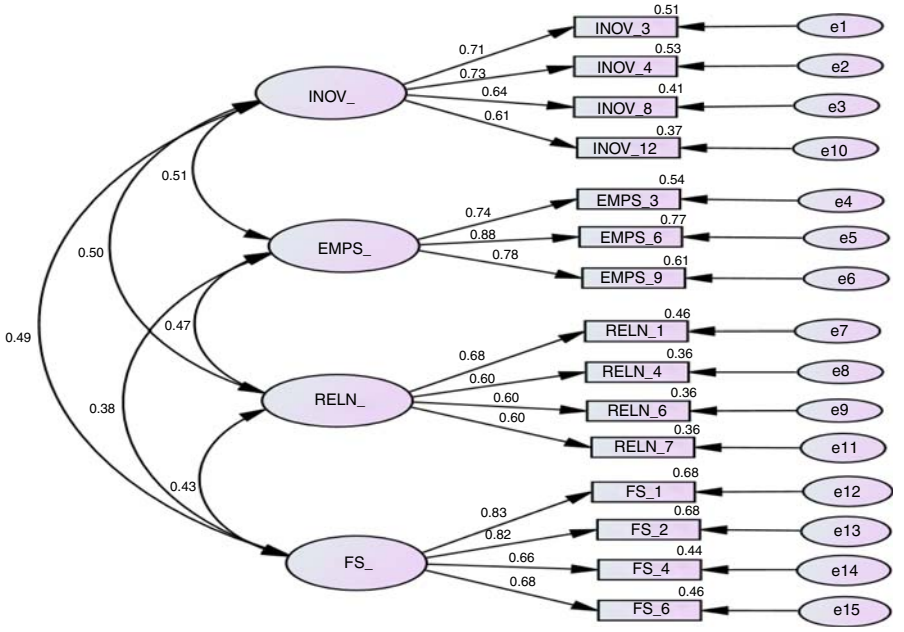
Organisational capabilities and FS

The study developed three hypothesised relationships between organisational capabilities and FS, as presented earlier. Table V shows the unstandardised and standardised coefficients for the three relationships, along with their CRs.

The results of the confirmatory analysis (Figure 1) and goodness-of-fit indices of the structural model (Figure 2) are NFI (0.909), CFI (0.958), TLI (0.948), IFI (0.959) and

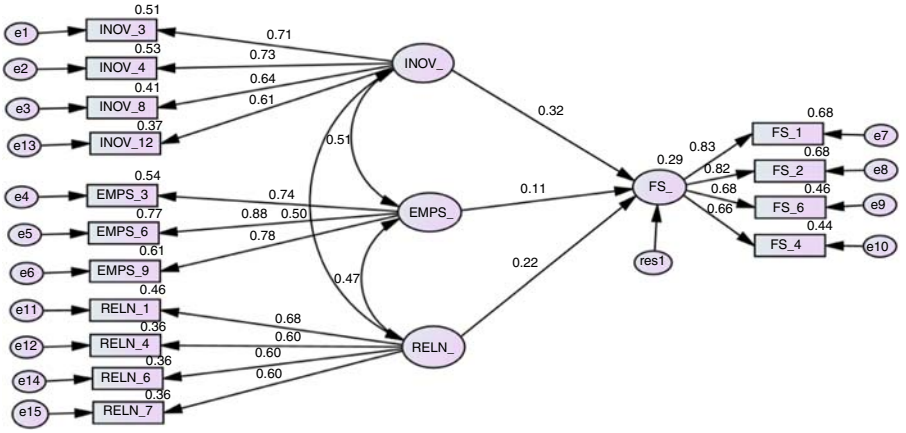
	Unstandardised Regression Weights	SE	CR	*p*	Standardised regression weights
FS ← INOV	0.412	0.119	3.455	0.000	0.317
FS ← EMPS	0.123	0.090	1.367	0.172	0.111
FS ← RELN	0.190	0.077	2.478	0.013	0.223

Table V. Regression weights of organisational capabilities on firms' success



Notes: $\chi^2 = 146.119$ (84 df); $p = 0.000$; GFI = 0.933; AGFI = 0.905; CFI = 0.958; RMSEA = 0.051; TLI = 0.948; NFI = 0.909; IFI = 0.959; PCLOSE = 0.443

