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Examining the paths from export strategic orientations to export performance: the mediating role of export resource transformation capability

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Abstract

Export strategic orientation research suggests that export entrepreneurial orientation (EO) and market orientation (MO) directly affect export performance. Based on the dynamic capability theory, this study hypothesizes that export resource transformation capability is an intervening factor that helps explain how EO and MO, individually and jointly, impact export performance. Using archival and survey data from small- and medium-sized exporters in the United Kingdom and Nigeria, the study finds that export resource transformation capability partially mediates the individual effects of EO and MO on export performance in both samples. Results further show that export resource transformation capability does not mediate the joint effect of EO and MO on export performance. The findings help provide a more complete understanding of how export strategic orientations might be related to export performance.

Keywords: export strategic orientations; export entrepreneurial orientation; export market orientation; export resource transformation capability; export performance; cross-national study

Introduction

International business research suggests that variation in a firm's export performance is a function of changes in its export entrepreneurial and export market orientations (Cadogan et al., 2009; Kuivalainen et al., 2007). On the one hand, export entrepreneurial orientation (EO) is often conceptualized to be reflective of a firm's general proclivity to discover/identify and exploit new export market opportunities (Boso et al., 2012), and, as such, it has been central to the international entrepreneurship thinking (Coviello et al., 2011; Covin & Miller, 2014). Extant research shows that variation in a firm's entrepreneurial orientation causes changes in its export market performance (e.g. Kuivalainen et al., 2007; Guo et al., 2014; Zhang et al., 2012). On the other hand, export market orientation (MO) is viewed as a central tenet of the export marketing thought as it entails implementation of the marketing concept in export markets (Cadogan et al., 2009). It is noted to be reflective of a firm's general orientation towards export market customers, competitors and other exogenous factors, and, as such, it is revealed in the tendency of the firm to generate, disseminate and response to export market intelligence (Cadogan et al., 2001). The market intelligence that is developed is, therefore, seen as a resource that earns the firm superior export performance (Morgan et al., 2003; Julian et al., 2014).

While the view that export strategic orientations have direct causal effects on export market success is instinctively appealing, and has served as a baseline model in many empirical studies, scholarly works have long questioned the theoretical adequacy of this view (e.g. Lisboa et al., 2011; Noble et al., 2002; Wang, 2008). For example, Wang (2008) argues that a firm's general proclivity towards learning is a missing link connecting EO to firm performance, and Noble et al. (2002) have argued that organizational learning and innovativeness mediate the causal path between MO and firm performance. Within the context of exporting, Lisboa et al. (2011) find that exploitative and explorative product and

market capabilities serve as channels through which EO affects export performance. In this study, we follow this later line of reasoning to propose a theoretical framework to argue that variations in a firm's EO and MO result in changes in its export performance through its ability to reconfigure its export-related asset base (Jantunen et al., 2005; Lado et al., 1992).

The launch of the personal digital assistant (or PDA) handheld device is a useful example to showcase our theoretical model. In 1997, Palm Incorporate, at that time a subsidiary of U.S. Robotics, launched the PalmPilot Personal and PalmPilot Professional handheld devices, after recognizing that there was a market opportunity for an ultra-small personal computer that enabled users, just by the touch of a button, to synchronize e-mails, contacts, schedules, and personal information on a handheld device with information on their personal computers. Before taking the risk to commit resources to produce the devices, the company gathered intelligence to learn about how potential users would use them. Market intelligence showed that the core tasks for which potential users would use a handheld device were primarily synchronizing e-mails and scheduling appointments with contacts. Palm Inc then reconfigured its existing hardware and software systems to add e-mail and network capabilities to its Pilot-connected organizer, an earlier technology. Customers of earlier versions of the device could then upgrade to the new software features of the PalmPilot through a user-installable upgrade software (Grieve, 1997). By the end of 1997, the PalmPilot had generated a global market share of 51% in the personal organizer market (Chaston, 2009). Thus, this PalmPilot case provides a useful example of how entrepreneurial proclivity is combined with strong market intelligence processes to build a technology-based resource reconfiguration competence to create superior market value.

The dynamic capability theory helps explain the logic underlying our theoretical model (e.g. Hodgkinson and Healey, 2014; Teece, 2007). The theory states that “dynamic capabilities are a set of specific and identifiable processes such as product development,

strategic decision making, and alliancing” (Eisenhardt and Martin, 2000, p.1105), which are characteristic of the traditional notion of organizational processes with predictable outcomes (Teece, 2007). A key tenet of the dynamic capability theory is that resource stock drives capability development (Ketchen et al., 2007), which in turn drives performance (Chang et al., 2014). In drawing insights from the dynamic capability standpoint, therefore, we identify the notion of export resource transformation capability (RTC), referred to as a firm’s ability to redefine, reconfigure and redeploy salient resources (e.g. export personnel, export finance, export experience and know-how) to exploit export market opportunities (c.f. Johnson et al., 2003; Sanchez, 1995). Thus, we make two contributions to the exporting literature. First, prior research has discussed export strategic orientations as direct causal determinants of export performance (Sousa et al., 2008). We extend this existing theorization by suggesting that RTC is a vehicle through which EO and MO influence export performance. Second, while extant export strategic orientation research tends to focus on empirical examination of export strategic orientations in a single country study, often in Western advanced economies (e.g. Cadogan et al., 2009; Kuivalainen et al., 2007), this study draws on notable studies (e.g. Zhang et al., 2012; Guo et al., 2014) to bring on board a developing-economy market perspective to provide a more complete understanding of how EO and MO are related to export performance (Fang and Zou, 2009). Accordingly, this study enhances external validity and generalization of export strategic orientation research by testing the proposed theoretical framework on cross-national datasets from the United Kingdom and Nigeria.

Theoretical development and hypotheses

Resources, Capabilities and Firm Performance: Insights from Dynamic Capability Theory
Predicting export performance outcome is a major research agenda in international business research as success in exporting has been credited as accounting for the survival of many

firms (e.g. Murray et al., 2011) and the growth of many nations (Styles and Ambler, 1994). In their efforts to determine levels of export performance, international business scholars have drawn on multiple theoretical lenses and contexts (see Sousa et al., 2008; Morgan et al., 2004). One such theoretical perspective is dynamic capability theory (e.g. Morgan et al., 2004). Anchored in the resource-based theory (Barney, 2001), Teece et al. (1997, p.516) define a dynamic capability as a “firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments”. An important tenet of this theory is that a firm’s success is a function of its “ability” to proactively create accumulation of unique, valuable and imperfectly imitable resources and competences (Lado et al., 1992). Within the dynamic capability framework, the firm is viewed as a nexus of resources and capabilities that are not freely bought and sold in the spot market (Conner, 1991; Rumelt, 1987; Wernerfelt, 1984), and for that matter a firm’s competitive advantage is sustained only if its stock of valuable, rare, imitable and non-substitutable resources are mobilized to create unique and difficult to copy capabilities (Hart, 1995). To this end, the dynamic capability theory emphasizes firm capability as a channel through which resources influence performance (Barreto, 2010; Lu et al., 2010).

Given its theoretical origin from the resource-based theory (Barreto, 2010), it can be argued that the conceptual domain of a dynamic capability is the idea of how a firm can define, integrate, build, reconfigure and redeploy its resources and competences to effect change in its marketplace fortunes (Teece, 2007; Eisenhardt and Martin, 2000; Hodgkinson and Healey, 2014). Thus, while resources (or assets) are “organizational attributes that an organization can acquire, develop, nurture, and leverage for both internal (organizational) and external (marketplace) purposes)” (Srivastava et al., 2001, p. 779), capabilities are a firm’s ability to leverage value from its resources (Teece, 2007). Day (2011) sums this up by arguing that, while resources exist for firms to nurture and use, dynamic capabilities are a category of

resources that provide firms with the ability to sense organizational changes, respond to the changes and select a configuration of resources that deliver economic profit. Day's (2014, p. 28) commentary concludes, therefore, that dynamic capabilities are a "repeatable and deeply embedded set of skills and knowledge exercised through processes".

In borrowing from this dynamic capability principle, the international business literature has examined how multinational enterprises draw on their capabilities (e.g. marketing skills, market knowledge and product innovation) to convert their resource stock (e.g. channel relationships, culture and experiences) to earn superior international performance (Cui et al., 2005; Lu et al., 2010; Fang and Zou 2009). For example, in a study of international joint ventures (IJVs) in China, Fang and Zou (2009, p. 742) find that marketing dynamic capabilities are "influenced by IJV resource magnitude, resource complementarity, organizational culture, and organizational structure" to affect performance. Similarly, Lu et al. (2010) investigate a large sample of Chinese entrepreneurial firms and find that, while institutional capital and managerial ties are important in the firms' internationalization efforts, their international performance impacts are channelled through their adaptive capability.

In line with the dynamic capability theory and extant international business literature, therefore, we identify EO and MO export opportunity discovery and informational resources, and firms' ability to transform export resource as a specialized capability. We further argue that variations in these resources and transformative capability can cause changes in export performance. On the one hand, EO captures activities that firms perform to discover export market opportunities (Balabanis & Katsikea, 2003). As such, it is reflected in a firm's innovative, risk-taking, proactive, competitively aggressive and autonomous proclivities (Lumpkin & Dess, 1996; Kuivalainen et al., 2007), providing the firm with export market opportunity recognition and exploitation resource. On the other hand, MO explains how a firm incorporates the marketing concept into its export operations, and this is manifested in

the firm's propensity to generate, disseminate and respond to export market information (Cadogan et al., 2009; Srivastava et al., 2001), providing the firm with an informational resource.

While it is intuitively appealing to expect the two export strategic orientations to directly impact export performance, empirical findings suggest that the causal path from the two orientations to export performance is not always direct (e.g. Noble et al., 2002; Wang, 2008). As Table 1 shows, while strategic orientation literature has drawn attention to, and demonstrated with empirical evidence that, the two distinct but related strategic orientation constructs are not always directly related to performance, very little exporting research has examined the channels through which EO and MO are connected to export performance. Earlier works examining intervening forces linking export strategic orientations to export performance produced divergent findings, and in many cases EO and MO are rarely examined simultaneously. For the studies that have examined the orientations from an exporting context, evidence suggests that export strategic orientation does not always drive export performance. For example, the work of Zou et al. (2003) shows that cost and branding strategies fully mediate the effect of marketing competences on the financial performance of exporting ventures. Additionally, Lisboa et al.'s (2011) work demonstrates that exploitative and explorative product and market capabilities serve as channels through which international EO affects export performance. Thus, while researchers are beginning to study how to bridge the gap between the EO and MO research, there is still a dearth of knowledge on the channels through which EO and MO, individual and jointly, impact export performance.

