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EVALUATION OF THE CLUSTER LOCATION DECISION ON THE PERFORMANCE OF FURNITURE MANUFACTURING SMES IN ZIMBABWE

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Abstract

The study sort to establish the effects of cluster location decision on the performance of SME in the furniture manufacturing industry. Data for the study was collected from 69 SME owner/managers in the furniture manufacturing cluster industry located at Mkoba 6, Mtapa and DST complex in Gweru (the third largest city in Zimbabwe). The study deployed a structured questionnaire for data collection. A 100% response rate was obtained from the study and thus allowing study to make conclusions and generalize the results to the furniture manufacturing sector. The study found that SMEs performance is negatively affected by the cluster location decision as it leads to a high concentration of competitors in a single location, SMEs in clusters are restricted in their operations due to limited space allocated to them in the clusters, the majority of SMEs are not able to obtain sustainable benefits through knowledge spillovers in and around clusters. The study therefore recommends local government to involve SMEs in industrial park location and layout decisions so that location becomes are driver to operational success of small firms. It is imperative that town planning and zoning restriction take into consideration the internal heterogeneities of small firms when making agglomeration decisions rather than using the working definition of small firms. The study further recommends the allocation of operating space in designated areas to firms who are in the same line of business or who provide complementary services to the main line cluster so that all firms may benefit from agglomeration.

Keywords: cluster, agglomeration, knowledge spillover, capacity, manufacturing



INTRODUCTION

Zimbabwe's business landscape is characterised by many micro, small and medium scale enterprises as the engines of growth and economic sustainability. According to World Bank (2012) "there are 2.8 million MSME owners owning an estimated 3.5 million businesses (meaning, some business owners have more than one business). They are mainly individual entrepreneurs without any employees (about 71%) and micro-businesses with 1 to 5 employees (24%). The sector is driven by agricultural activities (43%), wholesale and retail (33%). Most of the businesses are located in the rural areas (66%), and operate mainly from residential premises (39%) and farms (22%). They are largely informal (85% are not registered or licensed) and relatively young (40% are in the start-up and 31% are in the growth phase; in total 71% have been in operation for 5 years or less)". There Zimbabwean business environment has been challenging to many start up and already existing business enterprises due to economic instability.

World Bank - Finscope MSME Survey (2012) further expressed that the main challenges reported by MSME owners relate to access to finance/sourcing money, lack of raw material and operational space/working facilities. In order to address the challenge of lack of operational space and/working facilities many urban and rural local authorities in Zimbabwe availed working and trading spaces in and around the central business districts, in high density neighbourhoods business areas as wells as at growth points. However, some of the availed working areas such as factory shells, bus terminus, and vending platform still remain unoccupied as the target businesses have tended to shun away from the allocated and designated operational facilities leading to little revenue recovery by local authorities. The limited uptake of designated operating areas saw the mushrooming of SMEs in undesignated areas and the prevalence of street vendors, blockage of streets and traffic in the major cities of Zimbabwe. Feldman and Audretsch (1996) lamented that the question of where to produce or more generally the location of economic activity has been relatively neglected for too long. A more recent study on SME cluster in Zimbabwe by Kamoyo, Muranda and Mavhima (2014) interrogated the effectiveness of microenterprise clustering as a tool for sustainable economic development. In contrast the aim of the study to assess the impact of location on the performance of SMEs in the manufacturing sector.

The study further aims to establishing the challenges that are faced by SMEs operating in a cluster and to recommend alternative strategies in order to enable cluster operators to benefit from agglomeration.

LITERATURE REVIEW

Clustering

Porter (2000) denotes that clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate. From a broad perspective clustering can be viewed as a geographic location strategy where firms benefits from being closer to each other directly and indirectly. From a relational perspective, the cluster is described as a cohesive and dense network made up of strong contacts (Molina-Morales, Martínez-Cháfer, and Valiente-Bordanova 2017). Competitive clusters exist in both industrial and service sectors, being especially common (Urtasun and Gutiérrez 2017) and in Zimbabwe many SMEs operate in clusters. A cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities (Porter 2000). According to Porter (1998) clusters are geographic concentrations of interconnected companies and institutions in a particular field, encompassing an array of linked industries and other entities important to competition. In a study of clustering among SMEs in Palestine, Jordan and Israel, Sultan (2014) envisaged that there is a significant positive relationship between cluster and SMEs performance in the Palestinian food-processing sector. Sultan further denoted that cluster can help SMEs in the food-processing sector in Palestine to enhance their performance and further reiterated that these SMEs need to build linkages among themselves and with related and supporting industries.

