

CHAPTER 4

DRIVING BUSINESS EXPORTS IN EMERGING MARKETS: BUSINESS CLUSTERS AS A POLICY OPTION FOR INTERNATIONALISATION

Anthony Ayakwah, Ellis L.C. Osabutey and
Isaac Sakyi Damoah

ABSTRACT

A few decades ago, most research works on internationalisation were aligned to studies in developed economies. In recent times, business entrepreneurs in developing and emerging economies have shown their potential to permeate international markets. The current capability of business entrepreneurs in developing and emerging economies, which drives their ability to overcome the numerous barriers to internationalisation, particularly within clusters, requires a critical examination. As a result, the study situates the discussion on internationalisation within the theory of agglomeration in developing and emerging economies and argues that the gains enjoyed by business entrepreneurs from operating in close proximity in clusters are critical for overcoming the barriers of internationalisation. This research adopts a systematic review of secondary data to tease out the unique attributes of clusters in developing and emerging economies, which supports the internationalisation drive. The findings show that most emerging economy clusters are engaged in exports but there is minimal work on international entrepreneurs operating within clusters. The unique features that drive exporting clusters are the presence of multinational companies, public agencies and collaborative relationships. These unique features

International Entrepreneurship in Emerging Markets: Nature, Drivers, Barriers and Determinants
Contemporary Issues in Entrepreneurship Research, Volume 10, 81–97

Copyright © 2020 by Emerald Publishing Limited

All rights of reproduction in any form reserved

ISSN: 2040-7246/doi:[10.1108/S2040-724620190000010008](https://doi.org/10.1108/S2040-724620190000010008)

have the capacity to minimise the constraints to internationalisation and determine the export performance of businesses in the cluster.

Keywords: Internationalisation; clusters; knowledge; networks; emerging economies; exports

INTRODUCTION

Agglomeration strategy and the supposed advantages of co-location have made the cluster concept more attractive to policymakers (Martin & Sunley, 2003; OECD, 2007). This has led to studies on spatial clustering of firms in developing economies, to elucidate their common features and to propagate the cluster concept as driving economic growth in developing economies (Clarke & Ramirez, 2014; Rasiah & Vainanchiarachi, 2013; Sonobe & Otsuka, 2016). While the studies show that external knowledge and networks serve as the means by which businesses in clusters are able to survive and remain competitive in the world market, very often the internationalisation knowledge and networks in emerging economies are driven by multinational enterprises (MNEs) or public institutions (Ayakwah, Sepulveda, & Lyon, 2018; Rasiah & Vainanchiarachi, 2013; Sonobe, Akoten, & Otsuka, 2011). Despite the growing literature on clusters in developing economies, research on internationalising activities in clusters remains relatively limited.

Over the last three decades, advancement in technology and lowering cost of transportation in developed economies have shortened the products' life cycles of small businesses; making it easy for them to traverse the international market (Baldwin, 2011; Hashai & Almor, 2004; Piore & Sabel, 1984). This has extensively been espoused in the international entrepreneurship (IE) literature (Bell, McNaughton, Young, & Crick, 2003; Cavusgil & Knight, 2015; Oviatt & McDougall, 1994). Small-to-medium enterprises (SMEs) in developed countries are able to harness external knowledge quickly through business networks due to the availability of information, stable institutional environment and international exposure. As a result, businesses are able to operate, perform and remain competitive in the international market (Baldwin, 2011; OECD, 2009). It is pertinent to note that knowledge networks and institutions are often weaker in developing countries (Kiss, Danis, & Cavusgil, 2012; Osabutey & Croucher, 2018).

Emerging economy clusters and their peculiarities concerning internationalisation has not received the needed attention. Given that the internationalisation of entrepreneurial activities in developed economies differs from that of developing economies, the objective of this chapter is to situate business clusters as central to the internationalisation activities in emerging/developing economies by looking at the nature and drivers of clusters. This chapter seeks to review the relevant theoretical and empirical literature on the peculiarities of clusters in emerging economies and how their operations and performance have minimised the barriers to internationalisation. This chapter further seeks to situate internationalisation of clusters within agglomeration theory. In effect, we argue that

spatial organisation in clusters are not cast in stone and that the peculiar features of business clusters may facilitate different levels of internationalisation in developing economies.

This chapter begins with literature discussions on business cluster policies in developing and emerging economies, the key theoretical underpinning of internationalisation (knowledge and networks), and barriers to internationalisation. The methods for the selection of literature for the discussions are presented in the second section. This is followed by a discussion of the findings and the conclusion.

LITERATURE

Clustering Policy in Developing and Emerging Economies

One distinct feature in most developing and emerging countries, which has received attention in recent times, is the clustering of firms. As a policy consideration in developing and emerging economies in the 1990s, studies on clustering have been pioneered by discussions on spatial policies (Altenburg & Meyer-Stamer, 1999; Schmitz, 1999). However, studies by Sonobe et al. (2011), Clarke and Ramirez (2014), Sonobe and Otsuka (2016) and Knorrunga and Nadvi (2016) have looked at various spatial clustering of firms as a 'common feature' in developing economies. These works propagate the cluster concept as a driver for economic growth in developing economies. However, these studies fail to demonstrate adequately the links between clusters and export barriers. Haddoud, Onjewu, Jones, and Newbery (2018) note export promotion programmes that are required to coordinate the activities of SMEs within clusters to enhance export performance. Research on clusters is minimal on internationalisation activities, though several studies abound on developing economies. Krugman (2011), called for the reform or adaptation of theoretical analysis of spatial organisations in emerging economies because current theories appear not to be comprehensive. His argument is premised on the fact that clustered firms in emerging economies produce purposely for the world market. According to Stiglitz (2011) and Primi (2013), clustered firms in these economies are threatened with inept market structures and institutional controls. Grounded solely on developed economies, theories on cluster performance and internationalisation, may not be able to explicate the current condition in emerging economies. The OECD (2013) affirm that emerging economies such as Brazil, Russia, India and China have practised continued solid economic growth since the 1990s and up until lately been leading the world's economic growth since the global economic crises in 2008. The obvious question to ask then is: To what degree have clustered firms added to the performance of these economies?