Thus, while studies have proposed contingency approaches (e.g. Cadogan et al., 2009; Murray et al., 2011; Boso et al., 2012), this study follows scholarly works that have proposed an intervention approach to examine how EO and MO impact export performance. To this end, we draw insights from Sanchez (1995) to argue that flexible use of core export resources

is a transformative capability that can affect a firm's bottom-line – its export market. The literature on strategic transformation makes reference to resource transformation as a firm's ability to redefine, reconfigure, and redeploy its chain of resources to meet overall organizational goals and environmental jolts (Johnson et al., 2003; Sanchez, 1995).

Foundational works on resource orchestration provide a further theoretical basis for expecting EO and MO to drive performance through a firm's ability to 'orchestrate' its resources to realize its strategic objectives (Sirmon et al., 2011). Within the context of strategic orientation, Chirico et al. (2011, p. 311) examine EO as an organizational philosophy that "provides the mobilizing vision to use firm resources. By directing the use of resources, EO not only provides an objective, but also helps identify the resources necessary to support the objective". Thus, RTC provides a firm with an ability to reconceptualize and realign its resources to meet broader organizational goals (Sanchez, 1995).

In our field interviews with senior management in several exporting SMEs, it was revealed that export resource management is an important capability for the exporters. One senior manager in charge of international business development remarked that, "a few years back one of our colleagues attended a technology conference in California and had a discussion with a potential client for us to supply Russia. We needed to grab that opportunity quickly and make this client happy. We were successful in doing that because we have a flexible approach to moving our resources around". This remark clearly shows that a firm is more likely to be successful in its export operations if it focuses on directing its entrepreneurial and market-based efforts to building smart use of its resources. This comment can also be linked to ground-breaking works in firm resource management that suggest that effective firm resource management includes processes of "structuring the firm's resource portfolio, bundling the resources to build capabilities, and leveraging those capabilities with the purpose of creating and maintaining value for customers and owners" (Sirmon et al.,

2007, p. 273). This brings to mind a major topic in the organizational structure literature that suggests that firms require capability to leverage and deploy resources held at different functional units (e.g. R&D, marketing, human resources and financial and accounting) to ensure their optimal use (Johnson et al., 2003). It is argued that the ability to redefine, reconfigure and redeploy critical resources offers firms the capacity to “generate firm-specific real options for the configuration and reconfiguration of appreciably superior value propositions” (Johnson et al., 2003, p. 77), and this can be a major source of superior performance (Sanchez, 1995; Cui et al., 2005). In sum, we expect that RTC helps firms to channel market opportunities that they have discovered and intelligence gathering for superior performance.

Table 1 about here

Export Entrepreneurial Orientation, Export Resource Transformation Capability and Export Performance

International entrepreneurship literature suggests that EO is related to export performance (e.g. Coviello et al., 2011; Covin & Miller, 2014), and evidence supports the notion of a directional relationship between EO and export performance based on three core arguments (e.g. Zahra & Garvis, 2000; Balabanis & Katsikea, 2003; Boso et al., 2012). First, it is argued that entrepreneurial-oriented exporters have a strong proclivity to innovate in export operations, enabling such firms to focus attention and efforts on using novel and creative processes and technologies to develop and market products that delight customers. As a result, innovative exporting firms benefit from pioneering and first-mover advantages, which then enable these firms to dominate their export market to earn above-average sales (Shane & Venkatraman, 2000). Second, entrepreneurial-oriented exporters are proactive businesses that anticipate and act on future market needs and wants, which affords such firms the opportunity

to offer new products/services to the market ahead of their competitors (Zahra and Garvis, 2000). Third, entrepreneurial-oriented firms are competitively aggressive and more willing to commit a significant amount of resources to export operations with unknown outcomes. As such, such firms enjoy the advantage of reshaping their industry value chain by forcing competitors to behave differently.

While such direct effect assertions are appealing, we contend that EO is an organizational resource that offers only a potential economic value, providing a firm with a vision for achieving its strategic goals (Chirico et al., 2011). From a dynamic capability perspective, we argue that EO causes changes in export performance by first driving a firm's ability to reorganize its resource base to exploit entrepreneurial opportunities. For example, Day's (1994, p. 41) theory on capabilities of market-driven organizations argues that a superior market-sensing know-how helps "inform and guide both spanning and inside-out capabilities". Furthermore, Barnett et al. (1994, p. 12) suggest that recognition of a new market opportunity (or threat) "can cause current practices in the organization to be considered inadequate. Hence, a firm that faces competition is more likely to refine current routines". Several other studies argue that EO plays a role in building resource reconfiguration capability (Jantunen et al., 2005; Baker and Nelson, 2005; Fisher, 2012). It is argued that entrepreneurial-oriented firms seize opportunity through their deliberate actions. In order to exploit opportunities, Jantunen et al. (2005, p. 227) argue that an entrepreneurial-oriented firm needs to build "new processes, business models, complementary assets and methods [... including] capabilities [to] transform its asset base and reconfigure its processes and structures in order to achieve new valuable resource combinations". In re-engineering new uses and configurations of resources, an entrepreneurial-oriented firm boosts the productivity of its resources and efficient matching of its asset base to environment requirements, to improve its performance.

With the arguments above, it can be expected that, by being active in reconfiguring how resources are used and by being proficient in orchestrating new uses of resources (Sirmon et al., 2011), an EO firm should be more successful in seizing market opportunities. This argument is reflective of the notion of entrepreneurial resource orchestration (Sirmon et al., 2007), which suggests the need to reduce resource inefficiencies in exploration of entrepreneurial opportunity. Greater EO requires an escalation in a firm's resource use as more resources need to be committed to high-risk projects and novel innovations. While efforts to launch novel innovations require substantial resource commitment, a greater resource configuration capability enables the firm to leverage its resources in novel ways to seize an opportunity (Fisher, 2012). Thus, by being active in finding new resource combinations and with advanced capability in reconfiguring resources, processes and structures, an EO firm should be more capable of taking advantage of new export market opportunities, and this should be reflected in increases in its export performance.

Accordingly, we argue that:

H1: Export resource transformation capability mediates the relationship between export EO and export performance.

Export Market Orientation, Export Resource Transformation Capability and Export Performance

Empirical studies on the export MO – export performance continue to provide evidence to support the claim that exporting firms that are market-oriented generate superior performance in export markets (e.g. Cadogan et al., 2009; Racela et al., 2007). Several arguments are advanced to back a positive relationship between MO and export performance. First, export market-oriented firms prioritize export customer intelligence acquisition, sharing and usage, and, for that reason, such firms are able to learn about their export market customers' expressed and latent needs (Srivastava et al., 2001). Consequently, because market-oriented

firms are market-facing organizations, they are able to develop and deliver products or solutions that customers need the most, relative to the competition (Cadogan et al., 2001). Second, market-oriented firms are also customer-connected, channel-linked and informed about competitors (Murray et al., 2011), providing such firms with the advantage to acquire and absorb knowledge from key market players such as customers, distributors, competitors, and suppliers, which enables them to design and deploy products and solutions that are superior to those of their competitors. Third, given their closeness to export customers, connection to channels, and deep knowledge about competitors' offerings and other exogenous export market environment forces, export market-oriented firms tend to engage in line and brand extensions that better satisfy specific niche market demands (Murray et al., 2011). Accordingly, it is argued that export market-oriented firms generate superior performance than their less market-oriented counterparts.

We argue that variations in export market-oriented activities will first lead to conversion of intelligence resources into products or solutions for customers through a process of resource reorganization (Srivastava et al., 2001). Importantly, collected market intelligence resources must be defined, transformed and leveraged. From an organizational capability perspective, we argue that exporting firms can better exploit the benefits of export market intelligence by developing greater capability in redefining, reconfiguring and deploying their internal resources held in different functional units (Johnson et al., 2003). This is necessary because contemporary export market intelligence is not so obvious (Cadogan et al., 2009); hence, export success is likely to be determined by a firm's ability to redefine, reconfigure and redeploy its stock of export market-relevant resources to be able to convert export information into profitable market offerings (Menon et al., 1997).

For example, greater capability in reorganizing resources ensures that frontline export salespeople find it less costly to switch critical resources (e.g. export personnel and budget)

committed to a particular export customer segment to an alternative segment to effectively exploit a market opportunity. In addition, greater competence in coordinating how firm resources are used can help boost cohesion, compromise and confidence among functional units, which can then help channel export market intelligence to export market effectiveness. When inter-functional exchange of critical resources is well-coordinated, employees are more willing to support one another emotionally and logistically in helping to implement the generated export market intelligence. Miller and Friesen (1983) argue that firms that base their resource usage decisions on solid market intelligence do earn superior performance. Consequently, this study delineates the mediating role of RTC in the export market orientation – export performance relationship. Taken together, we argue that:

H2: Export resource transformation capability mediates the relationship between export MO and export performance.

Combined Effect of Export Entrepreneurial and Market Orientations

A major contention in the resource-based theory is that the locus of sustainable firm performance lies in a firm's propensity and ability to pursue productive opportunities by seeking complementarity among individual resources. In drawing insight from research on resource interdependencies (Kor and Leblebici, 2005) and resource complementarities (Tece, 2007) as sources of performance, Wiklund and Shepherd (2011) argue that EO encapsulates how a firm organizes itself to be able to seize an opportunity. However, how this entrepreneurial process impacts a firm's bottom line is a function of how it is combined with the firm's market-based assets (Baker and Sinkula, 2009). To this end, this study contends that the manner in which a firm is organized to seize a market opportunity, when combined with its MO, could cause the firm to develop new resource combinations to improve its performance. Our argument here is that, "it is not the value of an individual resource that

matters but rather the synergistic combination or bundle of resources created by the firm” that drives performance (Kraaijenbrink et al., 2010, p. 356). Thus, we propose a combined effect of EO and MO on RTC and export performance.

Specifically, we argue that, while EO may help a firm to discover a market opportunity, the incentive for that firm to develop proficiency in reconfiguring its resource base to seize the opportunity is boosted when the firm also has strong knowledge of the market. This is because MO provides the firm with strong awareness and real-time connectivity to customer problems, a clearer understanding of competitive offerings, and knowledge of environmental dynamics, constituting a major source of market opportunity. In addition, while EO may force a firm to develop new methods and processes to discover new technologies and products, Wiklund and Shepherd (2003) argue that the locus of new technology or product success lies in the users’ ability to articulate new product needs (see also Atuahene-Gima et al., 2005). A firm high in EO might lack prior knowledge of customer needs and problems and the ways to better address them, but MO fills this void in a firm’s knowledge base by providing the market intelligence and knowledge required to initiate appropriate configuration of resources to design solutions to customer problems. To this end, Wiklund and Shepherd (2003) conclude that firms lacking understanding of and familiarity with customer problems and the ways to serve customers may find it hard to design and implement market solutions, unless the firms are simultaneously market oriented.