There is an additional factor that explains why businesses might be interested in clustering: Geography economies or externalities generated not by the presence of other firms but by the existence of resources that draw related firms to an area, (Urtasun and Gutiérrez 2017). In most countries there are deliberate strategies designed by local governments and non-governmental organisations to foster the development of SMEs which results in clustering. For instance SMEs generally experience location challenges due to their large numbers and lack of adequate financial resource to afford locations that are charged commercial rate by their owners. Resultantly local government and other civic organisation have led to the development of industrial parks where SMEs are located. These industrial parks thus leads to the development of location economies addressing both the demand and supply side benefits. Rodríguez-Victoria, Puig, González-Loureiro, (2017) proposed that in line with this assertion that it is very likely that clustering has a direct effect on improved competitiveness. The combination of collaboration and competition incentivizes firms to operate at higher levels of innovation and productivity, and also leads to the formation of new businesses in the cluster and economic

growth (Rivera, Gligor, Sheffi, 2016). However, Urtasun and Gutiérrez (2016) be morns that far less explored are demand externalities, which are more relevant in consumer service businesses, such as hotels and restaurants, that sell products or services which are consumed at the business location. Porter (1990) cited in Rodríguez-Victoria, Puig, González-Loureiro, (2017) showed that a number of externalities were generated by clusters:

- Advantages in cost and availability of materials and skilled human resources;
- Availability of more and better information and knowledge within the cluster;
- Complementarities and synergies arising from specialization within the cluster;
- More direct access to institutions and public goods:
- Under the premise that what cannot be measured cannot be managed, the cluster helps managers to compare internal procedures and performance.

Kamran, Fan, Matiullah, Ali, Hali, (2017) corroborates Porter's views by mentioning that clustering leads to spillover that causes local firms to grow faster and becomes a source of attraction for other specialized services or supply firms to the region, making it even more attractive and beneficial for the industry, the generation of human capital and knowledge in the region which, in turn, are beneficial for others as well as subsequent firms. Feldman (2016) firms are one mechanism for organizing economic activity and social networks are another; geography provides and alternative platform that easily bring together resources external to firm and augments social networks through face to face interaction. Nachum and Wymbs (2002) market size is most likely going to have significant effect on the location choice of firms. Thus the greater the potential market size in a location the greater the chances that firms might chose the location. This study also seeks to evaluate whether clustering by SMEs as a firm capacity management strategy has led to the improved performance of manufacturing SMEs in Zimbabwe and to what extend are the firms consciously are choosing their location for their convenience and their customers respectively as espoused by Porter (1990).

The study poses the assumptions that agglomeration is only beneficial to specific types of businesses depending on their own characteristics. Maine, Shapiro and Vining (2008) notes that clustering benefits arise from the ability of firms to externally augment resources, knowledge and capabilities, which in turn give rise to competitive advantage. This assumption is corroborated by Nachum and Wymbs (2002) who opined that firm specific attributes determine the ability of firms to realize value and benefits from cluster participation. Firm attributes such as owner/manager levels of education, firm size, number of years in business or number of employees, marketing abilities and knowledge of and possession of modern technologies are some of the factors affecting performance of clustered firms. Shaver and Fyler (2000) indicated that the technological competences of firms influence their location choice. Shaver and Fyler further posits that the viewing of location advantages as isolated from the characteristics of firms is particularly inadequate with reference to clusters as it is the characteristics of firms that create the advantage of a location. These views are consistent with Nachum and Wymbs (2002) who expressed that policy makers who seek to effect the location patterns of firms within the areas under their jurisdictions would also benefit greatly by explicitly acknowledging the heterogeneity among firms in terms of the attraction of particular locations. Policies designed to attract all firms within an industry may not yield the most desirable outcome, as the benefits that a particular location provide may differ among firms (Nachum and Wymbs). Astrid (2016) corroborates this assertion by concluding that agglomeration economies play a significant role for small firms but not for medium and large firms. Scott (1998) explained that the major reason for cluster locations is the search for complementary resources that they do not possess. Such resources are often more abundant in and around clusters than elsewhere and geographic proximity reduces the costs associated with accessing them. Badri (2007) deduced that the general critical factors of industrial location are transportation, labour, raw materials, markets, industrial sizes, utilities, government attitude, tax structure, climate and community. Astrid (2016) further noted that agglomeration of economic activity is explained through the interplay of increasing returns to scale and transport costs, better market access, supplier and demand linkages, infrastructural sharing and knowledge spill overs. Transportation costs are inversely related to the mean distance shipped, so that a higher value of transportation costs should be associated with a lower geographic concentration of production, industries tend to be less geographically concentrated when scale economies play a more important role for organisation where resource dependence in a key factor, for organisations where new economic knowledge tends to play a more important role there is a higher propensity to cluster together (Audretsch and Feldman 1996). Whereas the market potential exerts a significant positive impact for all firms, labour costs do not exert a significant impact on large firms' location decisions. The study therefore make the supposition that small firms share labour especially handyman who freelance and thus agglomeration creates a labour cost advantage as well as availing adequate flexible contract labour during period of high production levels. A cluster of firms is also likely to attract a pool of suitably skilled labour reducing search costs and facilitate the matching of workers to jobs (Howard, Newman, Rand and Tarp 2014)