There are many forms of clustering in developing economies. Rasiyah and Vainanchiarachi (2013) proposed the state-run clusters and clusters of a transnational/multinational corporation, Sonobe et al. (2011), suggested formal and informal clusters, and vertically related and horizontally related clusters. In these economies, major cluster challenges are the use of basic technology, uncertainty and rising costs of production, as observed in the study of Kariobangi metal

clusters in Nairobi, and vehicle and metalwork clusters in Ghana (McCormick, 1999; Sonobe et al., 2011). Some firms in a cluster produce on a subsistence basis and the production processes rooted in the social environment, for example, the study of the Chilean wine clusters and the Peruvian mango clusters. Micro and small-scale enterprises with poor entrepreneurial competence, low management skills, low trust and poor contract enforcement mechanisms, which affect the benefits to the cluster, as asserted by (Altenburg & Meyer-Stamer, 1999; Clarke & Ramirez, 2014), normally control these clusters. Opined years ago by Altenburg and Meyer-Stamer (1999), these features of clusters fit the 'survival clusters' notion.

Clarke and Ramirez (2014), in the study on Peruvian clusters, endeavoured to distinguish between survival and emerging clusters. They observed that through 'learning-by-exporting', emerging clusters have been able to infiltrate export markets and are embracing new experiences. Guo and Guo (2011) identified that the problem with such classification is that some firms categorised within the survival clustering class have developed new knowledge and improved technology in their jobs and are linked to the supply chain of the Chinese economy with no plans of exporting yet. Should one go by Clarke and Ramirez's (2014) assessment, then such 'emerging' clusters are not classed as emerging. The critical point is that the economies must look at the survival nature of these clusters in a non-functioning market system in order to internationalise. As observed in clusters in Argentina, Peru and China (Knorrington & Nadvi, 2016; Rocha & McDermott, 2010), government institutions' most essential role is to coordinate and serve as enablers via macro, meso and micro government agencies and policies. Therefore, government agencies need to run programmes to ensure that export barriers are reduced (Haddoud et al., 2018). However, some of these institutions in developing countries are weak (Osabutey & Croucher, 2018), that is why Ayakwah et al. (2018) encourage cooperative relationships in clusters. That is to say, SMEs operating in clusters need to find a way to work together to improve their presence in the global markets (Berko Obeng Damoah, 2018).

There is also proof that some clusters in emerging economies work at medium and large scales with good managerial and technological competencies. These clusters, conversely, according to Altenburg (2011) are controlled by transnational corporations that produce standardised products for both domestic and international markets. For example, Popescu (2010) explains that the presence of MNEs such as Dell and IBM in the software cluster in Romania creates the external link necessary for the growth of the cluster. Additionally, there is the presence of transnational cooperation working with a more supportive institutional framework such as the automobile clusters in South Africa (Alfaro, Bizuneh, Moore, Ueno, & Wang, 2012), Argentina, and the Penang electronic cluster in Malaysia (Rasiah & Vainanchiarachi, 2013). Nadvi (1999), in the study of the Sialkot surgical instrument cluster in Pakistan, notes a vertical integration of firms that produce standardised products for Western Europe and the United States of America. The spillover from the presence of multinational cooperation (Osabutey, Williams, & Debrah, 2014) ensures that clusters are able to produce on a large scale and conduct innovation and development activities to meet the needs of suppliers.

Theoretical Discussions on Export Networks

Several scholars (Coviello, 2006; Dib, Da Rocha, & Da Silva, 2010; Senik, Scott-Ladd, Entrekim, & Adham, 2011; Vahlne & Johanson, 2013) have described the relationship between networking and internationalisation. Johanson and Vahlne (2009) posit that network ties encourage the accumulation of knowledge and trust. It reduces the psychic distance of firms and aids the internationalisation process. They believe that the success of a firm is dependent on its position as an 'insider' and the connectivity of its supply chains. A firm is invariably termed an 'outsider' when it is without a position in the network and suffers from the liability of 'outsidership' and foreignness. This foreignness thus, makes the internationalisation process difficult. They noticed that becoming an insider comprises the learning process to foster commitment and trust in the internationalisation process.

Johanson and Vahlne (2009) point out that, effective internationalisation calls for a mutual commitment between the firm and its counterparts. They are of the view that creation of knowledge is not excluded from the firm's own activity but it is profoundly seated in the established networks of producers and product users.

Now the environment of the firm is assumed to be of a network character with companies embedded in dyadic relationships with other actors, who, in turn, are embedded in other such relationships. (Vahlne & Johanson, 2013, p. 195)

Other firms in the process of internationalisation through the network (Johanson & Vahlne, 2009) obtain knowledge about the firm's relationships, partners, their resources, needs, capabilities and strategies.

Coviello (2006) responds to the question of whether international new ventures (INVs) follow a linear path of evolution using the network theory on the early internationalisation stage of INVs. The study notes that network ties may be a constraining factor in the emergence of INV (Coviello, 2006). A similar study looks at the networking performance of SMEs (in Beijing and Hong Kong) in sustaining innovation and providing resources for internationalisation. This study concludes that, although the development and maintenance of networks may be expensive, SME networks offer the resources needed to hasten the internationalisation process (Tang, 2011). Senik et al. (2011) explored the effectiveness of the networking system in the fast-emerging economy of Malaysia using a network approach. They conclude that network relationships can expedite the processes involved in entering international markets.

