Influence Of Firm Resources, Organizational Characteristics and Macro-Environment on Export Performance of Small and Medium Manufacturing Enterprises in Nairobi City County, Kenya

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Abstract
The broad objective of this study was to determine the joint influence of firm resources, organizational characteristics, and macro environment on export performance of small and medium manufacturing enterprises in Nairobi city county, Kenya. A conceptual model was developed, and from it, a hypothesis was formulated to test the joint influence of firm resources, organizational characteristics, and macro environment on export performance. The study is anchored on four theories; the Resource Based Theory, Porters Theory of competitive advantage, The Industrial Organization Theory and Firm Internationalization Theory. The research was a cross-sectional survey of 265 companies in Nairobi City County, chosen from a population of 853 companies. The unit of analysis was the SMME involved in exporting. The Cronbach alpha coefficient was used to evaluate internal consistency and homogeneity among the study variables. Out of the 265 firms sampled, 238 completed the questionnaire resulting in 89.1 percent response rate. The responses were then used to evaluate the hypothesis of the research. A level of five percent was chosen when testing the coefficients' importance. The findings from the hypothesis was that, jointly, firm resources, organizational characteristics and macro-environment influence export performance. The study has contributed to theory, policy, management and practice, industry and methodology. Based on the research results, the national and county governments need to formulate legislation and policies that promote the growth of small and medium-sized enterprises, such as creating an appropriate atmosphere for SMMES to acquire credit and recommending appropriate and effective production processes. Further, stakeholders in export promotion should appreciate and place an emphasis on the importance and impact of the economic factor in the macro-environment to guide existing and potential investors in manufacturing and exporting sector. The research had certain constraints primarily due to the categorization of the enterprises by the various government agencies and stakeholders. The limitations however did not have significant effect on the findings. Future studies should address the scope and geographical coverage of SMMEs.

Keywords: Firm Resources, Organizational Characteristics, Macro-Environment, Small and Medium Manufacturing Enterprises, Export performance.

Introduction
Researchers have argued that exporting is a highly flexible and cost-effective means of gaining entry into new foreign markets. Exporting requires minimal resource commitments when compared to other foreign market entry modes such as licensing and foreign direct investment. The progress of a nation’s exports has positive impact on the growth of the economy in total as well as on individual firms (Cavusgil & Nevin, 1981; Tesfoqm & Lutz, 2006). Exporting activities increase profitability, improve trade balances, and help to deal with the problem of poverty and unemployment (Koskal, 2008; Karadeiz & Gocer, 2007). Secondly, exporting provides greater incentives for Small and Medium enterprises to invest in Research and Development, and innovation (Ganotakis & Love, 2012). Thirdly, in the process of exporting, Small and Medium Enterprises (SMEs) become exposed to superior skills and new technology which can ultimately boost productivity (Grossman & Helpman, 1991). Finally, exporting can be used as a stepping stone for future international expansion through foreign direct investment (Erminio & Rugman, 1996). Other researchers, for instance Palley (2011) contend that as a result of changed conditions in both emerging
markets and developed economies, countries should reduce reliance on strategies aimed at attracting export oriented foreign direct investment (FDI), and institute a new paradigm based on domestic demand-led growth model.

Theoretical underpinnings of exporting are rooted in Resource Based View (RBV), Firm Internationalization Theory, and Porter’s Theory on competitive advantage and Industrial Organization Theory. Even though, the existing theories provide many important and valuable insights into the multi-dimensional phenomenon, the resulting picture is fragmented (Coviello & McAuley, 1999; Daniels 1991; O’Farrell However, in this study, SMEs engaged in manufacturing and exporting are of great concern because they play a significant role due to their contribution to the national economy, for instance, in realizing the much-needed foreign exchange and to reduce balance of payments. This study seeks to establish the joint influence of firm resources, organizational characteristics and macro-environment on export performance of manufacturing small and Medium Enterprises in Nairobi City County.