Thus, in extending our arguments in H1 and H2, we argue here that resource management competence is an outcome of EO and MO as it speaks to how resources are defined, configured and deployed in line with the firm’s values, goals, and strategic priorities (Zheng et al., 2010). We contend that EO and MO, which are general organizational beliefs or philosophies about how market opportunities are exploited and market needs are satisfied, do not individually or jointly directly influence performance; rather, they exert their impact on

performance by first shaping a firm's new resource combinations and organization of processes and structures. Accordingly, we propose that,

H3: Export resource transformation capability mediates the combined effect of export EO and MO on export performance.

Research Method

Research Settings and Data Collection

The study began with interviews with 11 export managers aiming to develop new insights into exporters' resource management competences. The interviews helped us learn about the managers' language and subsequently guided the development of survey instruments for the study^a. Additionally, several interviews were held with experts on export entrepreneurship and marketing. A total of 22 such interviews were held. In all cases, we were interested in uncovering key strategic orientations and resource management capabilities that were relevant to the performance of exporting firms. Subsequently, in view of the importance of context for research rigour and practical relevance (Whetten, 2009), we tested our hypotheses among exporting firms in the United Kingdom (UK) and Nigeria, enabling us enhance the external validity and empirical generalizability of our proposed theory.

The United Kingdom Study

Two waves of survey were undertaken in the UK. In the first wave, a random sample of 830 exporting small- and medium-sized enterprises (SMEs) across multiple industries was generated from 2,180 eligible firms listed in the Bureau van Dijk and British export directory databases. Accordingly, we focused on firms that employed between five and 250 employees, and which were earning export sales at the time of the study. A questionnaire pack was then

^a Note that the purpose of our study was not to undertake grounded theory development; rather, we were interested in testing our a priori conceptual model in Figure 1.

sent to the sampled firms, addressed to the export manager or the chief executive officer. This group of managers is deemed to be knowledgeable about the firms' strategic activities and had been targeted in similar studies in the past (e.g. Balabanis & Katsikea, 2003; Julian et al., 2014; Leonidou et al., 2004). After two reminders, 245 responses were received, a 29.50% response rate. This was after we discounted non-deliveries, companies no longer exporting, and incomplete responses. This sample size and response rate compares well to a host of other comparable studies (e.g. Balabanis & Katsikea, 2003).

One year later, a second wave of the survey was administered to the finance managers of the 245 exporting firms that participated in the first study. This was to help obtain information on the firms' export performance indicators from a second source to procedurally eliminate common method and single informant biases (Guide & Ketokivi, 2015). Two key other reasons informed our choice of time lag. First, we followed Wiklund and Shepherd's (2011) advice for a time lag between the predictor and outcome variables because this helped reduce social desirability and reverse causality. Second, it takes some time before an investment in organizational resources and capabilities impacts performance (Lu et al., 2010). For that matter, it was necessary to allow a time lag in order to track how the studied export resources and capabilities impact export performance. A total of 212 firms provided complete responses on the export performance questionnaire, representing an 86.53% response rate. Subsequently, we base our analyses on the 212 matched responses.

The firms in our UK sample operated in the manufacturing (87%) and services (13%) industries (Wang, 2008). Specific industries were electronic and electrical equipment and components, textiles and garments, telecommunication, and related industries. The firms employed between 16 and 170 full-time employees, with a mean of 88 full-time employees. Average age of the firms was 52 years and annual revenue was US\$72.05 million. The mean percentage of export sales was 60.67% of total annual turnover. About 95% of the firms

exported their products and services to the European Union (or EU) market, 88% exported to Eastern Europe, 84.90% to North America and 59.60% served Mainland China. Other Asian countries (other than Mainland China) were served by 72.20%, while 67.80% exported to South and Central America. The Middle East, Australia/New Zealand, and Africa were served by 74%, 81.10% and 79.30% of the firms respectively.

The Nigeria Study

The Nigeria study involved a multi-industry survey of exporting SMEs. Several reasons justify the choice of Nigeria for the second study. First, Nigeria is the largest economy in Sub-Saharan Africa with an estimated 173.60 million consumers, a projected nominal gross domestic product (GDP) of US\$574 billion and purchasing power parity GDP of US\$1.109 trillion in 2015, and was expected to grow by .1% in 2015 (International Monetary Fund, 2015). The rapid growth of key non-oil sectors in this African economy has generated significant interest in the exporting firms operating in the country (Ibeh et al., 2012; Mmieh et al., 2012; Okpara, 2012).

We identified 1,000 exporting firms from the database of Small and Medium Enterprises Development Agency of Nigeria for the replication study, but, in order to balance our survey costs and the sample size needed to obtain statistical power, we randomly selected 450 firms for the study. This was after we had screened the firms to ensure that they employed between five and 250 full-time employees and were earning export sales. Further, in view of the infrastructural challenges in Nigeria, we also ensured that it was logistically possible to reach the firms to administer the survey by post, given the unreliable postal system in the country. Accordingly, we followed the existing literature (e.g. Acquah, 2012) to adopt a face-to-face delivery approach whereby our four trained interviewers personally handed the

surveys to the key informants (export managers or chief executive officers) to complete at their leisure and later collected them on an agreed date.

To ensure reliable responses, the four interviewers were trained extensively to ensure that they did not introduce any biases by prompting informants during the interviews. They were also trained to understand the objectives of the study, the importance of a number of administrative elements such as assuring informants of the confidentiality of their answers and filling in the questionnaire completely, and how to answer any requests for clarification. Since the interviewers clarified questions or answers on the spot, the reliability of the data was enhanced. To boost our ability to make cause and effect claims, and rule out common method bias, one year later, we telephoned the firms that participated in the first study to obtain export performance data. In the first study, we explicitly asked the firms to provide their contact telephone numbers to enable us undertake a follow-up study. With these contact details, we contacted the finance managers (or a senior manager other than the export managers or chief executive officers) for their firms' export performance data. Ultimately, 163 firms provided matched data, representing a 36.2% response rate.

The firms in the Nigeria sample operated in the manufacturing (66%) and services (34%) industries (Wang, 2008). Specific industries were agro-processing, cement manufacturing, oil refining, construction materials, beverages and tobacco, textiles, apparel and footwear, pharmaceutical products, ceramic products, plastic and rubber products, banking and telecommunication services. The firms employed an average of 125 full-time employees. Average age of the firms was 16 years and annual revenue was US\$2.3 million. The average percentage of export sales was 42% of total annual turnover. The firms exported mainly to other African markets (79%), EU market (12%) and other markets (9%).

ANOVA tests show no differences between early and late respondents in both samples in relation to total export sales, firm size and export experience. Two tests for common

method bias (i.e. Harman one-factor and marker variable tests) suggest no major common method bias concerns.

Measures

Details of items used to measure our constructs and their factor loadings are available in the Appendix.

Dependent Variable: In line with previous studies, we used both objective and perceptual measures of export performance (Racela et al., 2007; Cadogan et al., 2009). To assess export performance objectively, one year later we asked the finance managers of the firms to provide us with annual export sales, annual return on export sales and annual export profit data. We validated these objective measures with perceptual measures provided by the senior managers, capturing the managers' satisfaction with their firms' export performance in terms of export sales volume, export market share, export sales growth, and export profitability, measured on a seven-point rating scale ($\alpha = 0.91$). The correlation between the objective and perceptual performance measures was high in both samples (UK: $r = 0.82$, $p < .01$; Nigeria: $r = 0.76$, $p < .01$).

Independent Variables: To assess export market orientation, we used the export market orientation scale from Cadogan et al. (2001). The items assessed the three behavioural dimensions of the export market orientation construct: export intelligence generation, dissemination and responsiveness. These three factors captured the extent to which the firms targeted their export markets with the marketing concept (Cadogan et al., 2001). We employed 11 seven-point Likert scale items (1 = strongly disagree; 7 = strongly agree).

This study based the measure of export entrepreneurial orientation on the work of Boso et al. (2012) as their measures reliably tap all aspects of Lumpkin and Dess' five entrepreneurial orientation dimensions from the angle of export operations. Overall, six factors were generated: export product innovativeness (with two components: product innovation intensity and product innovation radicality), export risk-taking, export proactiveness, export competitive aggressiveness, and export autonomy. In this instance, 20 seven-point rating scale items were employed (1 = not at all; 7 = to an extreme extent).

Mediating Variable: Given that the exporting literature lacks measures that capture the export resource transformation (RTC) construct, we relied on the strategic management literature for insights to operationalize this construct. Specifically, we drew insights from Buckley and Casson (1998), Johnson et al. (2003) and Sanchez (1995) to define the RTC construct as a firm's ability to redefine, reconfigure and redeploy export market resources to exploit export market opportunities. Consequently, we developed new observed measures that reflect elements of resource redefinition, reconfiguration and redeployment. In all, seven reflective items were developed and measured on a rating scale that ranged from 1 (not at all) to 7 (to an extreme extent). In developing this reflective scale, we were guided by an established scale development procedure that places major emphasis on the intercorrelations among the scale items, and common variance, unidimensionality and internal consistency of the scale itself.

Covariates: We included four covariates (or control variables) in our conceptual model as these variables can affect export performance. These were firm size, measured by number of employees (logarithm transformed); international experience, measured by number of years the firms have been exporting (logarithm transformed); export intensity, measured as total

export sales to total annual sales (logarithm transformed); and industry types, categorized into manufacturing = 0 and services = 1.

Analyses

Measurement Assessment

We followed a two-step procedure to analyse the data in this study: measurement model assessment with the aid of confirmatory factor analysis (CFA), and subsequent structural equation modelling (SEM) assessment (Anderson & Gerbing, 1988). We relied on the LISREL 8.7 statistical package and maximum likelihood estimation method in both analyses. We addressed model fit by using absolute χ^2 and associated degrees of freedom index (D.F.). Given the sensitivity of χ^2 /D.F. to sample size, we further assessed the fit of our implied models by employing other fit heuristics such as comparative fit index (CFI), non-normed fit index (NNFI) and incremental fit index (IFI). Finally, we reported on root means square error of approximation (RMSEA) and standardized root means square residual (SRMR) for both models.

CFA tests were subsequently performed for all measures as a way of assessing measure validity (Anderson & Gerbing, 1988) as this allows for simultaneous specification, estimation and evaluation of hypothesized relations between constructs and their associated observed indicators. As can be seen in the Appendix, the measurement model achieved adequate fit in both samples: UK sample: χ^2 /D.F. = 861.41/609; RMSEA = 0.04; NNFI = 0.93; SRMR = 0.05; CFI = 0.94; Nigeria sample: χ^2 /D.F. = 969.79/609; RMSEA = 0.04; NNFI = 0.94; SRMR = 0.06; CFI = 0.95. Additionally, path coefficients in both samples were significant at the 0.01 level, suggesting evidence of unidimensionality and convergent validity. We observed that modification indexes and results show no evidence of cross loading in either sample. Composite reliability for each latent construct was greater than the

minimum threshold value of 0.60, as can be seen in Table 1. To assess discriminant validity, we compared the average variance extracted (AVE) of each first-order construct with the shared variance (i.e. square of all correlations) of this first-order construct and that of other first-order constructs (see Table 1). The AVEs were larger than the shared variances, indicating satisfactory discriminant validity (Bagozzi & Yi, 1988).