Porter (2000) and Howard et al (2014) share the common view that locating a business in clusters may lead to improved productivity of firms. Proximity, arising from the co-location of companies, customers, suppliers, and other institutions, amplifies all of the pressures to innovate and upgrade (Porter 2000). Howard et al (2014) agglomerative forces that motivate

firms to cluster leads to firms in clusters to be more productive as locating close to suppliers or customers reduces transport costs but also increases competition, under competitive pressures firms are incentivized to reduce slack, cut costs, and organize production more efficiently in order to compete. New and small firms in a geographic area get innovation through new knowledge spill over from third party, firms and or research institutions Feldman and Audretsch (1996). Firms that are located in clusters are more likely to experience technology or knowledge spillovers which directly impact on firm productivity (Howard et al). Fortune magazine (cited in Feldman and Audretsch 1996) also points out that: "business is a social activity and you have to be where important work is taking place. What makes Triangle Park so well is a unique nexus of the business community, area universities and state and local governments. It is home to more than 34 000 scientists and researchers and over 50 corporate, academic and government tenants specialising in microelectronics, telecommunications, chemicals, biotechnology, pharmaceuticals and environmental health sciences". Feldman (2016) indicated that economic actors realize gains when located to places with abundant resources, well-developed social networks and the chance for serendipitous encounters: all factors that increase the probability of recognizing opportunity and easily solving problems.

METHODOLOGY

Data for the study was collected from census 69 SME owner/managers in the furniture manufacturing cluster industries located at Mkoba 6, Mtapa and DST complex in Gweru (the third largest city in Zimbabwe). A self designed structured likert scale questionnaire was adopted as the main instrument for data collection. A 100% response rate was obtained from the study and thus allowed the study to make conclusions and generalize the study results to the furniture manufacturing sector. Data from the study was presented in tables and frequency statistics were obtained in order to analyse and interpret the results.

ANALYSIS AND DISCUSSION OF FINDINGS

Location based strategies

As already noted in literature, it is often very rare for organisations in manufacturing sector to focus purely on market based view or resource based view, but rather they try to strike a balance between the two thus creating a hybrid perspective. The hybrid view the study was focused on location decision as the SMEs targeted for this study were cluster based, hence there was a need to assess whether location through clustering enabled them to effectively manage their capacity through; improved customer perception due to location, sharing of resources (electricity, machinery), sharing of labour, customer concentration due to locating closer to competitors and availability of operating space.

Table 1. Location decision responses

Description	SA	Α	N	D	SD	TOTAL
Customers have positive perception about my	17	49	9	12	13	100%
organisation's location						
My organisation's location provides access to customers	15	52	3	13	17	100%
easily						
My organisation's benefits from knowledge sharing due to	16	74	3	1	6	100%
location						
My organisation acquired new production equipment in	1	28	2	39	30	100%
the past 2 years						
My organisation's location facilitate resource sharing with	49	29	2	4	16	100%
other firms						
Our current location allows our organization to have more	4	15	2	70	9	100%
operating space						
My organisation faces stiff competition due to clustering	7	39	0	44	10	100%
My organisation participates in manufacturing workshops	3	9	1	39	48	100%

Customers have positive perception about location

Firstly the study assessed the owner/manager's knowledge of customer perception as a result of their location. Results from table 1 above indicates that 66% (agree 49% and strongly agree 17%) of the respondents agreed that customers had a positive perception about them due to their location. However, 25% (disagree 12% and strongly disagree 13%) whereas, 9% were neutral.