In spite of the varied opinions on how firms internationalise, there seems to be unanimity on the role networking plays in fostering relationships among firms in the supply chain. These network structures are principally apparent in the internationalisation activities of clusters in developing and emerging economies. Alfaro et al. (2012) cite very interesting examples, which include the automobile clusters in South Africa that operate as a franchise of a multinational automobile company based in Europe. Similarly, Perez-Aleman (2005) cites the salmon cluster in Chile and espouses a collaborative method through public sector policy, which are linked to external institutions in their operations. Additionally, the electronics cluster in Malaysia according to Rasiah and Vinanchiarachi (2013) used their

network and relationships with other multinational companies to internationalise. [Martinovic, Karisik, and Bico-Car \(2013\)](#) contend that these networks affect the standards, specifications and structure of the production process at countless levels of the chain. There is a need for constant solidity in the interaction of players in these networks to meet market necessities. Such solidity relies on the established trust between internal firms on the one hand and external companies on the other ([Clarke & Ramirez, 2014](#); [Johanson & Vahlne, 2009](#)).

Theoretical Perspective on Export Knowledge

Two forms of knowledge: experimental and objective are emphasised in the literature on internationalisation ([Johanson & Vahlne, 1977](#)). All forms of knowledge acquired via documentary sources such as written documents, reports and explicit materials comprise objective knowledge. Experiential knowledge is acquired only through experience. These forms of knowledge drive the innovations for firms within the internationalisation process. The absence of these knowledge forms, therefore, creates blockades to internationalisation. This is so because businesses are not able to appreciate the conditions in the external markets. [Bilkey and Tesar \(1977\)](#) and [Hashai and Almor \(2004\)](#) outline the blockades, among others, as understanding foreign business practices, different product standards and consumer standards in foreign countries, and difficulty in obtaining adequate representation in foreign markets.

[Mejri and Umemoto \(2010, p. 168\)](#) explicate it that market knowledge is a form of objective and experiential knowledge, which includes,

network knowledge (social and business network; knowledge as the network itself), cultural knowledge (knowledge of language, habits, norms, laws, behaviour ...), and the entrepreneurial knowledge (knowledge of the existence of opportunities and exploiting them).

The traditional internationalisation school (TIS) observed that this knowledge is a significant impediment to the development of international operations ([Johanson & Vahlne, 1977, 2009](#); [Kalinic & Forza, 2012](#)). [Johanson and Vahlne \(2009\)](#) distinguish between institutional market knowledge and business market knowledge in relation to market knowledge. They refer to institutional market knowledge as knowledge that comprises factors associated with psychic distance and to the liability of foreignness, such as language, laws and rules. Business market knowledge, in contrast, is linked to a firm's business environment and involves the firms with which it does or tries to do business.

The IE describes knowledge as a means to drive competitive advantage to permeate multiple countries ([Coviello, 2006](#); [Freeman, Deligonul, & Cavusgil, 2013](#); [Oviatt & McDougall, 1994](#)). The IE literature indicate that, owing to globalisation, the progress of information and communications technology and reduced transportation cost, firms are able to innovate, and acquire knowledge and skills to attain substantial foreign market success early in their evolution ([Dib et al., 2010](#); [Freeman et al., 2013](#); [Knight & Cavusgil, 2004](#); [Krishna, Patra, & Bhattacharya, 2012](#)). Advocates of the 'born global' firms phenomenon claim that firms track global niches from the start with more dedicated and proactive

management. By exploiting and protecting proprietary knowledge, these firms seek to gain first-mover advantage and rapid market penetration. [Bell et al. \(2003\)](#) argue, based on the features of the 'born global' firms, that production and processing involve the higher added value of scientific knowledge, and thus categorise them as either knowledge-intensive or knowledge-based firms. Knowledge-based firms, according to these scholars exist owing to the advent of new technology. This new technology may be because of proprietary or acquired knowledge such as that of software and internet developers. Conversely, knowledge-intensive firms may necessitate knowledge to increase productivity and modify production techniques. These may include computer-aided designs and manufacturing ([Bell et al., 2003](#)).

It must be emphasised that the nature of knowledge affects the internationalisation process ([Freeman et al., 2013](#)). Knowledge-based firms internationalise quickly but the pace of a knowledge-intensive firm hinges on whether they are innovators or adopters of the knowledge acquired ([Bell et al., 2003](#)). Apparently, acquired knowledge seems very relevant in the internationalisation process. [Cuervo-Cazurra \(2011\)](#) reports that managers with internationalisation knowledge have attained it by working for firms involved in foreign activities and have a seeming interest in internationalisation from the start of the business. [Coviello \(2006\)](#) agrees with [Cuervo-Cazurra \(2011\)](#) that a firm's acquired knowledge and its effectiveness in internationalisation rests on the established network relations. [Knight & Cavusgil \(2004\)](#), on the period before a business starts in internationalisation, approximate the period of business formation and eventual internationalisation at four years. [Oviatt and McDougall \(1994\)](#), however, approximate the period to be eight years. Against this backdrop, [Bilkey and Tesar \(1977\)](#) and [Johanson and Vahlne \(2009\)](#) question the disparity in a firm's learning ability in the internationalisation process. Could it be that this period, however short, forms the learning period required for the born global firms to internationalisation? If it were so, then there is a resemblance, knowledge is either a constraint or an enabler to a firm's internationalisation ([Autio, 2005](#)).

There are variances in the pace of knowledge acquisition and usage in the internationalisation process but there seems to be consensus on the relevance of learning and knowledge in the internationalisation process. For example, the stages theory adopts the acquisition of knowledge on an incremental basis but international entrepreneurs seem to assume knowledge for strategic positioning in the international market ([Bell et al., 2003](#); [Johanson & Vahlne, 2009](#)). Resource constrictions and the competitive nature of the knowledge economy affect the acquisition of knowledge by businesses. This way, [Mejri and Umemoto \(2010\)](#) assert that knowledge is seen as a commodity that positively relates to the resource availability of firms. This assertion supports [OECD's data \(2013\)](#) on the dominance of big firms and their performance in the internationalisation process. Nonetheless, if big transnational corporations have more resources to attain knowledge and increase performance in internationalisation, what is driving the evidence of small firms' rapid internationalisation?