Firm Resources
A resource can be described as the financial, social, human capital, each with a specific job in the development of a firm and speaks to a hindrance for the venture when constrained (Cooper et al., 1994). Other scholars, for instance Rumelt (1991) explains how reputation when recognized as a resource leads to market prominence, and the way it influences performance. Grant (2001) categorises internal resources into financial resources, physical assets, Human Resource, technological resources, reputation and hierarchical assets. While industry factors determine competitive advantage in the internationalization perspective, a firm’s resources determine competitive advantage according to RBV. The strengths of a firm are measured by its capabilities as a result of combinations of internal resources pooled together to achieve high levels of business growth. It was however stated that economic resources are the most fundamental. The thinking however has changed, according to Celec et al. (2014) SMEs can make minor technological changes in their operations to suit their circumstances and result to financial gains.

Organizational Characteristics
Researchers have identified numerous organizational characteristics and perceptions which may shed light on their relationship with export performance of the firm; however, the literature on the topic is still characterized by the lack of consensus among scholars as to what constitutes the managerial factor in determining exporting and what specific dimensions are influenced by management (Leonidou et al., 2011). Further, a number of determinants are found that can be classified as management skill-based determinants of export performance. These include managers’ experience, education level, number of employees, age, and ownership of the firm.

Knowles et al. (2006) contend that decision-makers of successful exporting firms were much more likely to have competences such as foreign language skills. These skills were often at a higher level for successful exporters than those of less successful exporters, at the same time presenting an international mindset that is conducive to successful internationalization. A literary review by Zou and Stan (1998) had established mixed views; firm size has positive effects on export performance if measured in terms of total sales and has negative effects based on export profits if measured by number of employees.

Previous studies, for instance, Aaby and Slater (1989) posit that firms’ export market knowledge is an important competence and positively influences export performance. However, Hart et al., (1994), and Toften (2005) established a weak correlation between export performance and export market knowledge. Other studies, for instance, Langes and Montgomery (2005) based on Portuguese firms, much earlier, established that some firm characteristics such as, labour productivity, export orientation, and concentration, as well as firm size are important determinants of firm’s export intensity. Accordingly, the central proposition in this study is that export performance correlates with firm resources, and organizational characteristics among them, vital elements, such as, firm size, age of the firm, ownership and management.

Macro-environment
Macro-level environment refers to the national or territorial environment in which the firm operates (Yabs, 2010). Other scholars such as Pearce and Robinson (2007) stated that indicators such as economic, political, social and technological forces that firms face which incidentally affect performance form the external environment. In support of this view, Kibera (1996) says, depending on the context in which enterprises
exist, the Macro-environment can be contextualized in the following dimensions: physical, historical, economic, social-cultural and technological. These indicators are also referred to as macro-environment. Specifically, the macro-environment conditions include political, financial, socio-cultural, technological, environmental and legal factors, all these, influence export growth.

Export performance is affected by internal and external barriers, the performance tends to be conditioned by environmental characteristics such as the extent of competition the legal and regulatory policies of host country governments, and the availability of suitable distribution and communication channels among other factors. As the organization's external environment changes, its goals must respond to those changes, to reflect this changing environment (Walley, 2008).

Gathungu et al. (2014) claimed that the capacity of a company to directly associate with external opportunities strongly moderates the relationship between performance and other factors, including entrepreneurial orientation. Leonidou (2014) argues that the dynamic nature of today's environmental components presents a challenge from which market policy is chosen.

Export Performance
Exporting plays a crucial role in accelerating the growth and profitability of firms thereby enabling them to achieve a sustained competitive advantage. Existing research has certainly enhanced the understanding of firms’ export performance, though; work in this field is still evolving.

Exporting is conceptualized on the Firm Internationalization theory by Buckley and Casson (1976). Internationalization, is equally defined as an act of businesses increasing involvement in international operations (Welch & Luostarinen, 1988); it can take many forms, such as licence/franchise, indirect export, direct export, overseas subsidiary, joint venture, and foreign direct investment (Calof & Beamish, 1995; Lage & Montgomery, 2004; Li et al., 2013; López-Duarte & Vidal-Suárez, 2011). Exporting has become a significant internationalization strategy for both companies and national economies in the world markets (Koksal, 2006). Since exporting is generally a less resource-laden approach compared with alternative foreign market entry and expansion modes, it requires minimum business risk, needs low commitment of resources, and offers high flexibility of movements (Neupert et al., 2006; Korez-Vide, 2007).