Furthermore, the study collected data to establish whether clustering enabled SMEs in the manufacturing sector to obtain access to a large pool of customers due to centre of gravity pull.

Access to customers due to location

Study results shown in table 1 above indicates that the majority of SME owner/managers constituting 67% (agree 52% and strongly agree 15%) opined to the notion that clustering brought more customers, 3% were neutral and 30% disagreed (13% disagree and 17% strongly disagreed). Maine et al (2008) notes that co-location with competitors may generate demandside benefits by reducing consumer search costs The location of clusters in and around high

density neighborhoods helps SMEs to access a large market share for home products, a relatively moderate market share of school furniture and a low market for office furniture customers as shown in Table 1 below.

Cluster SME market segment

Table 2. Target market for manufactured products

-					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Home	44	63.8	63.8	63.8
	School	14	20.3	20.3	84.1
	Office	11	15.9	15.9	100.0
	Total	69	100.0	100.0	

It is this study's assumption that clustering enables SMEs to reduce marketing costs for when the other businesses make efforts to attract their own customers all businesses in the same industrial park will be seen and accessed by visiting customers. In addition location near high population residential places allows SMEs to be easily identified by customers. However, the downside is that high density neighborhoods they serve are characterised by low level of income and expenditure which does not lead to sustainable business operations. Thus therefore means that market attraction may occur both deliberately and not deliberately (without knowledge due to indirect spillovers from competitor activities) for SMEs.

Knowledge sharing due to location

Table 1 results shows that the majority of SME 90% (agree 74% and strongly agree 16%) of sample participants concurred that clustering enabled them to share knowledge about their industry, 3% were neutral and 7% (disagree 1% and strongly disagree 6%). Thus these results also entails that through clustering SMEs are able to manage and feel the gaps caused by lack of market research as 65% of the responded disagreed that they carried out market research. Henceforth, knowledge sharing enhances the performance of cluster firms. Clustering offers the benefit of free information through association with related businesses. The study further obtained that the majority of SME constituting 87% (48% strongly disagree and 39% disagree) have not attended any production related workshop. This result leads to assumption that knowledge spillovers due to clustering are the major source of information for smaller firms. Elche, García-Villaverde and Martínez-Pérez, (2018) advocates for clustering by noting that the

costs and the complexity of knowledge transfer increase significantly when firms are dispersed and disconnected. Transfers among firms can be of various kinds, and may include marketing and managerial know-how, technology, market knowledge, access to external networks and markets (da Rocha, Kury, Tomassini and Velloso 2017).

Location facilitate resource sharing

Results presented in table 1 above shows that 78% (agree 29% and strongly agree 49%) whereas 20% (disagree 4% and strongly disagree 16%) of the respondent were of the view that they do not share any resources with competitors. Only 2% of the respondents were neutral to their views. Maine, Shapiro and Vining (2008) posited that benefits arise from the ability of firms to obtain and integrate valuable external resources and capabilities made available in the cluster. The ability to share resources is assumed to enable SMEs to effectively manage their production capacity as, it allows them not to make costly adjustments such as addition of manpower and or unnecessary addition of tools to meet job demands. Maine et al (2008) argue that benefits are pronounced when firms require specialized resources, but are unable to generate these resources internally. Results obtained from the study indicates that 69% of the respondents had not acquired new production equipment in the past five years of operation. Thus it can be assumed that clustering enabled small firms to share existing equipment. The proximity between companies, which facilitates the frequency of contacts and, on the other hand, the proximity between the actors, leads to the formation of a dense network structure, as well as strong relationships among the different actors (Molina-Morales, Martínez-Cháfer, and Valiente-Bordanova 2017).