Table 2 about here

Having demonstrated the reliability and validity of all measures across both samples, a multi-group CFA of all items was undertaken to establish item invariance (Steenkamp & Baumgartner, 1998). Findings from the two-group invariance analysis revealed that the measures are invariant across the two samples given the acceptable fit for configural, factor, metric and error invariance tests. The error invariance test (the highest in order of the four invariance tests) returned an acceptable fit to the data ($\chi^2/D.F. = 1022.11/503$; RMSEA = 0.05; SRMR = 0.04; NNFI = 0.95; and CFI = 0.96). Note that invariance tests for the individual constructs across the two samples returned excellent fit statistics. For example, the results of the error invariance test for export performance revealed an excellent fit^b: $\chi^2/D.F. = 5.75/3$; RMSEA = 0.05; SRMR = 0.05; NNFI = 0.99; and CFI = 0.99.

Subsequently, we created summated scales from the items in both samples. To create composite measures of the three first-order factors of export market orientation, we first averaged across the export intelligence-generation items, to create a single item score. Likewise, we created a single item score for export intelligence dissemination and responsiveness by averaging their respective scale items. The three scores were then averaged to generate an export market orientation composite score. The export entrepreneurial orientation CFA model comprised six first-order factors. We first averaged across the items

^b Detailed results of the invariance tests conducted are available from the corresponding author upon request.

that measured each first-order factor to generate single item scores for intensity of product innovation, radicality of product innovation, risk-taking, proactiveness, competitive aggressiveness and autonomy. These new scores were subsequently averaged to create an export entrepreneurial orientation score. Given that export resource transformation capability comprised first-order reflective items, we created a single score by averaging across its seven indicators. Similarly, the three objective indicators to measure the export performance construct were averaged to create a single score, after their logarithm transformation was undertaken. While several statistical techniques can be used to calculate interaction terms between export EO and MO variables, Marsh et al. (2007, p. 578) suggest that efforts should be directed at achieving greater ‘parsimony [...] and robustness in relation to violation of assumptions (e.g., normality)’. In view of this, we used the traditional multiplication approach (Ping, 1995) to compute the interaction term for export EO and MO.

To this end, having mean-centred the EO and MO variables, they were then multiplied to obtain a product term. We then estimated a structural model and set the error variance of the latent variables at $[(1-p) \times \sigma^2]$, where p is the composite reliability and σ is the sample standard deviation of each construct. This enabled us generate estimates for the item loadings and error variances of the linear terms in the structural model. We then used Ping’s (1995) equations to calculate the item loadings and error variances of the interaction term. For the single indicant constructs (i.e. industry, size, experience and export intensity) we assumed a composite reliability value of 0.70 when computing their error variances (Ping, 1995).

Structural Model Estimation

Given the high degree of item invariance observed across the two samples, we followed Morgan et al. (2003) to then estimate and compare two competing multi-group structural models. We first estimated a two-group structural model in which the measures of the

constructs and the hypothesized structural paths between the constructs were constrained to be invariant across the two samples. The results obtained for this model were acceptable. A second two-group structural model was estimated in which the measures of the constructs were held equal across both samples, but the parameters for the structural paths between the constructs were allowed to vary freely across both samples. We found a large and significant increase in chi-square and deterioration in fit heuristics, indicating that the earlier model that assumed equality of measures and structural paths has a better fit to our data. However, we found that control paths were different (e.g. firm size and export intensity); hence, in following Anderson and Gerbing's (1988) advice, we analyzed the UK and the Nigeria samples separately. To examine our conceptual model, we used the structural equation modelling (SEM) approach outlined by MacKinnon et al. (2002) and James et al. (2006). The SEM approach is a preferred method because it “provides[s] researchers with a comprehensive means for assessing and modifying theoretical models” (Anderson and Gerbing, 1988, p. 411). Additionally, the method enabled us control for measurement error and to provide information on the level of fit of the models tested (James et al., 2006).

This requires estimation of the full mediational model as a baseline model. In testing full mediational models, James et al. (2006) suggest that there is no need to include paths from the independent variables (here EO, MO and EOxMO) to the dependent variable (here export performance). Other scholars have corroborated this view (e.g. MacKinnon et al., 2002), and this approach has recently been followed to test mediation models in the international business literature (e.g. Lu et al., 2010). Table 2 shows that the baseline model provides an acceptable fit in both samples: UK: $\chi^2/D.F. = 198.18/93$, $p = 0.000$, RMSEA = 0.07, SRMR = 0.06, NNFI = 0.87; and Nigeria: $\chi^2/D.F. = 164.60/93$, $p = 0.00$, RMSEA = 0.07, SRMR = 0.07, NNFI = 0.87.

We then followed the procedures used by Lu et al. (2010) to estimate a series of competing nested models against our baseline model. With respect to Model 1, the path corresponding to H1 was constrained to zero: EO→RTC was restricted in the baseline model. A significant increase in chi-square (and associated degrees of freedom) was taken to mean that the constrained path was useful in providing support for the baseline model. In Model 2, the MO→RTC path (i.e. H2) was set to zero and chi-square change was noted. In Model 3, the constrained EOxMO→ RTC path was set to zero, and a non-significant increase in chi-square was observed in both samples. This suggests that the EOxMO interaction term is not an important driver of RTC in either the UK or the Nigeria sample. Taken together, the baseline model was found to be superior to Model 1 and Model 2, but statistically different from Model 3.

Additionally, the baseline model was compared with a partial mediation model in Model 4. In this case, two extra paths were added to the baseline model: direct paths from EO, MO and EOxMO to export performance. We found that the partial mediation model produced a superior fit in both samples: UK: χ^2 /D.F. = 161.76/90; RMSEA = 0.06; SRMR = 0.05; NNFI = 0.92; and Nigeria: χ^2 /D.F. = 127.91/90, RMSEA = 0.05, SRMR = 0.05, NNFI = 0.92. On the basis of these results, we concluded that the partial mediation model was superior to the baseline model and it was therefore relied upon (rather than the baseline model) in additional model comparisons.

We then computed an additional three models to rule out alternative explanations relating to the partial mediation model. First, it could be argued that resources are not different from capabilities because transformation capability is another type of firm-specific resource that, like EO and MO, might be directly related to export performance. To remove this possibility, Model 5 was tested, in which case EO, MO, EOxMO and RTC were modelled as direct predictors of export performance. The results from Model 5 (UK: χ^2 /D.F. =

187.25/90; Nigeria: $\chi^2/\text{D.F.} = 165.99/90$) were inferior to the partial mediation model, Model 4 (UK: $\Delta\chi^2/\Delta\text{DF} = 25.50/0$; Nigeria: $\Delta\chi^2/\Delta\text{DF} = 38.08/0$).

We also ruled out the suggestion that RTC plays only a trivial role in predicting export performance. Accordingly, a non-mediation model was estimated in Model 6 by constraining the path linking RTC to export performance to zero. Results of the chi-square difference test were worse (UK: $\chi^2/\text{DF} = 179.48/91$; Nigeria: $\chi^2/\text{DF} = 131.85/91$). This indicates that RTC is not a trivial variable in our model. A third suggestion may be that RTC predicts export EO and MO to export performance. To rule out this possibility, we tested an additional rival model, Model 7, in which RTC is modelled as an antecedent variable impacting on EO and MO, and with EO and MO directly linked to export performance. Less acceptable model fits were received in both samples (UK: $\chi^2/\text{DF} = 189.66/94$; Nigeria: $\chi^2/\text{DF} = 217.86/94$), suggesting that the partial mediation model estimated in Model 4 is the best-fitting model in both samples. A fourth argument may be that RTC is a moderator of the effect of EO and MO on export performance. To rule out this argument, we tested a competing moderating effect model where $\text{EO} \times \text{RTC} + \text{MO} \times \text{RTC} \rightarrow \text{export performance}$ was estimated in both samples. The results showed inferior model fits relative to the partial mediation model, Model 4: (UK: $\chi^2/\text{DF} = 195.56/98$; Nigeria: $\chi^2/\text{DF} = 213.32/98$). Given these results, we rely on the partial mediation model, Model 4, to interpret our hypotheses.

Table 3 and Table 4 about here

Results

Table 4 presents the results of the standardized parameter estimates of the final structural model (i.e. the partial mediation model, Model 4). Overall, the partial mediation model achieves an R^2 of 35% for export performance and 32% for RTC in the UK sample, and in the Nigeria sample R^2 values of 36% and 44% are obtained for export performance and RTC

respectively. Hypothesis 1 argues that RTC mediates the relationship between EO and export performance. The results show that the EO→RTC relationship is significant in both samples (UK: $\gamma = 0.26$; $t = 3.10$; $p < 0.01$; Nigeria: $\gamma = 0.44$; $t = 4.05$; $p < 0.01$), and RTC→ export performance (UK: $\gamma = 0.34$; $t = 4.35$; $p < 0.01$; Nigeria: $\gamma = 0.18$; $t = 1.99$; $p < 0.05$) is significant in both samples. This provides support for hypothesis 1. Hypothesis 2 argues that RTC mediates the relationship between MO and export performance. The results show that MO → RTC (UK: $\gamma = 0.25$; $t = 3.21$; $p < 0.01$; Nigeria: $\gamma = 0.26$; $t = 2.24$; $p < 0.05$) is significant in both samples, and, given that RTC→ export performance is also significant, we argue that H2 is supported in both samples. In support of the partial mediation results, EO→ export performance (UK: $\gamma = 0.26$; $t = 3.74$; $p < 0.01$; Nigeria: $\gamma = 0.48$; $t = 4.93$; $p < 0.05$) and MO→ export performance (UK: $\gamma = 0.26$; $t = 3.93$; $p < 0.01$; Nigeria: $\gamma = 0.35$; $t = 3.55$; $p < 0.05$) relationships are also found to be significant in both samples. The study further argues in H3 that EO and MO interact to jointly impact export performance through RTC. The results show that the EOxMO interaction term is not significantly related to RTC (UK: $\gamma = 0.06$; $t = 0.80$; $p > 0.05$; Nigeria: $\gamma = 0.01$; $t = 0.09$; $p > 0.05$) and export performance (UK: $\gamma = 0.02$; $t = 0.43$; $p > 0.05$; Nigeria: $\gamma = -0.18$; $t = -1.61$; $p > 0.05$); hence, H3 is rejected in both samples.