Figure 1. Confirmatory factor analysis



Notes: $\chi^2 = 146.119$ (84 df); $p = 0.000$; GFI = 0.933; AGFI = 0.905; CFI = 0.958; RMSEA = 0.051; TLI = 0.948; NFI = 0.909; IFI = 0.959; PCLOSE = 0.443

Figure 2. Model for organisational capabilities and firm success

RMSEA (0.051), which do not differ from the models obtained and accepted in previous research using SEM (see e.g. Hair *et al.*, 2010). Following these precedents, the computed comparative fit indices were deemed appropriate and the models deemed to reflect a good fit for acceptance.

The *H1* relating innovativeness to FS was examined using the path leading from INOV to FS. From Table V, the standardised coefficient is associated with CR = 3.455; using a significance level of $p < 0.000$, CR > 1.96 indicates a significant relationship. A standardised regression weight of 0.317 indicates a strong positive relationship between owner-managers' innovativeness and FS, in line with the hypothesised relationship.

The *H2* was tested using SEM and, as expected, the relationship between RELN and FS was found to be significant (CR = 2.478, $p < 0.05$). The standardised regression weight between the two variables was 0.223, signifying a significant positive relationship. Based on these results, it can be concluded that owner-managers' personal relations are positively related to FS.

In the third hypothesis, the relationship between employees' technical skills (EMPS) and FS was examined. The results reveal a positive but insignificant relationship, with CR = 1.367 and $p > 0.05$. It can thus be stated that the relationship between employees' technical skills and FS is not supported, although the relationship is positive.

Discussion of findings

The findings from our study demonstrate that the owner-managers' innovativeness is positively and significantly related to FS. The results complement existing literature by adding support to the view that innovativeness influences FS. In line with Tsai and Yang (2013), our findings complement the argument that a firm with high innovative capability continuously introduces new products and technological processes that allow it to respond to the competitive market and adapt to changes in the business environment. Gunday *et al.* (2011) and Atalay *et al.* (2013) also found a significant relationship between innovativeness and firm performance. In response to the changing needs of customers in the wood- and metal-work industries in Eritrea (where there are no standard product lines), innovative abilities in products and processes are crucial. Given that most SMEs in this study were mostly operated and controlled by their owners, innovative use of resources by the firms was contingent on the owner-managers' skills. Consequently, a firm's success depends on the innovative abilities of the owner-manager to conceive and develop reliable and cost-effective products and processes. Although most of the owner-managers have been working in the industry since their early years, the ones who understand the industry and who have the skills to innovate are in a better position than their competitors.

This study found a significant positive relationship between personal relations and FS. This implies that, through cooperative interactions with suppliers and customers, SMEs can gain access to information and other resources, and develop the effective strategies and tactics needed to thrive in a changing environment. These relational capabilities are often used to evade deficient or absent market and institutional structures through non-market interactions. The study concurs with that of Ngugi *et al.* (2010) that relational capabilities enhance innovation and the co-creation of value, where small suppliers in formal relationship with their larger customers jointly create value through cost or revenue benefits. It is important, however, to note that SME owner-managers in Eritrea are operating in a country with an unstable economic environment in which there is a lack of established institutions to aid business-to-business relations. In such conditions, the firms' owner-managers use their personal relationships to access information, markets and resources. Specifically, in the absence of information on the supply of materials, personal contacts with suppliers and agents help the firms to secure their material needs.

Employees' technical skills were found to have a positive but insignificant relationship with FS. This is in contrast to previous studies showing that the

employees' skills directly influence new product development, which in turn influence business performance (Mendes and Machado, 2015). This can be explained in two ways. First, most of the owner-managers of the wood- and metal-manufacturing SMEs in Eritrea were in full control of the firms and fully involved in their day-to-day operations. The owner-managers' centralised control might prevent the employees from fully exercising their skills. Fabo *et al.* (2007), for instance, indicated that much of the workforce in SMEs is likely to fall within the owner-managers' immediate span of control and they see themselves as able to personally respond to pressures from customers or the need to change work processes. This centralised control has happened despite Wilkinson's (2004) argument that employees should be given the autonomy to make decisions in the workplace to utilise their skills innovatively. Second, most of the employees of these firms are hired when unskilled and develop their skills in the firms over time through on-the-job training. After they have gained experience, most do not stay long in the firms. They either start their own firms or move to larger firms for better pay. This implies that the insignificant result may not be because of the lack of skills of the employees, but due to the centrally controlled nature of the firms.