Constraints to Internationalisation

A firm's ability to internationalise rests on a myriad of factors. There are country-specific conditions that stimulate or affect the internationalisation of SMEs. Factors include a firm's access to information, its function, operation, finance and ability to market goods (price, distribution and logistics). The main constraints are procedural, institutional (government), environmental and external market factors (Alfaro et al., 2012; Kiss et al., 2012; Primi, 2013; Rocha & McDermott, 2010). However, these constraints vary among firms in different countries. For instance, competition from East Asia and institutional bottlenecks are critical challenges confronting the footwear and clothing clusters in Mexico and Peru, respectively (Visser, Távora, & Villaran, 2015) but Ibeh, Wilson, and Chizema (2012) identify international contacts and information on internationalisation opportunities to be limited in clustering of firms in Nigeria, Kenya and Ghana.

There are different constraints confronting SME internationalisation activities across countries and in both Organisation for Economic Co-operation and Development (OECD) countries and non-OECD countries (OECD, 2009). According to OECD, these barriers are largely internal and reflect the capabilities of firms on the key issue that are necessary to internationalise. However, in recent surveys, administrative and technical difficulties, exchange rate, documentation and payment problems and foreign market competition are external forces that impede SME internationalisation (OECD, 2013).

The observed literature on internationalisation activities in developing economies has so far revealed critical factors that have theoretical significance to the discussions on internationalisation such as networking relationships and knowledge flow. The issue is whether the unique attributes and benefits of co-location could minimise the effects of these barriers.

METHODOLOGY

The study adopts secondary data sources in addressing the research questions proposed for the study based on a systematic literature review to identify the unique features of clusters in emerging economies, and how their operations or performance have minimised the barriers to internationalisation (Tranfield, Denyer, & Smart, 2003). This followed the procedure prescribed by Khan, Kunz, Kleijnen, and Antes (2003), Ke, Wang, Chan, and Cheung (2009) and Lu and Liu (2014). This starts with the Framing Questions for a Review (Khan et al., 2003); hence, the review commenced by framing the main research question (s): does the peculiarities of clustered businesses in developing economies matter in generating the needed conditions for internationalisation? How has internationalising businesses in clusters utilised these unique key features to stimulate cluster performance? How have these peculiarities supported the performance of internationalising business clusters? Here keywords for searches are required to be set in order to meet the requirements of the researches (Ke et al., 2009). In order to ensure the search range is wide to capture the necessary literature for the review,

Lu and Liu (2014) advice that there is the need to use plural forms of keywords for the searches. Hence, the search started with plural forms of search words such as exporting clusters, internationalising clusters, emerging economy clusters, developing economy clusters, internationalising entrepreneurs in clusters.

The second phase of the search step is the data selection source(s). Khan et al. (2003) assert that this search must be comprehensively and extensively searched from relevant and reputable database and journals to ensure the reliability of the literature. Consequently, Lu and Liu (2014) argue that to obtain the most relevant and appropriate citations, journals in the relevant field of study needs to be identified and selected for review. In agreement with Lu and Liu (2004), this study used the database source of ScienceDirect as the primary and first search engine. This search engine was focussed on as the first search engine because it contains most journals in the field of internationalisation business, IE and internationalising business clusters in developing and emerging economies. We, further, use ABS Journal Rankings to select other related journals that publish papers on internationalisation and internationalising clusters in developing and emerging economies (see Table 1). This was followed by a third step, where the Google Scholar search engine was used. The assumption is that there could be other relevant and appropriate industry reports, seminars and conference proceedings; PhD and Masters' degree theses that could provide important literature.

The third step prescribed by Ke et al. (2009) and Lu and Liu (2014) is to perform a preliminary search that involves preliminary search using the search keywords that are defined within specific domains such as Abstract, Titles and Keywords. Therefore, we followed this by searching for export, cluster, network, knowledge and internationalisation. The keywords searches are then inserted and entered into the identified databases or journals (Ke et al., 2009; Lu & Liu, 2014). To follow this procedure, a general search on exporting clusters in developing economies was carried out. To do so, words and phrases such as clusters that are exporting; clusters that have external networks; clusters that utilise external and local knowledge in their operations; clusters with multinational linkages; clusters receiving government export support programmes. At this stage, Khan et al. (2003) argue that the searches must be rigorous but with no language restrictions and therefore, it should be subject to the flow from the research question(s). Further, Lu and Liu (2014) and Ke et al. (2009) also add that, at this phase of the searches, the searches should be restricted to the parameters of search criteria – in order to ensure consistency.

The fourth step is Assessing the Quality of Studies so that academic rigour could be ensured (Khan et al., 2003). During searches at this phase, the search words and phrases were narrowed down to the exact focus of the study such as exporting clusters, drivers and barriers of exports, exporting cluster performance which is more direct and specific to the study's topic.

At step 5, the data or the literature collected are then summarised by doing a detailed review through analysis and synthesis of the relevant and appropriate literature that was identified (Lu & Liu, 2014). During this phase, the literature can now be tabulated based on themes (main) and sub-themes based on their similarities. In accordance with the assertions, recommendations of Khan et al.

Table 1. Reviewed Work on Clusters in Emerging and Developing Countries.