Additional analyses using the perceptual export performance measures showed that the results are qualitatively unchanged^c. Specifically, we found that the EO → RTC (UK: $\gamma = 0.35$; $t = 3.46$; $p < 0.01$; Nigeria: $\gamma = 0.40$; $t = 3.58$; $p = 0.01$), MO → RTC (UK: $\gamma = 0.30$; $t = 2.97$; $p = 0.01$; Nigeria: $\gamma = 0.30$; $t = 2.72$; $p = 0.01$), and RTC → export performance (UK: $\gamma = 0.19$; $t = 2.45$; $p < 0.01$; Nigeria: $\gamma = 0.19$; $t = 1.97$; $p = 0.05$) relationships are significant in both samples. Further, we found that the joint effects of EO and MO on RTC and export

^c Results of the additional analyses are available from the corresponding author and can be made available upon request.

performance are not significant in both samples; thus, EO and MO alignment plays a limited role in enhancing RTC and export performance.

We further partitioned the total effects into direct and indirect effects^d for both EO and MO by employing the SPSS PROCESS function and bootstrapping method with bias-corrected 95% confidence interval (Preacher and Hayes, 2004). We found that the 95% confidence interval of the indirect effect obtained with 5,000 bootstrap resampling did not contain the value of zero in all cases. These results are further confirmed in the Preacher and Kelley (2011) Kappa-squared test for indirect effects. For the UK sample, the results showed that the bootstrap indirect effect of EO ($\beta = 0.047$; CI = 0.017 to 0.108) and MO ($\beta = 0.050$; CI = 0.014 to 0.112) did not contain a value of zero. With these indirect effect values, one can infer that RTC does partially mediate the two orientations to performance in a fairly uniform manner. In the case of the Nigeria sample, the indirect effects of EO ($\beta = 0.164$; CI = 0.071 to 0.282) and MO ($\beta = 0.102$; CI = 0.094 to 0.306) are both significantly different from zero. However, in the Nigeria sample it seems that EO dominates the effect, suggesting that Nigerian firms are able to improve their performance when they place greater emphasis on EO and RTC and less emphasis on MO.

Discussion

Theoretical Contribution

Despite years of scholarly discussion of the determinants of export performance, theoretical and empirical evidence regarding the influence of export EO and MO on export performance has received limited research attention in the international business literature, especially with respect to firms' internal resource transformation capabilities that connect the two orientations to export performance. In drawing insights from the dynamic capability literature, this study identifies and argues that RTC, a key export resource configuration process, mediates the

^d We thank an anonymous reviewer for suggesting this test to us.

effect of EO and MO on export performance. The results of our analysis of cross-national archival and survey data reveal that RTC plays a partial mediating role in linking EO and MO to export performance in UK and Nigeria exporting firms. With these findings, this study extends extant exporting research in several ways.

First, using dynamic capability theory as a background, this study provides answers to existing deficiencies in the exporting literature by capturing the mediating roles of RTC in linking EO and MO to export performance (Lu et al., 2010). We argue that, rather than focus on the export market opportunities explored through EO and export market intelligence generated by MO as direct drivers of export performance, these firm-specific resources can be leveraged and orchestrated together with other firm-specific assets to build transformative capabilities to boost export performance. Although the two export strategic orientations are related directly to export performance, this study provides evidence to explain that RTC provides a channel through which the two orientations explain variation in export performance. This piece of evidence is consistent with a largely untested proposition in the dynamic capability literature that resource stock does not per se explain variation in performance (Day, 2011), but through resource orchestration processes firms are able to generate superior performance from their resource base (Jantunen et al., 2005; Lu et al., 2010; Lado et al., 1992). In line with this dynamic capability theory, we find that a firm's ability to redefine, reconfigure and redeploy its export-related resources enables it to convert its export market intelligence and export market opportunities into superior export performance. The implication of this finding is that examination of the association between firm resources and export performance should take account of the internal resource configuration processes as an important intervening strategy.

Second, we provide new insights on the direct and indirect effects of EO and MO on firm performance from an exporting perspective, further extending understanding of the

dynamic capability and the resource management literatures (Morgan et al., 2004; Sirmon et al., 2011). To date, research has focused largely on the value of a firm's domestic entrepreneurial and market orientations, yet McDougall et al. (2000) suggest that international business activities involve qualitatively separate activities from domestic operations. An interesting finding from this research is that, while in the UK data EO and MO have an equal impact on RTC, in the Nigeria sample EO seems to have a greater impact on RTC than MO, further highlighting the need to study the strategic orientations from an international business perspective. We suggest that the difference in the two samples may be due to a difference in the stage of market development and this variation may have implications for whether EO or MO is more or less an important driver of export business success. In the UK, the market is mature and well developed; reliable customer information is readily available and accessible to exporters. Therefore, it is critical that MO is just as important as EO. However, in Nigeria, which is still developing and forming, EO can pay greater dividends than MO because the need to be market and customer oriented may not be as high as being entrepreneurially oriented (e.g. being innovative and aggressive). In addition, the difference in the findings may be a function of different levels of customer expectations. Specifically, customer expectations might not be as strong and developed in Nigeria as in the UK; hence, the lesser importance of MO in the Nigerian market. Thus, our efforts to study the interconnections between both export strategic orientations (individually and in combination), export resource management capabilities and export performance across two countries at different stages of market development are an extension of the existing literature.

Third, in order to examine the relationships involving EO and MO and export performance, we developed and used measures that tap export-specific entrepreneurial-oriented, market-oriented behaviours and resource transformation capability and performance. While prior research efforts have been expended to develop and validate export-specific

measures of EO and MO, measures capturing export-specific resource transformation capability are currently under-developed (Jantunen et al., 2005). In this respect, this study further contributes to the literature in that it provides researchers and managers with new export-specific measures that could be used to assess firms' resource management know-how in export markets. Our export resource transformation capability measures were validated in two major culturally distinct economies: the United Kingdom (an industrialized European economy) and Nigeria (a major emerging market economy in Sub-Saharan Africa).

Managerial Implications

Taken together, this study's findings raise three important managerial issues: does an entrepreneurial proclivity and a propensity to be market oriented in export market operations, either individually or jointly, require export resource transformation capability to improve export performance; does an ability to reconfigure a firm's asset base benefit from export entrepreneurial proclivity and export market-oriented inclination; and does it substantially impact export performance? Some researchers suggest that export entrepreneurial orientation (EO) and market orientation (MO) drive performance individually. Other scholars have contended that EO alone is not sufficient for a firm to be able to discover solutions to market problems, and MO alone is not enough because overreliance on MO may result in the firm ignoring or underestimating emerging market opportunities (Matsuno et al., 2002; Wiklund and Shepherd, 2003). A major contention therefore is that, when a firm takes risks to proactively innovate to discover solutions to export market problems, the discovered solution is more likely to be successful when the firm also has superior understanding of the needs and problems of export customers, actions of competitors, and exogenous macro-environment opportunities and threats (Boso et al., 2012). The results of this study seem consistent with

this advice: the exporters in our samples that are both entrepreneurial and market oriented generate superior export performance.

Beyond these direct export performance benefits from EO and MO, the results suggest the importance of building advanced resource mobilization capability to channel the two export strategic orientations to export performance. The results indicate that being active and proficient in reconfiguring a firm's export-related assets base helps boost its export performance. In addition, the results suggest that firms can improve the export performance effect of their existing resources via the processes of configuring new ways of using export resources or assets. A more interesting finding is that, for the UK firms studied, the indirect effects of EO and MO on export performance seem to be uniform, implying that RTC does mediate the two orientations to perform in a fairly balanced manner. In the case of the Nigeria sample, however, the indirect effect of EO is substantially larger than the indirect effect of MO, suggesting that EO dominates the total effect, and implying that Nigerian firms are able to improve their performance when they place a greater emphasis on EO and RTC and less emphasis on MO. Thus, while EO and MO are equally important for driving performance through RTC in UK firms, EO seems to be a dominant force in Nigerian firms. Taken together, our findings highlight the role of resource transformation capabilities as the channel through which EO and MO activities are connected to export performance, helping extend existing advice to managers to link aspects of their orientations to performance through organizational knowledge-based assets (Wang, 2008; Rhee et al., 2010).

Thus, an overarching managerial implication from our results is that a firm's strategic entrepreneurial and market orientations towards export markets and its dynamic capabilities, in this case advanced proficiency in reconfiguring its asset base, are important determinants of export performance. We suggest that, although a firm's internal culture-based strategic orientations and advanced competences in transforming its assets base are idiosyncratic, and

can be complex and time-consuming to build, they can be beneficial to the firm in seizing export opportunity. In view of the fact that these behavioural characteristics are specific to the firm, and are therefore difficult for other firms to imitate, they become a major source of a firm's competitive advantage. On a final note, this study has developed and validated items that specifically measure export context-specific export resource transformation capability. These items can be used by managers to train exporting functional leaders on how to develop competence in reconfiguring a firm's asset base.

Limitations and Directions for Further Research

As is the case in many empirical studies, the results of this study must be interpreted within the context of its boundaries and limitations. This study develops a model that captures the mediating role of export resource transformation capability within the framework of EO/MO export performance relationship. Thus, our immediate target audience is researchers and practitioners interested in export entrepreneurship and marketing themes. Clearly, several socio-cultural, geographical, political, regulatory, infrastructural and other macro-environmental factors may play a role in influencing the perception of managers about the value of the two orientations in export operations. Future research examining the impacts of the two orientations together with the export resource transformation capability construct should consider controlling for the influence of these environmental forces.

There is also a possibility that the associations of EO and MO with export performance may be mediated by other organizational capabilities such as export market innovation capability (Baker and Sinkula, 2009). This is because the two orientations tend to generate positive innovation outcomes. Additionally, in drawing on the organizational learning literature, it can be argued that the effects of the two orientations on export performance may be mediated by a firm's exporting learning processes (Wang, 2008).

Furthermore, rather than a mediating model, an argument may be made that transformation capability moderates the effect of the two strategic orientations on export performance. The findings show poor model fits for this argument in our two samples. However, it would be worthwhile for future research to explore these interactions to shed new light on how the two orientations and resource transformation capability interconnect to impact export performance.

Finally, our study relies on primary data from only two countries – the UK and Nigeria – to test and validate our proposed relationships, limiting our ability to develop a priori arguments to account for country effects. Given that such a cross-country study is likely to help expose the nuances of the relationships under study, we propose that future research should develop hypotheses to include the country effects with data from exporting firms in multiple countries.