Conclusion and implications

This paper has shown that innovativeness and personal relations have a significant and positive relationship with FS. Implicitly, in an unstable economic environment, owner-managers' innovativeness in terms of products and process and their personal relations skills, could lead to better performance. Although employees' technical skills were found to have a positive relationship with FS, this relationship was insignificant, perhaps due to the control the owner-managers have over their firms' decisions. It appears that the firms' employees may possess the required skills, but they may not be involved in important product design and process decisions. The owner-managers are highly involved in the firms' operations and have close contact with customers, whereas employees have limited opportunities to get involved in decision making. This may be due to the long tradition of central control by the owner-managers of these firms. They centralise the management because they do not want to transfer their skills to the employees. This relates to the traditional theory of management whereby managers make decisions and employees execute them.

This paper adds knowledge to the theoretical debate by applying the RBV to SMEs in the context of a developing economy, and by attempting to measure the impact of organisational capabilities on FS as opposed to most previous studies that have been theoretical in nature. More to this, the study is one of the few to have examined organisational capabilities and their dimensions in Africa in general and in Eritrea in particular.

The results on relevance of innovativeness can enlighten policy makers' understanding of the relevance of innovativeness to the development of the wood and metalwork sub-sector. They suggest that the government can introduce capacity building programs to promote owner-managers' creative and innovative ability for the wood- and metal-work firms through apprenticeship and entrepreneurship training. In South Africa, for instance, a high level of innovation among manufacturing firms is partly attributed to the investment in quality training and the promotion of the entrepreneurs' innovative skills (World Economic Forum, 2015). The capacity for innovation helps to explain why the country has transformed its manufacturing sector and became the most developed manufacturing sector in Africa. From the practical

point of view, our results have some implications for SME owner-managers. First, they inform owner-managers of the value of product innovativeness for the success of their firms. Second, they can enlighten them of the value of personal relationships in the absence of institutions to support business-to-business relationships. Third, they encourage them to provide an avenue for employees to apply their skills and take independent decisions and actions, which appear to be highly beneficial for innovation. The owner-managers need to encourage innovative culture that must be shared throughout the firm.

Although the scope of the study was limited to wood- and metal-manufacturing SMEs, it would be of great interest to study this subject in a non-manufacturing firm context. This could be important as it would augment this study's findings and could provide more knowledge on the factors relating to organisational resources and capabilities, which may not necessarily be similar outside the wood- and metal-manufacturing business. Conducting a similar study in other contexts would facilitate a comparison of organisational capabilities that would in turn be useful for developing a theory, and for developing a benchmark for practical and policy purposes.

References

Q1

Adler, P.S. and Kwon, S. (2002), "Social capital: prospects for a new concept", *Academy of Management Review*, Vol. 1, pp. 17-40.

Adner, R. and Helfat, C. (2003), "Corporate effects and dynamic managerial capabilities", *Strategic Management Journal*, Vol. 24, pp. 1011-1025.

Akman, G. (2008), "Innovative capability, innovation strategy and market orientation: an empirical analysis in Turkish software industry", *International Journal of Innovation Management*, Vol. 2 No. 1, pp. 69-111.

Anderson, A.R. and Jack, S. (2002), "The articulation of social capital in entrepreneurial networks: a glue or a lubricant?", *Entrepreneurship and Regional Development*, Vol. 14 No. 3, pp. 193-210.

Arend, R.J. (2006), "Tests of the resource-based view: do the empirics have any clothes?", *Strategic Management Journal*, Vol. 24, pp. 1011-1025.

Atalay, M., Anafarta, N. and Sarvan, F. (2013), "The relationship between innovation and firm performance: an empirical evidence from Turkish automotive supplier industry", *Procedia – Social and Behavioural Sciences*, Vol. 75, pp. 226-235.

Bacon, N. (2001), "Competitive advantage through human resource management: best practices or core competencies", *Human Relations*, Vol. 54 No. 3, pp. 361-372.

Barney, J.B. (1991), "Firm resources and sustainable competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.