Location allowing an organization to have more space

Results obtaining from table 1 above shows that 79% (disagree 70% and strongly disagree 9%) of the respondents were of the opinion that clustering negatively affected availability of production space. A small population constituting 19% (agree 15% and strongly agree 4%) agreed that clustering offered them more space to operate whilst 2 % were neutral in their views. This study based on the results therefore insinuates that, clustering negatively affect capacity utilization as less space is made available, this also affects visibility to SMEs to customers, create conflict between SMEs due to resource sharing, subletting (that create more pressure for limited resources such as electricity connection causing illegal connections and compromising health and safety of workers) and many other potential challenges. Maine et al (2008) expressed that firm-specific cluster benefits will depend not only on the resources,

knowledge and capabilities available in the cluster, but on the ability of a firm to absorb these resources, and in particular on their ability to absorb knowledge.

Stiff competition due to clustering

Results obtained from table 1 above indicates that the majority of SMEs were not able to withstand the competition caused by clustering as evidenced by 54% (disagree 44% and strongly disagree 10%). In contrast 46% (39% agree and 7% strongly agree of the respondents noted that they were able to withstand competition from competitors. Further analysis of the production output trend of clustered SMEs showed that their levels of capacity was decreasing when measured against those of competitors in the same cluster as shown in table 3 below.

Cumulative Frequency Percent Valid Percent Percent 14.5 Valid Increasing 10 14.5 14.5 Constant 12 17.4 17.4 31.9 Decreasing 47 68.1 68.1 100.0 Total 69 100.0 100.0

Table 3. Changes in the number of output vs competition

The study thus incites that the majority of SMEs are not benefiting from cluster location as their output is constantly decreasing due to competitive pressures. The study therefore reflects from research results and infers that organization that deliberately create strategies to manage competition such as market research, new product development and acquisition of new production machinery are able to withstand competition within a cluster. These results demonstrates that small firms in cluster locations are failing to take advantage of specialised economies. Specialization economies arise when a geographical concentration of similar firms takes place in a specific area (Claver-Cortés, Marco-Lajara, Manresa-Marhuenda, García-Lillo and Seva-Larrosa 2017).

Study results obtained also indicated that 64% of the SMEs who participated in the research were below 10 years of operation. Thus the study makes an inference that lack of cluster and operations experience prevents small firms from benefiting from industry agglomeration. Claver-Cortés, Marco-Lajara, Manresa-Marhuenda, García-Lillo and Seva-Larrosa (2017) the age (years of operation) of a firm may influence innovation both positively and negatively: on the one hand, having more experience is likely to permit a greater accumulation of knowledge, but it can also become an inertia generation source that will hinder

adaptation as well as the introduction of novelties in products and processes. Geographical proximity creates competitive advantages for SMEs that cooperate closely and compete, since a host of linkages between cluster members results in a whole greater than the sum of its parts (Porter, 1998). It is expected that firms in a cluster can benefit from productivity improvements due to reduced transaction costs, access to labour, benefits associated with collective intelligence, technology spillover, and increased competitive pressure (Osarenkhoe and Fjellström 2017). However, it is the ability of cluster participants to craft adequate strategic intents and execute them accordingly through appropriate utilisation of cluster knowledge spillovers.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that SME generally are facing location challenges. SMEs are not able to experience sustainable benefits that are brought by cluster location in industrial parks.

The study therefore recommends local government to involve SMEs in industrial park location and layout decisions so that location becomes are driver to operational success of small firms. It is imperative that town planning and zoning restriction take into consideration the internal heterogeneities of small firms when making agglomeration decisions rather than using the working definition of small firms. The study further recommends the allocation of operating space in designated areas to firms who are in the same line of business or who provide complementary services to the main line cluster so that all firms may benefit from agglomeration. In addition the study advocates for the existence of size heterogeneity in clusters where small firms are collocated close to large firms in order to create knowledge spill overs that will be beneficial to SMEs. More so the study recommends that SMEs need to be educated on strategies to enhance business networking and collaborations in order for them to benefit from industrial park clustering.

REFERENCES

Aihie Osarenkhoe and Daniella Fjellström (2017) Clusters' Vital Role in Promoting International Competitive Advantage - Towards an Explanatory Model of Regional Growth. Investigaciones Regionales, Journal of Regional Research, 39 (2017), Pages 175 to 194.