References

- Anderson J. C., & Gerbing D. W. (1988). Structural equation modelling in practice: a review and recommended two-step approach. *Psychological Bulletin*, 103, 411- 423.
- Atuahene-Gima, K. & Anthony, Ko. A. (2001). An Empirical Investigation of the Effect of Market Orientation and Entrepreneurship Orientation Alignment on Product Innovation. *Organization Science*, 12, 54-74.
- Atuahene-Gima, K. (1996). Market orientation and innovation. *Journal of Business Research*, 35(2), 93-103.
- Atuahene-Gima, K. (2005). Resolving the capability-rigidity paradox in new product innovation. *Journal of Marketing*. 69(4), 61-83.
- Bagozzi, R.P. & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 14(1), 33-46.
- Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative science quarterly*, 50(3), 329-366.
- Baker, W. E., & J. M. Sinkula (2009). The Complementary Effects of Market Orientation and Entrepreneurial Orientation on Profitability in Small Businesses. *Journal of Small Business Management*, 47(4): 443-464.
- Balabanis, G. I. & Katsikea, E. S. (2003). Being an entrepreneurial exporter: does it pay? *International Business Review*, 12 (2003) 233-252.
- Barnett, W. P., Greve, H. R., & Park, D. Y. (1994). An evolutionary model of organizational performance. *Strategic Management Journal*, 15(S1), 11-28.
- Barreto, I. (2010). Dynamic capabilities: A review of past research and an agenda for the future. *Journal of Management*, 36(1), 256-280.
- Boso. N., Cadogan, J.W. & Story, V.M. (2012). Complementary effect of entrepreneurial and market orientations on export new product success under differing levels of competitive intensity and financial capital. *International Business Review*, 21(4), 667-681.
- Buckley, P. J. & Casson. M. C. (1998). Models of the Multinational Enterprise. *Journal of International Business Studies*, 29 (1), 21-44.
- Cadogan, J.W., Olli Kuivalainen, and Sanna Sundqvist (2009). Export Market-Oriented Behavior and Export Performance: Quadratic and Moderating Effects under Differing Degrees of Market Dynamism and Internationalization. *Journal of International Marketing*, 17(4), 71-89.
- Cadogan, J.W., Paul, N.J., Salminen, R.T., Puumalainen, K., and Sundqvist, S. (2001). Key antecedents to “export” market-oriented behaviors: a cross-national empirical examination. *International Journal of Research in Marketing*, 18, 261-282.
- Chang, W., Franke, G. R., Butler, T. D., Musgrove, C. F., & Ellinger, A. E. (2014). Differential Mediating Effects of Radical and Incremental Innovation on Market Orientation-Performance

Relationship: A Meta-Analysis. *Journal of Marketing Theory and Practice*, 22(3), 235-250.

Chaston, I. (2009). *Entrepreneurial management in small firms*. Sage Publications.

Chirico, F., Sirmon, D. G., Sciascia, S., & Mazzola, P. (2011). Resource orchestration in family firms: Investigating how entrepreneurial orientation, generational involvement, and participative strategy affect performance. *Strategic Entrepreneurship Journal*, 5(4), 307-326.

Coviello, N. E., McDougall, P. P., & Oviatt, B. M. (2011). The emergence, advance and future of international entrepreneurship research: An introduction to the special forum. *Journal of Business Venturing*, 26(6), 625-631.

Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship Theory and Practice*, 35(5), 855-872.

Covin, J. G., & Miller, D. (2014). International entrepreneurial orientation: conceptual considerations, research themes, measurement issues, and future research directions. *Entrepreneurship Theory and Practice*, 38(1), 11-44.

Cui, A. S., Griffith, D. A., & Cavusgil, S. T. (2005). The influence of competitive intensity and market dynamism on knowledge management capabilities of multinational corporation subsidiaries. *Journal of International Marketing*, 13(3), 32-53.

Day, G. (2011). Closing the marketing capabilities gap. *Journal of Marketing*, 75(4), 183-195.

Day, G. S. (1994). The capabilities of market-driven organizations. *Journal of Marketing*, 37-52.

Day, G. S. (2014). An outside-in approach to resource-based theories. *Journal of the Academy of Marketing Science*, 42(1), 27-28.

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21(10-11), 1105-1121.

Fang, E. E., & Zou, S. (2009). Antecedents and consequences of marketing dynamic capabilities in international joint ventures. *Journal of International Business Studies*, 40(5), 742-761.

Fisher, G. (2012). Effectuation, causation, and bricolage: a behavioral comparison of emerging theories in entrepreneurship research. *Entrepreneurship Theory and Practice*, 36(5), 1019-1051.

Grieve, R. (1997). U.S. Robotics Announces Two New Models of the Best Selling Pilot Connected Organizer, Available at http://web.archive.org/web/20030815030604/http://www.palm.com/us/company/pr/1997/pressrel_palm20.html. Accessed on March 15, 2016.

Guide Jr., V. D. R. & Ketokivi, M. (2015). Notes from the Editors: Redefining some methodological criteria for the journal, *Journal of Operations Management*, 37, V-VIII.

Guo, C., Jiang, C. X., & Yang, Q. (2014). The Development of Organizational Capabilities and Corporate Entrepreneurial Processes: The Case of Chinese Automobile Firms. *Thunderbird International Business Review*, 56(6), 483-500.

- Hagen, B., Zucchella, A., Cerchiello, P., & De Giovanni, N. (2012). International strategy and performance-Clustering strategic types of SMEs. *International Business Review*, 21(3), 369-382.
- Han, J. K., Kim, N., & Srivastava, R. K. (1998). Market orientation and organizational performance: is innovation a missing link?. *The Journal of Marketing*, 30-45.
- Hodgkinson, G. P., & Healey, M. P. (2011). Psychological foundations of dynamic capabilities: reflexion and reflection in strategic management. *Strategic Management Journal*, 32(13), 1500-1516.
- Ibeh, K., Wilson, J., & Chizema, A. (2012). The internationalization of African firms 1995–2011: Review and implications. *Thunderbird International Business Review*, 54(4), 411-427.
- International Monetary Fund (2015). "Nigeria". *World Economic Outlook Database*, April 2015. Available at <https://www.imf.org/external/country/NGA/index.htm>. Accessed on November 02, 2015.
- James, L.R., Mulaik, S.A., & Brett, J.M. (2006). A tale of two methods. *Organizational Research Method*, 9 (2), 233-244.
- Jantunen, A., Puumalainen, K., Saarenketo, S., & Kyläheiko, K. (2005). Entrepreneurial orientation, dynamic capabilities and international performance. *Journal of International Entrepreneurship*, 3(3), 223-243.
- Johnson, J. L. Lee, R.P. & Saini, A. (2003). Market-Focused Strategic Flexibility: Conceptual Advances and an Integrative Model. *Journal of the Academy of Marketing Science*, 31(1), 74-89.
- Julian, C. C., Mohamad, O., Ahmed, Z. U., & Sefnedi, S. (2014). The market orientation–performance relationship: The empirical link in export ventures. *Thunderbird International Business Review*, 56(1), 97-110.
- Ketchen, D. J., Jr., Hult, G. T. M., and Slater, S. F. (2007). Toward greater understanding of market orientation and the resource-based view. *Strategic Management Journal*, 28, 961-964.
- Kor, Y. Y., & Leblebici, H. (2005). How do interdependencies among human-capital deployment, development, and diversification strategies affect firms' financial performance?. *Strategic Management Journal*, 26(10), 967-985.
- Kraaijenbrink, J., Spender, J. C., & Groen, A. J. (2010). The resource-based view: a review and assessment of its critiques. *Journal of Management*, 36(1), 349-372.
- Kuivalainen, O., Sundqvist, S., & Servais, P. (2007). Firms' degree of born-globalness, international entrepreneurial orientation and export performance. *Journal of World Business*, 42(3), 253-267.
- Lado, A. A., Boyd, N. G., & Wright, P. (1992). A competency-based model of sustainable competitive advantage: Toward a conceptual integration. *Journal of Management*, 18(1), 77-91.
- Leonidou, L. C., Kaminarides, J. S., & Hadjimarcou, J. (2004). An analysis of US small and medium-sized manufacturers' international business relationships. *Thunderbird International Business Review*, 46(5), 545-573.

- Li, Y. H., Huang, J. W., & Tsai, M. T. (2009). Entrepreneurial orientation and firm performance: The role of knowledge creation process. *Industrial marketing management*, 38(4), 440-449.
- Lisboa, A., Skarmeas, D., & Lages, C. (2011). Entrepreneurial orientation, exploitative and explorative capabilities, and performance outcomes in export markets: A resource-based approach. *Industrial Marketing Management*, 40(8), 1274-1284.
- Lu, Y., Zhou, L., Bruton, G. & Li, W. (2010). Capabilities as a mediator linking resources and international performance of entrepreneurial firms in an emerging economy. *Journal of International Business Studies*. 41 (3), 419-436.
- Lumpkin, G. T., & Dess. G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.
- MacKinnon, D.P., Lockwood, C.M., Hoffman, J.M., West, S.G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variables effects. *Psychological Methods*, 7, 83-104.
- Marsh, H. W., Wen, Z., Hau, K. T., Little, T. D., Bovaird, J. A., & Widaman, K. F. (2007). Unconstrained structural equation models of latent interactions: Contrasting residual- and mean-centered approaches. *Structural Equation Modeling: A Multidisciplinary Journal*, 14(4), 570-580.
- Matsuno, K., Mentzer, J. T., & Özsomer, A. (2002). The effects of entrepreneurial proclivity and market orientation on business performance. *Journal of marketing*, 66(3), 18-32.
- Mavondo, F. T., Chimhanzi, J., & Stewart, J. (2005). Learning orientation and market orientation: Relationship with innovation, human resource practices and performance. *European Journal of Marketing*, 39 (11/12), 1235-1263.
- Mavondo, F. T., Chimhanzi, J., & Stewart, J. (2005). Learning orientation and market orientation: Relationship with innovation, human resource practices and performance. *European Journal of Marketing*, 39(11/12), 1235-1263.
- McDougall, P. P., & Oviatt, B. M. (2000). International Entrepreneurship: The intersection of two Research Paths. *Academy of Management Journal*, 43 (5), 902-906.
- Menon, A., Jaworski, B.J. & Kohli. A. K. (1997). Product Quality: Impact of Interdepartmental Interactions. *Journal of the Academy of Marketing Science*, 25 (3), 187-200.
- Miller, D., & Friesen, P.H. (1983). Strategy-making and Environment: The Third link. *Strategic Management Journal*, 4(3), 221-235.
- Mmieh, F., Owusu-Frimpong, N., & Mordi, C. (2012). Evaluating the contribution of the export sector to real GDP growth rate under structural adjustment programme (SAP): the case of Ghana. *Thunderbird International Business Review*, 54(4), 493-507.
- Morgan, N. A., Kaleka, A., & Katsikeas, C. S. (2004). Antecedents of export venture performance: A theoretical model and empirical assessment. *Journal of Marketing*, 68(1), 90-108.
- Morgan, N.A., Zou, S., Vorhies, D.W., & Katsikeas, C.S. (2003). Experiential and Informational

Knowledge, Architectural Marketing Capability, and Adaptive Performance of Export Ventures: A Cross-National Study. *Decision Sciences*, 34(2), 287-321.