Carmeli, A. and Tishler, A. (2004), "The relationship between technological and organisational elements and organisational performance", *Strategic Management Journal*, Vol. 25 No. 13, pp. 1257-1278.

Coad, A. and Rao, R. (2008), "Innovation and firm growth in high-tech sectors: a quantile regression approach", *Research Policy*, Vol. 37 No. 4, pp. 633-648.

Fabo, B., Louis, R. and Lacoursiere, R. (2007), "HRM practice clusters in relation to size and performance: an empirical investigation in Canadian manufacturing SMEs", *Journal of Small Business and Entrepreneurship*, Vol. 20, pp. 25-39.

Fessaha, Y. (1996), "A study of the private sector in Eritrea with a focus on the MSMEs", working paper, Asmara.

Galbreath, J. and Galvin, P. (2008), "Firm factors, industry structure and performance variations: new empirical evidence to a classical debate", *Journal of Business Research*, Vol. 61 No. 2, pp. 109-117.

Garengo, P. and Bernardi, G. (2007), "Organisational capability in SMEs' performance measurement as a key system in supporting company development", *International Journal of Productivity and Performance Management*, Vol. 56 No. 6, pp. 518-532.

Q2 Government of Eritrea (1994), "Macro policy".

Govindarajan, V. and Gupta, A.K. (1985), "Linking control systems to business unit strategy: impact on performance", *Accounting, Organisations and Society*, Vol. 10, pp. 51-66.

Grant, R.M. (2002), *Contemporary Strategy Analysis*, 4th ed., Blackwell Publishers Inc., Oxford.

Gunday, G., Ulusay, G., Kilic, K. and Alpakan, L. (2011), "Effects of innovation types on firm performance", *International Journal of Production Economics*, Vol. 133 No. 2, pp. 662-676.

Hair, J.F., Black, W.C., Anderson, R.E. and Babin, B.J. (2010), *Multivariate Data Analysis*, Prentice Hall, London.

Hansen, M.W. and Schaumburg-Muller, H. (2010), "Firms in developing countries: a theoretical probe into the borderland of business studies and development studies", *European Journal of Development Research*, Vol. 22 No. 2, pp. 179-216.

Helfat, C. and Peteraf, M. (2015), "Managerial cognitive capabilities and the microfoundations of dynamic capabilities", *Strategic Management Journal*, Vol. 36, pp. 831-850.

Hoque, Z. (2004), "A contingency model of the association between strategy, environmental uncertainty and performance measurement: impact on organisational performance", *International Business Review*, Vol. 13, pp. 485-502.

Islam, M.A., Khan, M.A., Obaidullah, A.Z. and Alam, M.S. (2011), "Effect of entrepreneur and firm characteristics on the business success of small and medium enterprises (SMEs) in Bangladesh", *International Journal of Business and Management*, Vol. 6 No. 3, pp. 289-299.

Johannisson, B. (1995), "Paradigms and entrepreneurial networks: some methodological challenges", *Entrepreneurship and Regional Development*, Vol. 7 No. 3, pp. 215-231.

Kafetzopoulos, D. and Psomas, E. (2015), "The imppact of innovation capability on the performance of manufacturing companies", *Journal of Manufacturing Technology Management*, Vol. 266 No. 1, pp. 104-130.

Q3 Kaplan, R.S. and Norton, D.P. (2004), "Strategy maps: they show you how to describe, measure, and align your intangible assets to achieve superior performance and become more profitable", *Strategic Finance*, March.

Klaas, B.S., Klimchak, M., Semadeni, M. and Holmes, J.J. (2010), "The adoption of human capital services by small and medium enterprises: a diffusion of innovation perspective", *Journal of Business Venturing*, Vol. 25, pp. 349-360.

Kraaijenbrink, L., Spender, J.C. and Groen, A.J. (2010), "The resource-based view: a review and assessment of its critiques", *Journal of Management*, Vol. 36, pp. 349-372.

Leiblein, M.J. (2011), "What do resources and capability based theories propose?", *Journal of Management*, Vol. 37 No. 4, pp. 909-932.

Mendes, L. and Machado, J. (2015), "Employees' skills, manufacturing flexibility and performance: a SEM applied to automotive industry", *International Journal of Production Research*, Vol. 53 No. 13, pp. 4087-4101.