Article/Book Source	Author(s)	Nature of Cluster, Country and Internationalisation Activities
<i>Critical Perspectives on International Business World Development</i>	Ayakwah et al. (2018)	Exporting agro-based clusters in Ghana
	Nadvi (1999)	Pakistani exporting Surgical instrument cluster
	McCormick (1999)	Variant product clusters in Ghana, Kenya and south Africa dominantly not internationalising
	Weijland (1999)	Non exporting agro-based clusters in Indonesia
	Schmitz (1999)	Exporting leather wear clusters in Brazil
	Visser et al. (2015)	Clothing cluster in Peru dominantly not internationalising
<i>Small Business Economics</i>	Sonobe et al. (2011)	Non exporting Metal work cluster in Kenya
<i>Technovation</i>	Guo and Guo (2011)	Non exporting Warp-knitting and cooling tower cluster in Zhenjiang China
<i>Economic Review</i>	Rasiah and Vinanchiarachi (2013)	Multiple product exporting clusters in Malaysia, Argentina, Chile and China
<i>Policy Paper</i>	Alfaro et al. (2012)	Exporting automobile cluster in South Africa
<i>Environment and Planning C: Government and Policy</i>	Clarke and Ramirez (2014)	Exporting mango cluster in Peru
<i>Industrial and Corporate Change</i>	Perez-Aleman (2005)	Exporting Tomatoes and Salmon clusters in Chile
<i>Journal of Studies and Research in Human Geography</i>	Popescu (2010)	Exporting Textiles and furniture clusters in Romania
<i>Organizations and Markets in Emerging Economies</i>	Rocha and McDermott (2010)	Exporting wine and automobile clusters in Argentina
<i>Journal of Organizational Change Management</i>	Martinez et al. (2012)	

Authors construct (2019).

(2003) and Lu and Liu (2014), our findings were tabulated based on the literature similarities in the findings as evidenced in Table 1. The last step, which is sixth is interpreting the findings; at the last phase of the procedure, the data are synthesised and discussed, and a conclusion is drawn (Khan et al., 2003).

DISCUSSION OF KEY FINDINGS

Cluster Internationalisation in Developing Economies

The examined literature on clusters shows that internationalisation activities in most developing economies have been driven by joint actions of multinational

corporations and local businesses or government-led export programmes and policies (Clarke & Ramirez, 2014; Martinovic et al., 2013; Rasiah & Vinanchiarachi, 2013). A study of 54 exporting businesses across Africa reveals that spatial proximity of businesses has a significant effect on the adoption of export programmes (Ibeh et al., 2012). Acquisition of knowledge on export opportunities is obtained by businesses through a relationship with other firms in their locality. For example, export programmes and policies such as trade fairs, workshops and oversea training programmes assisted in offering export knowledge in export processing zones in Bangladesh (Shamsuddoha, Yunus Ali, & Oly Ndubisi, 2012).

In addition, Ibeh et al. (2012) have observed the presence of private transnational corporations in promoting internationalisation in developing countries through collaborations across Africa, and Rasiah and Vinanchiarachi (2013) in some parts of Asia and Latin America. Contact networks and resource-augmenting external collaborative partners were identified as important facilitating factors in the literature reviewed by Ibeh et al. (2012) on SME internationalisation across Africa. In the automotive cluster in Buenos Aires, Argentina, and the electronics cluster in Penang, Malaysia, interaction and co-operation with the international production chain has led to the introduction of best practices in production, including design (Rasiah, 2009; Rasiah & Vinanchiarachi, 2013). Through public-private collaboration, knowledge on salmon farming export standards and technologies were transferred from Norway, Ireland and Scotland to boost Chilean salmon cultivation. This collaborative expertise went beyond the knowledge advice on market equipment for salmon farming to the establishment of fish-feed production centres (Rasiah & Vinanchiarachi, 2013; UNIDO, 2009). In the automobile cluster in South Africa, multinational owners for the German-based car manufacture design its models externally in Europe for production in their units in South Africa and contact networks drive the markets in other African economies (Alfaro et al., 2012).

Institutional and Policy Environment for Internationalisation

The evidence shows that public institutions have been the key promoters of exports through agencies, policies and programmes along with given location-specific, local non-public institutions due to the imperfect market structure of developing economies. In Malaysia, the formation of export processing zones, a form of special economic zones (UNIDO, 2009), an area demarcated to promote, attract and expedite investment, led to a thriving electronics manufacturing cluster in Penang (Rasiah, 2009). The UNIDO (2009) report suggests that supplier, distributor and customer relationships in the Penang electronics cluster provide evidence of considerable solidity and information exchange among firms within an institutional structure.

The Piura mango cluster in northern Peru is another success story that demonstrates how the government acted as an enabler to drive the internationalisation process, harmonising macro, meso and micro-institutions. Clarke and Ramirez (2014) contend that the Peru Commission for the Promotion of Peru Export and Tourism – a government-led export-promotion body – developed a complete

knowledge base for producers to contact buyers through organising trips by potential exporters to destination markets. In order to conserve the Peruvian Mango Export Standards in the international market, Clarke and Ramirez (2014) point out that SENASA, a phytosanitary institution, disseminated advice and regulations on internationalisation standards. The state, through its institutions, encourages internationalisation in developing economies by several means.

Nonetheless, export promotion programmes are not always successful. Cluster development agencies and trade chambers in the Bosnia and Herzegovina wood sector, give technical and advisory support, and international organisations provide financial assistance. Regional development agencies constantly organise seminars and workshops to train business owners in management skills, EU legislature and business practice on foreign markets. [Martinovic et al. \(2013\)](#) noted, however, that in the wood sector cluster of Bosnia and Herzegovina, these interventions were not strong enough and did little to change the situation. [Di Maio \(2011\)](#) presents that some failures in Sierra Leone's National Export Strategy are as a result of several factors extending from governance, that is, institutional structures, to external shocks such as falls in world market prices. The presence of non-tariff barriers (such as different standardisation requirements, quantitative restrictions, subsidies, anti-dumping, customs valuations and technical regulations) remains one of the hindrances that avert success in the advancement of agricultural and agro-processing exports in developing economies ([Mohan, Khorana, & Choudhury, 2013](#)).