- Murray, J. Y., Gao, G. Y., & Kotabe, M. (2011). Market orientation and performance of export ventures: the process through marketing capabilities and competitive advantages. *Journal of the Academy of Marketing Science*, 39(2), 252-269.
- Noble, C. H., Sinha, R. K., & Kumar, A. (2002). Market orientation and alternative strategic orientations: a longitudinal assessment of performance implications. *Journal of Marketing*, 66(4), 25-39.
- Okpara, J. O. (2012). An exploratory study of international strategic choices for exporting firms in Nigeria. *Thunderbird International Business Review*, 54(4), 479-491.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers*, 36(4), 717-731.
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: quantitative strategies for communicating indirect effects. *Psychological Methods*, 16(2), 93.
- Racela, O. C, Chaikittisilpa, C. & Thoumrungroje, A. (2007). Market orientation, international business relationships and perceived export performance. *International Marketing Review*, 24 (2), 144-163.
- Rhee, J., Park, T., & Lee, D. H. (2010). Drivers of innovativeness and performance for innovative SMEs in South Korea: Mediation of learning orientation. *Technovation*, 30(1), 65-75.
- Sanchez, R. (1995). Strategic Flexibility in Product Competition. *Strategic Management Journal*, 16, 135-159.
- Shan, P., Song, M., & Ju, X. (2016). Entrepreneurial orientation and performance: Is innovation speed a missing link?. *Journal of Business Research*, 69(2), 683-690.
- Shane, S. & Venkatraman, N. (2000). The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*, 25 (1), 217-226.
- Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of management review*, 32(1), 273-292.
- Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. (2011). Resource orchestration to create competitive advantage breadth, depth, and life cycle effects. *Journal of Management*, 37(5), 1390-1412.
- Sousa, C. M., Martínez-López, F. J., & Coelho, F. (2008). The determinants of export performance: A review of the research in the literature between 1998 and 2005. *International Journal of Management Reviews*, 10(4), 343-374.
- Srivastava, R. K., Fahey, L., & Christensen, H. K. (2001). The resource-based view and marketing: The role of market-based assets in gaining competitive advantage. *Journal of Management*, 27(6), 777-802.

- Steenkamp, J. B. E., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research*, 25(1), 78-107.
- Styles, C., & Ambler, T. (1994). Successful export practice: The UK experience. *International Marketing Review*, 11(6), 23-47.
- Sundqvist, S., Kyläheiko, K., Kuivalainen, O., & Cadogan, J. W. (2012). Kirznerian and Schumpeterian entrepreneurial-oriented behavior in turbulent export markets. *International Marketing Review*, 29(2), 203-219.
- Teece DJ, Pisano, G, Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7): 509-533.
- Teece DJ. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350.
- Wang, C.L. (2008). Entrepreneurial Orientation, Learning Orientation, and Firm Performance. *Entrepreneurship Theory and Practice*, 32 (4), 635-657.
- Whetten, D. (2009). An examination between context and theory applied to the study of organizations in China. *Management and Organization Review*, 5 (1), 29-55.
- Wiklund, J. & Shepherd, D. (2011). Where to From Here? EO-as-Experimentation, Failure, and Distribution of Outcomes. *Entrepreneurship Theory and Practice*, 35 (5), 925-946.
- Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic Management Journal*, 24(13), 1307-1314.
- Zahra, S. A. & Garvis, D. M. (2000). International corporate entrepreneurship and firm performance: the moderating effect of international environmental hostility. *Journal of Business Venturing*, 15, 469-492.
- Zhang, X., Ma, X., & Wang, Y. (2012). Entrepreneurial orientation, social capital, and the internationalization of SMEs: Evidence from China. *Thunderbird International Business Review*, 54(2), 195-210.
- Zheng, W., Yang, B., & McLean, G. N. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *Journal of Business Research*, 63(7), 763-771.
- Zou, S., Fang, E., & Zhao, S. (2003). The effect of export marketing capabilities on export performance: An investigation of Chinese exporters. *Journal of International Marketing*. 11(4), pp.32-55.

Figure 1: Conceptual Model

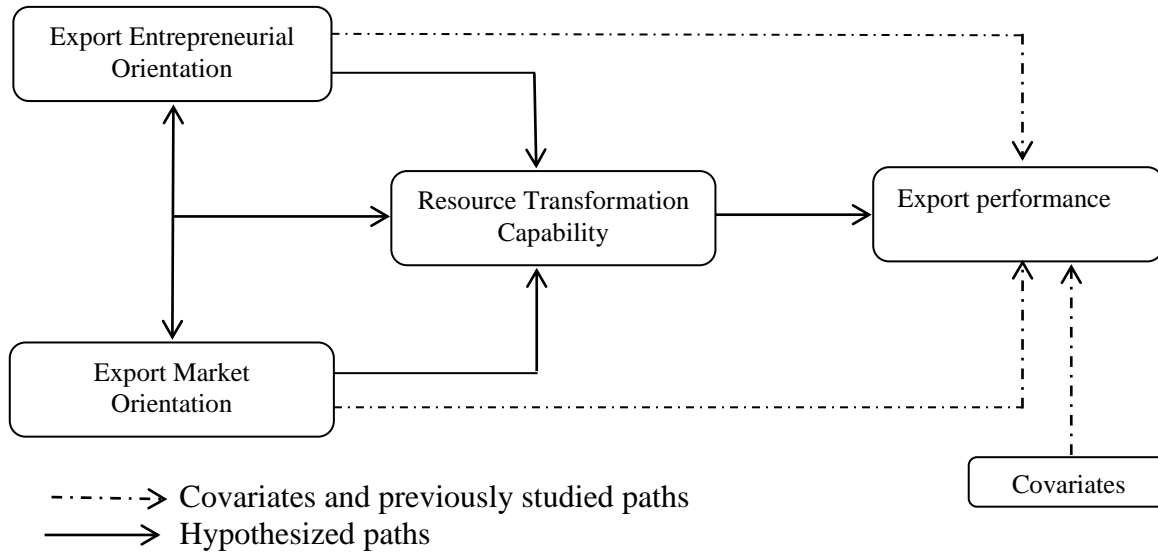


Table 1: Empirical contributions on the effect of entrepreneurial and market orientations on performance

Empirical studies	Independent strategic orientation variables	Empirical setting	Mediating effect variables	Performance outcome variables	Key findings
Shan et al. (2016)	Entrepreneurial orientation (EO)	New ventures	Innovation speed	Financial performance (i.e. ROI, profitability and sales)	Innovation speed partially mediates the effects of innovativeness and autonomy dimensions, but fully mediates the effects of proactiveness, risk-taking and aggressiveness dimensions of EO on performance.
Hagen et al. (2012)	International entrepreneurial orientation	Small-and-medium sized enterprises	International opportunity exploitation	Export intensity (i.e. profit goals, market share, product performance in major markets)	International EO is positively related to international opportunity exploitation and superior international performance.
Lisboa et al. (2011)	International entrepreneurial orientation	Export manufacturing firms	Exploitative and explorative product and market capabilities	Export market effectiveness (i.e. sales volume growth, growth in export market sales revenue, market share growth)	Exploitative and explorative product and market capabilities serve as channels through which international EO affects export performance.
Li et al. (2009)	Entrepreneurial orientation	Manufacturing and service firms in high technology industry	Innovation	Financial performance (i.e. efficiency, growth, and profit)	EO is positively related to firm performance, and knowledge creation process mediates this relationship.
Wang (2008)	Entrepreneurial orientation	Medium-to-large firms	Learning orientation	Firm performance (i.e. return on capital employed, earnings per share and sales growth)	Learning orientation mediates the effect of EO on performance relationship
Matsuno et al. (2002)	Entrepreneurial proclivity	Manufacturing companies	Market orientation and organizational structure	Business performance (i.e. Market share, return on new product sales and ROI)	Entrepreneurial proclivity has a direct positive effect on market orientation, and an indirect and positive effect on market orientation through reduction in departmentalization. The entrepreneurial proclivity on performance is mediated by market orientation.
Rhee et al. (2010)	Entrepreneurial orientation and market orientation (MO)	Small-and-medium sized enterprises	Learning orientation and firm innovativeness	Firm performance (i.e. profitability, sales growth, and market share)	Learning orientation mediate the effect of EO and MO on firm innovativeness and performance.
Baker and Sinkula (2009)	Entrepreneurial orientation	Small-and-medium sized enterprises	Market orientation and innovation success	Profitability (i.e. changes in sales, profit and profit margin)	EO and MO complement one another to influence profitability through innovation success.
Mavondo et al. (2005)	Market orientation and learning orientation	Medium-to-large firms	Human resource practices and innovation	Firm performance	Human resource practices are a major mechanism through which MO and learning orientation impacts firm performance.
Atuahene-Gima (2005)	Market orientation	Medium-to-large firms	Competence exploration and exploitation	Innovation performance	Market orientation influences performance through simultaneous exploitation of innovation competencies and exploration of new products.
Zou et al. (2003)	Market orientation (marketing competence)	Export ventures	Low-cost and branding advantage	Export financial performance (i.e. export venture profitability, ROI, return on sales and margin)	Export marketing competence impacts export financial performance indirectly through low-cost and branding positional advantages.
Noble et al. (2002)	Market orientation	Mass merchandisers in the retail industry	Organizational learning and innovativeness	Firm performance	Organizational learning and innovativeness mediate the causal path between market orientation and firm performance
Han et al. (1998)	Market orientation	Medium-to-large banks	Organizational innovativeness	Business performance (i.e. net income growth, and return on asset)	The effect of market orientation on business performance is mediated by organizational innovation.
Atuahene-Gima (1996)	Market orientation	Manufacturing and services firms	Innovation	Market performance (i.e. sales and profit performance)	Market orientation has no effect on market performance when channelled through product and service innovation.