Menguc, B. and Auh, S. (2006), "Creating a firm-level dynamic capability through capitalising on market orientation and innovativeness", *Journal of the Academy of Marketing Science*, Vol. 34, pp. 63-73.

Q4 Ministry of Trade and Industry (2013), "Eritrea enterprises report".

Ngugi, I.K., Johnsen, R.E. and Erdelyi, P. (2010), "Relational capabilities for value co-creation and innovation in SMEs", *Journal of Small Business and Enterprise Development*, Vol. 17 No. 2, pp. 260-278.

Peltier, J.W. and Nadu, G.M. (2012), "Social networks across the SME organisational lifecycle", *Journal of Small Business and Enterprise Development*, Vol. 19 No. 1, pp. 56-73.

Plahshappa, N. and Gorden, M.A. (2007), "Collaborative business relationships: helping firms to acquire skills and economies to prosper", *Journal of Small Business and Enterprise Development*, Vol. 14 No. 2, pp. 264-279.

Sanchez, J.J.N. (2006), "The effect of information technology management capability on firm competitiveness", presented at the European and Mediterranean Conference on
Q5 Information System (EMCIS), Costa Blanca.

Smith, K.G., Collins, C.J. and Clark, K.D. (2005), "Existing knowledge, knowledge creation capability, and the rate of new product introduction in high-technology firms", *Academy of Management Journal*, Vol. 48 No. 2, pp. 346-357.

Spanos, Y.E. and Lioukas, S. (2001), "An examination into the causal logic of rent generation: contrasting Porter's competitive strategy framework and the resource-based perspective", *Strategic Management Journal*, Vol. 22, pp. 907-934.

Spanos, Y.E., Zaralis, G. and Lioukas, S. (2004), "Strategy and industry effects on profitability: evidence from Greece", *Strategic Management Journal*, Vol. 25 No. 2, pp. 139-165.

Teece, D.J. and Pisano, G. (1994), "The dynamic capabilities of firms: an introduction", *Industrial and Corporate Change*, Vol. 3 No. 3, pp. 537-556.

Tesfayohannes, M. (1998), *The Promotion of Small and Medium Scale Enterprises Financing as a Contribution to Sustainable Industrial Development: The Case of Eritrea*, Shaker Verlag, Aachen.

Therrien, P., Doloreux, D. and Chamberlin, T. (2011), "Innovation novelty and (commercial) performance in the service sector: a Canadian firm level analysis", *Technovation*, Vol. 31, pp. 655-665.

Q6 Tomer, J.F. (1995), "Strategy and structure in the human firm: beyond hierarchy, toward flexibility and integration", *Journal of Socio-Economics*, Vol. 24.

Tsai, K.H. and Yang, S.Y. (2013), "Firm innovativeness and business performance: the joint moderating effects of market turbulence and competition", *Industrial Marketing Management*, Vol. 42 No. 8, pp. 1279-1294.

Vicente, M., Abrantes, J.L. and Teixeira, M.S. (2015), "Measuring innovative capability in exporting firms: the INNOVSCALE", *International Marketing Review*, Vol. 32 No. 1, pp. 29-51.

Wilkinson, A. (2004), "Quality and the human factor", *Total Quality Management*, Vol. 15 No. 8, pp. 1019-1025.

World Bank (2009), "Eritrean enterprise survey", International Finance Corporation, World Bank Group, New York, NY.

Q7 World Economic Forum (2015), "African competitiveness report 2015", available at: www3.weforum.org/docs/...2015/Africa_Competitiveness_Report_2015

Zatezalo, A. and Gray, B. (2000), "Competitor orientation of small organisations", *Proceedings of ANZMAC 2000 Visionary Marketing for the 21st Century, Facing the Challenge*, pp. 1487-1491.

Zohdi, M., Shafeai, R. and Hashemi, R. (2013), "Influence of relational capabilities on Business perfromance: case of Kermanshah industial city SMEs", *International Journal Research Journal of Applied and Basic Sciences*, Vol. 4 No. 3, pp. 589-596.

Further reading

Helfat, C. and Peteraf, M. (2003), "The dynamic resource based view: capability lifecycles", *Strategic Management Journal*, Vol. 2 No. 10, pp. 997-1010.

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