Collective Learning, Cooperation and Upgrading

Researchers such as [Porter \(1998\)](#), [Nadvi and Schmitz \(1999\)](#), [Clarke and Ramirez \(2014\)](#) and [Ayakwah et al. \(2018\)](#) posit from the cluster literature that the driving force of a cluster is the development of shared efficiency and teamwork in the production process. The observed literature on developing economies' clusters, according to [Nadvi \(1999\)](#), [Perez-Aleman \(2005\)](#) and [Clarke and Ramirez \(2014\)](#), shows that coordinating institutions direct the development of this shared efficiency and teamwork, which has been the driver of cluster successes. [Perez-Aleman \(2005\)](#) discussed the case of the salmon and tomatoes clusters in Chile and observed that collective action and cooperation among firms led to the creation of an institutional framework to manage production and flow of research ideas and new knowledge among firms. This collective force, supported by the government's policy frame, propelled the establishment of the product brand and reputation in the international market. Additionally, the study of the Peruvian mango cluster, like the Argentinean wine cluster, has been upgraded using local-based knowledge, multinational and national research knowledge and institutional support. [McDermott and Rocha \(2010\)](#) and [Clarke and Ramirez \(2014\)](#) explain that through the collective efficiency of firms and their intermediary institutions, such as their corresponding associations, government institutions and other non-private institutions, new knowledge and innovation have been accessed and diffused into these clusters. Through cooperative efforts by both transnational corporations and governments, new knowledge and innovation have been obtained from universities and external sources. [Rasiah and Vinanchiarachi](#)

(2013) believe that this new knowledge and innovation has necessitated cluster advancement in automotive firms in Buenos Aires (Argentina), salmon producers in Los Lagos (Chile), electronics firms in Penang (Malaysia) and button firms in Qiaotou (China). Goldstein and McGuire (2004) and [Altenburg \(2011\)](#) have all observed cases of cluster cooperation and collective action in upgrading clusters in Brazil, Mexico and India. The following discussion on cluster upgrading points to the fact that local cluster relationships are not static and therefore constant interactions generate the learning and knowledge required for upgrading.

Nevertheless, not all relationships produce the desired upgrading ([Clarke & Ramirez, 2014](#); [Nadvi, 1999](#)). In [Sonobe et al.'s \(2011\)](#) study of metal clusters in Nairobi and other studies by [Nadvi and Schmitz \(1999\)](#) and [Altenburg \(2011\)](#), challenges such as small-sized product markets, an oversupply of unskilled labour, and lack of capital, training and innovation hindered the upgrading process. Other factors such as limited quantity, quality and variety of information and institutional flaws were also seen as limitations to cluster upgrades. Such clustering developments rest on spinoffs and imitation of embedded knowledge with little to no cooperation and research. [McCormick \(1999\)](#) talks the case of the metalworking clusters in Ghana and states that apprenticeships serve as a means by which embedded knowledge attained over a period is transferred through spinoffs.

According to [Martínez, Belso-Martínez, and Más-Verdú \(2012\)](#), citing Leon's footwear cluster in Mexico, only a few companies in the cluster were adopting the latest technology in sewing and finishing equipment and therefore innovation and upgrade was being hampered. Admittedly, variations in the socio-cultural and economic structures of clusters may influence clusters' ability to innovate and upgrade the production process because no two clusters are the same. Now, how emerging economies' institutional and socioeconomic relationship operates, in order to produce positive responses, in their respective clusters is a critical issue of concern.

Exporting Clusters' Performance in Emerging Economies

The performance of clusters in most emerging economies has shown mixed results. [Alfaro et al. \(2012\)](#) admit that the automotive cluster in South Africa contributes 20% of total sales in the manufacturing sector, which represents 6.2% of the economy's GDP. Though the cluster is recovering from the global economic recession of 2008, these clusters have been a major source of employment ([Alfaro et al., 2012](#)). [Rasiah and Vinanchiarachi \(2013\)](#), in their work on four clusters, two in Latin America and two in Asia, respectively observe that clusters can perform extraordinarily well whether they are multinational led or government-led. In their four examples, [Rasiah and Vinanchiarachi \(2013\)](#) explain that transnational corporations run the salmon cluster of Los Lagos and the automotive cluster of Buenos Aires but the government drives the electronics and button clusters in Penang and Qiaotou, respectively. Other studies highlight where, despite technology upgrades and innovation, clusters do not perform well. The performance of the metal works clusters in Nairobi, like the Leon's footwear cluster in Mexico, has seen none to minimal improvement in performance. The bulk of the firms in these clusters are still using antediluvian technology regardless of the presence of

technology innovation centres and entrepreneurial advisory units for training and imbuing new knowledge into the clusters (Sonobe et al., 2011).

Alfaro et al. (2012) and Rasiah and Vinanchiarachi (2013) attribute these varying results in cluster growth and performance in emerging economies to challenges confronting cluster growth. Bottlenecks in government institutional set-up, volatility in macroeconomic variables, and competition from other emerging and developed economies are common challenges to all clusters (Rasiah & Vinanchiarachi, 2013). Other challenges are the absence of an effective intermediary and resources to innovate and create new knowledge for the performance of clusters (Clarke & Ramirez, 2014; Martínez et al., 2012). These issues seem to involve policy intervention should firms in emerging economies' clusters compete in international trade.

CONCLUSION

The literature affirms that clusters have the potential to enhance performance and internationalisation in emerging and developing countries. There is an emphasis on the role of network relationships as a source of knowledge to improve internationalisation performance. This emphasises the need for firms in developing and emerging economies to work towards building relationships with firms and other stakeholders in more advanced countries to facilitate their performance in international markets. The literature emphasises that national governments need to develop institutions that support the development of such clusters as well as help equip them with the requisite knowledge to facilitate better export performance. There have been notable success stories in some developing countries where government support has augmented the formation of clusters and international performance despite prevalent institutional voids. Other developing countries need to learn from such successful examples.

Most successful clusters are going international and are extensively engaging in research and upgrading. This upgrading comes from research and collaboration, strong network ties, both internal and external to the cluster, and the macro, meso and micro institutional environment in which the clusters operate. While cluster networking, innovation, and a strong institutional environment seem to be key to the achievements of some clusters in emerging economies, there appears to be a limited linkage between these key factors of cluster success and the process of a firm's internationalisation. Though most successful clusters in emerging economies are internationalising, the performance or success of clusters in emerging economies may not necessarily be linked to internationalisation activities. The examined literature provides evidence that successful and unsuccessful clusters may not be a prerequisite for internationalisation.