Table 2: Descriptive statistics of key constructs

Variables	UK Sample (N = 212)				Nigeria (N = 163)															
	Mean	SD	CR	AVE	Mean	SD	CR	AVE	1	2	3	4	5	6	7	8	9	10	11	
1 Export product innovation intensity	4.47	1.32	0.88	0.71	4.42	1.33	0.91	0.80		0.40	0.41	0.47	0.36	0.26	0.26	0.21	0.21	0.05	0.32	
2 Risk-taking	3.88	1.27	0.93	0.83	4.82	1.05	0.87	0.62	0.54		0.25	0.45	0.42	0.33	0.31	0.24	0.16	0.13	0.33	
3 Export product innovation novelty	4.78	0.98	0.89	0.73	3.79	1.29	0.89	0.73	0.47	0.29		0.50	0.35	0.27	0.14	0.14	0.17	0.05	0.42	
4 Proactiveness	4.83	1.05	0.77	0.53	4.77	1.08	0.81	0.59	0.38	0.38	0.54		0.60	0.44	0.33	0.25	0.28	0.02	0.41	
5 Competitive aggressiveness	4.42	1.28	0.90	0.69	4.39	1.28	0.85	0.59	0.38	0.51	0.34	0.66		0.27	0.13	0.30	0.11	0.31	0.27	
6 Autonomy	4.95	1.11	0.89	0.67	4.93	1.13	0.83	0.62	0.28	0.21	0.25	0.61	0.27		0.26	0.08	0.17	0.03	0.22	
7 Generation	5.01	0.99	0.80	0.51	5.00	0.98	0.81	0.52	0.29	0.32	0.22	0.53	0.41	0.37		0.47	0.50	0.00	0.32	
8 Dissemination	5.76	0.99	0.86	0.60	5.75	0.99	0.86	0.60	0.32	0.30	0.19	0.21	0.24	0.12	0.53		0.30	0.03	0.26	
9 Responsiveness	5.13	1.04	0.83	0.62	5.14	1.07	0.82	0.60	0.21	0.12	0.19	0.52	0.35	0.24	0.67	0.33		0.05	0.42	
10 Objective export Performance†	3.88	0.90	0.89	0.71	2.80	0.80	0.90	0.70	0.35	0.46	0.46	0.57	0.55	0.17	0.45	0.47	0.39		0.12	
11 Export resource transformation capability	4.78	1.14	0.72	0.50	4.84	0.84	0.72	0.51	0.51	0.40	0.43	0.53	0.28	0.22	0.35	0.26	0.49	0.51		

Note:
SD = Standard deviation
CR = Composite Reliability
AVE = Average Variance Extracted
† = Natural logarithm of the three observed indicators (i.e. export sales, return on export sales and export profit) was taken and aggregated to obtain overall measure of export performance.
a = Correlations coefficients for the UK sample are reported below the diagonal, while that of the Nigeria sample are reported above the diagonal of the correlation matrix

Table 3: Results of Alternative Model Comparisons across the UK and Nigeria Samples

UK Sample									Nigeria Sample							
Models	χ^2	D.F.	$\Delta\chi^2$	Δ D.F.	AIC	RMSEA	SRMR	NNFI	χ^2	D.F.	$\Delta\chi^2$	Δ D.F.	AIC	RMSEA	SRMR	NNFI
Baseline model	198.18	93	-	-	318.18	0.07	0.06	0.90	164.60	93	-	-	284.595	0.069	0.066	0.901
Model 1	204.86	95	6.68	2	319.86	0.07	0.07	0.84	180.55	95	15.95	2	296.55	0.07	0.09	0.84
Model 2	206.35	95	8.17	2	322.35	0.08	0.07	0.84	170.74	95	6.15	2	285.74	0.07	0.08	0.86
Model 3	199.17	94	1.00	1	317.17	0.07	0.06	0.87	164.42	94	0.17	1	282.42	0.07	0.07	0.88
Model 4†	161.76	90	36.42	3	287.76	0.06	0.05	0.92	127.91	90	36.69	3	253.91	0.05	0.05	0.92
Model 5+	187.25	90	25.50	0	307.25	0.07	0.08	0.86	165.99	90	38.08	0	285.99	0.07	0.09	0.86
Model 6+	179.48	91	17.72	1	303.48	0.07	0.06	0.87	131.85	91	3.939*	1	255.85	0.05	0.05	0.92
Model 7+	189.66	94	27.90	4	307.66	0.07	0.06	0.87	217.86	94	89.96	4	335.86	0.08	0.07	0.80
Model 8+	195.56	98	33.80	8	341.56	0.07	0.05	0.86	213.32	98	85.42	8	359.32	0.08	0.05	0.83

Note:

* = 0.05; ** = 0.01 (1-tailed test)

Baseline Model = full mediation model with no direct paths from the two predictors to the criterion against which Model 1 to Model 4 are compared

Model 1 = the path for hypothesis 1 was constrained to zero (i.e. the path from EO to RTC was forced to take the value of zero). For model identification purposes, EOxMO was also forced to take the value of zero

Model 2 = the path for hypothesis 2 was constrained to zero (i.e. the path from MO to RTC was forced to take the value of zero). For model identification purposes, EOxMO was also forced to take the value of zero

Model 3 = the path for hypothesis 3 was constrained to zero (i.e. the path from EOxMO to RTC was forced to take the value of zero), while all other paths including EO and MO were freely estimated.

Model 4 = a partial mediation model estimated (i.e. the baseline model plus direct paths from the three predictors to the criterion)

† = This is the model with the best fit to the data against which Model 5 to Model 8 are compared

Model 5 = direct effect model: direct paths from EO, MO, EOxMO and RTC to export performance only

Model 6 = non-mediation model: path linking RTC to export performance constrained to zero

Model 7 = reverse causality model: $RTC \rightarrow EO + RTC \rightarrow MO \rightarrow$ export performance

Model 8 = a moderation effect model: $EOxRTC + MOxRTC \rightarrow$ export performance

+ = note that Model 5 to Model 8 are compared to Model 4 because Model 4 is superior to the baseline Model

Table 4: Results of Structural Equation Modelling

Standardized Parameter Estimates and T-values*					
		United Kingdom		Nigeria	
Hypotheses	Independent variables	Resource Transformation Capability (RTC)	Export Performance	Resource Transformation Capability (RTC)	Export Performance
H1	Export entrepreneurial orientation (EO)	0.26 (3.10)	0.26 (3.74)	0.44 (4.05)	0.48 (4.93)
H2	Export market orientation (MO)	0.25 (3.21)	0.26 (3.93)	0.26 (2.24)	0.35 (3.55)
H3	Export EO x Export MO	0.06 (0.80)	0.02 (0.43)	0.01 (0.09)	-0.18 (-1.61)
	RTC	-	0.34 (4.35)	-	0.18 (1.99)
	Industry type	0.18 (1.55)	0.02 (0.16)	0.06 (0.82)	0.07 (1.09)
	Firm size	-0.03 (-0.40)	0.01 (0.21)	-0.14 (-1.61)	-0.05 (-0.61)
	International experience	0.08 (1.09)	-0.04 (-0.74)	0.12 (1.41)	0.02 (0.24)
	Export intensity	0.12 (1.59)	0.12 (2.06)	0.20 (2.55)	0.11 (1.57)
Structural Model fit indexes					
	Chi -square (χ^2)	161.76		127.91	
	Degrees of freedom (d.f.)	90		90	
	p-value	0.00		0.01	
	Normed-chi-square	1.80		1.42	
	RMSEA	0.06		0.05	
	NNFI	0.92		0.92	
	CFI	0.93		0.95	
	SRMR	0.05		0.05	
	R ²	0.32	0.35	0.36	0.44

* Critical t-values for hypothesized paths = 1.95 (5%, two-tail tests)

Appendix: Constructs, measurement items and standardized loadings

Constructs and details of items	Standardized Coefficients	
	UK	Nigeria
Export Market Orientation		
Export intelligence generation: (1 = strongly disagree; 7 = strongly agree)		
In our export operations, we generate a lot of information concerning trends (e.g. regulations, technological developments, political, economic) in our export markets.	0.70	0.68
In our export operations, we constantly monitor our level of commitment and orientation to serving export customer needs.	0.74	0.72
In our export operations, we are fast to detect fundamental shifts in our export environment (e.g. regulation, technology, economy).	0.73	0.72
In our export operations, we periodically review the likely effect of changes in our export environment (e.g. regulations, technology)	0.68	0.65
Export intelligence dissemination: (1 = strongly disagree; 7 = strongly agree)		
In our export operations, too much information concerning our export competitors is discarded before it reaches decision makers.	0.72	0.71
In our export operations, information that can influence the way we serve our export customers takes forever to reach export personnel.	0.89	0.85
In our export operations, important information about our export customers is often 'lost in the system'.	0.79	0.73
In our export operations, information about our export competitors' activities often reaches relevant personnel too late to be of any use.	0.69	0.78
Export intelligence responsiveness: (1 = strongly disagree; 7 = strongly agree)		
In our export operations, if a major competitor were to launch an intensive campaign targeted at our foreign customers, we would implement a response immediately.	0.71	0.69
In our export operations, we are quick to respond to significant changes in our competitors' price structures in foreign markets.	0.80	0.80
In our export operations, we rapidly respond to competitive actions that threaten us in our export markets.	0.84	0.81
Export resource transformation capability: (1 = not at all, 7 = to an extreme extent)		
Our core resources (e.g. finance, skill of employee, market networks, R&D activities, and market intelligence) are often redefined to conform to our export market goals.	0.78	0.67
Our main resources are normally repositioned to complement our broader export market goals.	0.66	0.71
In our export markets, we can easily reorganise our business activities to ensure that they are in line with our broader export business goals.	0.72	0.60
It is not difficult for us to rearrange our resources to effectively enter new export markets.	0.66	0.56
We can easily redeploy our current resources to exploit new export opportunities.	0.76	0.67
Resources currently used elsewhere in this company can easily be redeployed to exploit promising export opportunities.	0.82	0.60
Even if resources are tied up with other business activities (e.g. production, sales) we can always redeploy them in new export markets.	0.78	0.61
Objective export performance		
Export sales	0.99	0.99
Export profit	0.88	0.85
Return to export sales	0.79	0.89

Appendix (continues)

Constructs and details of items	Standardized Coefficients	
	UK	Nigeria
Export Entrepreneurial Orientation		
Export product innovation intensity : (1 = strongly disagree; 7 = strongly agree)		
Our company has produced more new products/services for our export markets than our key export market competitors during the past five years.	0.83	0.89
Industry experts would say that we are more prolific when it comes to introducing new products/services in our export markets.	0.88	0.88
Our key export market competitors cannot keep up with the rate at which we introduce new products/services in our export markets.	0.81	0.86
Export product innovation radicality : (1 = less; 7 = more)		
Relative to our main export competitors, the products/services we offer in our export market(s) are:		
Inventive	0.84	0.85
Novel	0.80	0.77
Creative	0.91	0.93
Export risk-taking : (1 = Not all; 7 = to an extreme extent)		
This company shows a great deal of tolerance for high risk export projects.	0.92	0.78
Our export strategy is characterised by a strong tendency to take risks.	0.97	0.86
Taking chances is part of our export business strategy.	0.83	0.81
Export proactiveness : (1 = Not all; 7 = to an extreme extent)		
We act opportunistically to shape the export environment in which we operate.	0.76	0.76
We are constantly seeking new opportunities to shape the export environment to our own advantage.	0.71	0.77
We consistently try to position ourselves to meet emerging export market demands.	0.72	0.73
Export competitive aggressiveness : (1 = Not all; 7 = to an extreme extent)		
We adopt an aggressive competitive stand in our export markets.	0.77	0.76
We typically adopt an “undo-the-competitor” posture in our export markets.	0.82	0.81
We take hostile steps to achieve export competitive goals.	0.84	0.75
Our actions towards export competitors can be termed as aggressive.	0.90	0.71
Export autonomy : (1 = Not all; 7 = to an extreme extent)		
Export personnel behave autonomously in our export operation.	0.73	0.75
Export personnel act independently to carry out their export ideas through to completion.	0.90	0.87
Export personnel are self-directed in pursuit of export opportunities.	0.88	0.71
Management approves of independent activities by export personnel to develop new export opportunities.	0.73	0.76
Fit Statistics		
χ^2 /D.F.	861.41/609	969.79/609
RMSEA	0.04	0.04
SRMR	0.05	0.06
NNFI	0.93	0.94
CFI	0.94	0.95