Ainhoa Urtasun, Isabel Gutiérrez, (2017) "Clustering benefits for upscale urban hotels", International Journal of Contemporary Hospitality Management, Vol. 29 Issue: 5, pp.1426-1446,

Audretsch David B and Feldman Maryann P (1996) R and D Spillovers and the Geohrapghy of Innovation and Production. The American Economic Review Vol. 86, No 3. (Jun 1996) pp 630-640. Published by American Economic Association. URL http://www.jstor.org

Claver-Cortés E, Marco-Lajara B, Manresa-Marhuenda E, García-Lillo F, and Seva-Larrosa P (2017). Location Decisions and Agglomeration Economies: Domestic and Foreign Companies. Investigaciones Regionales, Journal of Regional Research, 39 (2017), Pages 99 to 135.



Dioni Elche, Pedro M. García-Villaverde, Ángela Martínez-Pérez, (2018) "Inter-organizational relationships with core and peripheral partners in heritage tourism clusters: Divergent effects on innovation", International Journal of Contemporary Hospitality Management, Vol. 30 Issue: 6, pp.2438-2457

Elicia M. Maine Æ Daniel M. Shapiro Æ Aidan R. Vining (2008) The role of clustering in the growth of new technology-based firms. Small Bus Econ Springer Science+Business Media, LLC. 2008.

Feldman Maryann P and Audretsch David B (1996): Location, location, location: The geograpght of innovation and knowledge spillovers, WZB Discussion Paper, No FS IV 96-28, Wiseenschaftszentrum Berlin fur Sozialforschung (WZB), Berlin.

Feldman Maryann P (2016) Geography of innovation. In Augier M., Teece D. (eds) The Plagrave Encyclopedia of Strategic Management. Palgrave Macmillan, London.

Francesc Xavier Molina-Morales, Luís Martínez-Cháfer and David Valiente-Bordanova (2017) Disruptive Technological Innovations as New Opportunities for Mature Industrial Clusters. The Case of Digital Printing Innovation in the Spanish Ceramic Tile Cluster. Investigaciones Regionales — Journal of Regional Research, 39 (2017) — Pages 39 to 57.

Krenz, Astrid (2016): Firm structure and the location decision of German manufacturing firms: Evidence from official firm-level data, cege Discussion Papers, No. 298, University of Göttingen, Center for European, Governance and Economic Development Research (cege), Göttingen

Kamoyo Michael, Muranda Zororo and Mavhima Farai (2014) Cluster Approach To Microenterprise Development: A Comparative Study Of Clustered And Isolated Wooden Furniture Enterprises In Zimbabwe

Lilach Nachum And Cliff Wymbs (2002) Firm-Specific Attributes And Mne Location Choices: Financial And Professional Service Fdi To New York And London. ESRC Centre for Business Research, University of Cambridge Working Paper No. 223, 2002

Masood A. Badri (2007) Dimensions of Industrial Location Factors: Review and Exploration. Journal of Business and public affairs Volume 1, Issue 2, 2007

Porter, Michael E (2000) Location, Competition, and Economic Development: Local Clusters in a Global Economy. Economic Development Quarterly 2000; 14; 15

Porter, Michael E (1998) clusters and the new economics of competition. Harvard Business Review November-December 1998.

Emma Howard, Carol Newman, John Rand, Finn Tarp (2014) - productivity-enhancing manufacturing clusters: evidence from Vietnam. African growth initiative

Rivera, L., Gligor, D. and Sheffi, Y. (2016), "The benefits of logistics clustering", International Journal of Physical Distribution & Logistics Management, Vol. 46 No. 3, pp. 242-268.

Shah Muhammad Kamran, Hongzhong Fan, Butt Matiullah, Gulzar Ali, Shafei Moiz Hali, (2017) "Ethnic communities: a factor of industrial clustering", International Journal of Social Economics, Vol. 44 Issue: 10, pp.1290-1306,

Shaver, J.M. and F. Flyer (2000), Agglomeration Economies, Firm Heterogeneity, and Foreign Direct Investment in the United States, Strategic Management Journal 21 (12), 1175-1193.

Sultan Suhail Sami, (2014)," Enhancing the competitiveness of Palestinian SMEs through clustering", EuroMed Journal of Business, Vol. 9 lss 2 pp. 164 - 174

Rodríguez-Victoria, O. E., Puig, F., González-Loureiro, M. (2017): «Clustering, Innovation and Hotel Competitiveness: Evidence from the Colombia destination», International Journal of Contemporary Hospitality Management, 29(11).

World Bank. (2012) Zimbabwe - FinScope MSME survey 2012 (English). Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/780081468137402417/Zimbabwe-FinScope-MSME-survey-2012.