REFERENCES

- Alfaro, A. L., Bizuneh, G., Moore, R., Ueno, S., & Wang, R. (2012). South Africa: Automotive cluster. *Microeconomics of competitiveness*. Harvard Business School: 1260, Kennedy School of Governance: PED-329.

- Altenburg, T. (2011). *Industrial policies in developing countries, overview and lessons from seven countries cases*. Discussion Paper, Deutsches Institut für Entwicklungspolitik, Bonn, Germany.
- Altenburg, T., & Meyer-Stamer, J. (1999). How to promote clusters: Policy experiences from Latin America. *World Development*, 27(9), 1693–1713.
- Autio, E. (2005). Creative tension: The significance of Ben Oviatt's and Patricia McDougall's article 'toward a theory of international new ventures'. *Journal of International Business Studies*, 36(1), 9–19.
- Ayakwah, A., Sepulveda, L., & Lyon, F. (2018). Competitive or cooperative relationships in clusters: A comparative study of two internationalising agro-processing clusters in Ghana. *Critical Perspectives on International Business*, 14(2–3), 230–251.
- Baldwin, R. (2011). Trade and industrialization after globalization's second unbundling: How building and joining a supply chain are different and why it matters. *NBER Working Paper Series*. Retrieved from <http://www.nber.org/papers/w17716>. Accessed on June 13, 2018.
- Bell, J., McNaughton, R., Young, S., & Crick, D. (2003). Towards an integrative model of small firm internationalisation. *Journal of International Entrepreneurship*, 1(4), 339–362.
- Berko Obeng Damoah, O. (2018). A critical incident analysis of the export behaviour of SMEs: Evidence from an emerging market. *Critical Perspectives on International Business*, 14(2–3), 309–334.
- Bilkey, W. J., & Tesar, G. (1977). The export behavior of smaller-sized Wisconsin manufacturing firms. *Journal of International Business Studies*, 8(1), 93–98.
- Cavusgil, S. T., & Knight, G. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, 46(1), 3–16.
- Clarke, I., & Ramirez, M. (2014). Intermediaries and capability building in 'emerging' clusters. *Environment and Planning C: Government and Policy*, 32(4), 714–730.
- Coviello, N. E. (2006). The network dynamics of international new ventures. *Journal of International Business Studies*, 37(5), 713–731.
- Cuervo-Cazurra, A. (2011). Selecting the country in which to start internationalization: The non-sequential internationalization model. *Journal of World Business*, 46(4), 426–437.
- Dib, L. A., Da Rocha, A., & Da Silva, J. F. (2010). The internationalization process of Brazilian software firms and the born global phenomenon: Examining firm, network, and entrepreneur variables. *Journal of International Entrepreneurship*, 8(3), 233–253.
- Di Maio, M. (2011). Experiences with strategies and practices for export promotion in developing countries and some implementation issues with the Sierra Leone NES; Belloc, M. and Di Maio, M. *Sierra Leone's National export strategy: Implementation issues and recommendations*, IGC Working Paper 11/1018, IGC, London.
- Freeman, S., Deligonul, S., & Cavusgil, T. (2013). Strategic re-structuring by born-globals using outward and inward-oriented activity. *International Marketing Review*, 30(2), 156–182.
- Goldstein, A. E., & McGuire, S. M. (2004). The political economy of strategic trade policy and the Brazil–Canada export subsidies saga. *The World Economy*, 27(4), 541–566.
- Guo, B., & Guo, J. J. (2011). Patterns of technological learning within the knowledge systems of industrial clusters in emerging economies: Evidence from China. *Technovation*, 31(2), 87–104.
- Hashai, N., & Almor, T. (2004). Gradually internationalizing 'born global' firms: An oxymoron? *International Business Review*, 13(4), 465–483.
- Haddoud, M. Y., Onjewu, A. K., Jones, P., & Newbery, R. (2018). Investigating the moderating role of export promotion programmes using evidence from North-Africa. *Critical Perspectives on International Business*, 14(2–3), 282–308.
- 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.
- Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23–32.
- Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: from liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411–1431.

- Kalinic, I., & Forza, C. (2012). Rapid internationalization of traditional SMEs: Between gradualist models and born globals. *International Business Review*, 21(4), 694–707.
- Ke, Y., Wang, S., Chan, A. P., & Cheung, E. (2009). Research trend of public–private partnership in construction journals. *Journal of Construction Engineering and Management*, 135(10), 1076–1086.
- Kiss, A. N., Danis, W. M., & Cavusgil, S. T. (2012). International entrepreneurship research in emerging economies: A critical review and research agenda. *Journal of Business Venturing*, 27(2), 266–290.
- Khan, K. S., Kunz, R., Kleijnen, J., & Antes, G. (2003). Five steps to conducting a systematic review. *Journal of the Royal Society of Medicine*, 96(3), 118–121.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35(2), 124–141.
- Knorringa, P., & Nadvi, K. (2016). Rising power clusters and the challenges of local and global standards. *Journal of Business Ethics*, 133(1), 55–72.
- Krishna, V. V., Patra, S. K., & Bhattacharya, S. (2012). Internationalisation of R&D and global nature of innovation: Emerging trends in India. *Science, Technology and Society*, 17(2), 165–199.
- Krugman, P. (2011). The new economic geography, now middle-aged. *Regional Studies*, 45(1), 1–7.
- Lu, W., & Liu, J. (2014). Research into the moderating effects of progress and quality performance in project dispute negotiation. *International Journal of Project Management*, 32(4), 654–662.
- Martin, R., & Sunley, P. (2003). Deconstructing clusters: Chaotic concept or policy panacea? *Journal of Economic Geography*, 3(1), 5–35.
- Martínez, A., Belso-Martínez, J. A., & Más-Verdú, F. (2012). Industrial clusters in Mexico and Spain: Comparing inter-organizational structures within context of change. *Journal of Organizational Change Management*, 25(5), 657–681.
- Martinovic, D., Karisik, J., & Bico-Car, M. (2013). Internationalization and cluster potentials with special emphasis on wood-processing sector in Bosnia and Herzegovina. *UTMS Journal of Economics*, 4(2), 231–242.
- McCormick, D. (1999). African enterprise clusters and industrialization: Theory and reality. *World Development*, 27(9), 1531–1551.
- Mejri, K., & Umemoto, K. (2010). Small-and medium-sized enterprise internationalization: Towards the knowledge-based model. *Journal of International Entrepreneurship*, 8(2), 156–167.
- Mohan, S., Khorana, S., & Choudhury H. (2013). Why developing countries have failed to increase their exports of agricultural processed products. *Economic Affairs*, 33(1), 48–68.
- Nadvi, K. (1999). Collective efficiency and collective failure: The response of the Sialkot surgical instrument cluster to global quality pressures. *World Development*, 27(9), 1605–1626.
- Nadvi, K., & Schmitz, H. (1999). Clustering and industrialization: Introduction. *World Development*, 27(9), 1503–1514.
- OECD. (2007). *Policy Brief, Competitive regional clusters* [Online]. National policy approaches. Paris, France: Organisation for Economic Co-Operation and Development.
- OECD. (2009). *Top barriers and drivers to SME internationalisation* [Online]. Report by the OECD working party on SMEs and entrepreneurship, OECD considering the many bottlenecks associated with emerging economies. Paris, France: OECD. Retrieved from <https://www.oecd.org/cfe/smes/43357832.pdf> Accessed on June 13, 2018.
- OECD. (2013). Perspectives on global development 2013 industrial policies in a changing world shifting up a gear [Online]. Paris, France: OECD. Retrieved from https://www.oecd.org/dev/pgd/PGD2013_%20Launch_agenda.pdf Accessed on June 13, 2018.
- Osabutey, E. L., Williams, K., & Debrah, Y. A. (2014). The potential for technology and knowledge transfers between foreign and local firms: A study of the construction industry in Ghana. *Journal of World Business*, 49(4), 560–571.
- Osabutey, E. L., & Croucher, R. (2018). Intermediate institutions and technology transfer in developing countries: The case of the construction industry in Ghana. *Technological Forecasting and Social Change*, 128, 154–163.
- Oviatt, B. M., & McDougall, P. P. (1994). Toward a theory of international new ventures. *Journal of International Business Studies*, 25(1), 45–64.
- Pérez-Alemán, P. (2005). Cluster formation, institutions and learning: The emergence of clusters and development in Chile. *Industrial and Corporate Change*, 14(4), 651–677.

- Piore, M., & Sabel, C. (1984). *The second industrial divide: Possibilities for prosperity*. New York, NY: Basic Books.
- Popescu C. (2010). Industrial clusters and regional development in Romania. *Human geographies. Journal of Studies and Research in Human Geography*, 4(2), 17–34.
- Porter, M. E. (1998). *On competition*. Boston, MA: Harvard Business School Press.
- Primi, A. (2013, June 2–3). *The return of industrial policy: (What) can Africa learn from Latin America?* Working paper prepared for JICA/IPD Africa Task Force Meeting Yokohama, Japan.
- Rasiah, R. (2009). Expansion and slowdown in Southeast Asian electronics manufacturing. *Journal of the Asia Pacific Economy*, 14(2), 123–137.
- Rasiah, R., & Vinanchiarachi, J. (2013). Institutional support and technological upgrading: Evidence from dynamic clusters in Latin America and Asia. *World Economic Review*, 2, 24–47.
- Rocha, H. O., & McDermott, G. A. (2010). Clusters and upgrading: A purposeful approach. *Organizations and Markets in Emerging Economies*, 1, 24–50.
- Senik, Z. C., Scott-Ladd, B., Entekin, L., & Adham, K. A. (2011). Networking and internationalization of SMEs in emerging economies. *Journal of International Entrepreneurship*, 9(4), 259–281.
- Shamsuddoha, A. K., Yunus Ali, M., & Oly Ndubisi, N. (2009). Impact of government export assistance on internationalization of SMEs from developing nations. *Journal of Enterprise Information Management*, 22(4), 408–422.
- Sonobe, T., Akoten, J. E., & Otsuka, K. (2011). The growth process of informal enterprises in sub-Saharan Africa: A case study of a metalworking cluster in Nairobi. *Small Business Economics*, 36(3), 323–335.
- Sonobe, T., & Otsuka, K. (2016). *Cluster-based industrial development: A comparative study of Asia and Africa*. Berlin, Germany: Springer.
- Schmitz, H. (1999). Collective efficiency and increasing returns. *Cambridge Journal of Economics*, 23(4), 465–483.
- Stiglitz, J. E. (2011). Rethinking development economics. *The World Bank Research Observer*, 26, 230–236.
- Tang, Y. K. (2011). The Influence of networking on the *Small Business* internationalization of SMEs: Evidence from internationalized Chinese firms. *International Journal*, 29(4), 374–398.
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222.
- UNIDO. (2009). *Industrial development report breaking in and moving up: New industrial challenges for the bottom billion and the middle-income countries*. Vienna, Austria: United Nations Industrial Development Organization. ID No.: 438ISBN: 978-92-1-106445-2.
- Vahlne, J. E., & Johanson, J. (2013). The Uppsala model on evolution of the multinational business enterprise – From internalization to coordination of networks. *International Marketing Review*, 30(3), 189–210.
- Visser, E. J., Távora, J. I., & Villaran, F. (2015). Growing but not developing: Long-term effects of clustering in the Peruvian clothing industry. *Tijdschrift Voor Economische en Sociale Geografie [Journal of economic and social geography]*, 106(1), 78–93.
- Weijland, H. (1999). Microenterprise clusters in rural Indonesia: Industrial seedbed and policy target. *World Development*, 27(9), 1515–1530.