Although the sequential approach to exporting is based on the classical ideas presented by Vernon (1966), Buckley and Casson (1976), it reaches its maturity through two parallel research trends developed at the end of the 1970s and the beginning of the 1980s: The Uppsala School (Johanson et al., 1977), and the innovation school (Bilkey et al., 1982). Both approaches agree in the fact that internationalization is an evolutionary process in which the firm develops progressive levels of commitment to international markets, as it moves ahead through a series of sequential stages, by making cumulative decisions (Root, 1987). Recent studies reveal that approximately half the studies in the export literature now adopt strategic and subjective export performance measures which has also been verified. At firm level, a better understanding of export performance is important because exporting improves utilization of productive capacity, improves financial performance and competitive edge as well as providing a foundation for future international expansion (Lu & Beamish, 2001).

According to Langes and Montgomery (2005), Agndal and Chetty (2007), there are still many firms in developing countries that do not export or contemplate doing so despite the argument that exporting does not require a lot of capital investment and has lesser financial and commercial risk as a mode of a foreign market entry mode compared to other forms of direct investment. These studies suggest that the value embedded in firms determine their export capability, which in turn influence their conduct of exporting activities and ultimately export performance.

Small and Medium Manufacturing Enterprises in Export Business in Kenya
Numerous efforts have been explored by policy makers to define the concept of SMEs in different economies. The various attempts have resulted into multi approach in understanding the concept of SMEs. The concept of SMEs however, varies from one country to another depending on the indicators used (Visser, 1997). The first criteria, based on the number of employees, defines SMEs as those enterprises below a certain number of workers (for example, can range from less than 10 to less than 50 employees). The second criterion defines the SMEs in terms of legal formality, and has been used to distinguish between the formal and informal sectors. However, the definition by Government of Kenya which is adopted by this study
depicts SMEs as having less than 100 employees. In Kenya, the SME sector is considered as one of the major contributors to the economy by providing income and employment to a significant proportion of the population (Ngugi & Bwisa, 2013). The Kenya Economic Survey report (GoK, 2016) shows that the SME sector contributed 79.8 per cent of new jobs created during the year in Kenya. Under Vision 2030, SMEs have been identified as key economic pillars to spur growth and development because of the immense potential for creation of wealth and employment, and eradication of poverty. SMEs are involved in manufacturing and exporting, for instance, the growth in quantum index for manufactured articles increased by 28.6 per cent, Economic Survey (GoK, 2017).

Currently, it is estimated that the overall contribution to the GDP by this sector stands at over 12.5 per cent (Economic Survey, 2018). According to Kenya Association of Manufacturers (KAM), the manufacturing industry can be classified under three main sectors; namely, the agro-based industry sector, the engineering and construction industry sector and the chemical mineral industrial sector. The listed sub-sectors are fourteen, though the Sub-sectors which recorded growth were: meat and dairy products; canned vegetables; fruits; fish; oils; fats beverages; tobacco; petroleum and other chemicals among others (Economic Survey, 2018).

Conceptual Framework
The literature review highlights three variables, that is, firm resources, organizational characteristics, and macro-environment, that jointly influence export performance. The study tested the individual influence of each of the three variables, and the eventual joint effect on export performance. The interrelationships are captured in Figure 1, depicting the conceptual framework for the study.

![Figure 1: Conceptual Framework](image)

Source: Researcher

Methodology
The research was a cross-sectional survey that focused on Small and Medium Manufacturing Enterprises located within Nairobi City County that undertake exporting activity. The target population comprised of 853 firms registered with KAM, the list was divided into six main sub-sectors by the researcher. Stratified random sampling was used by the researcher to acquire the sample per each sector. A sample size of 265 SMMEs was determined using the Krejcie and Morgan Table (1970). The research targeted the executive
management, precisely the Chief Executive Officer (CEO), the Production Manager or the Personnel Manager.

The research used both primary and secondary data. The survey questionnaire was the main data collection tool. The primary data were collected by means of a structured questionnaire that had closed and open-ended questions on a five-point Likert Type Scale and nominal scale. It covered Firm resources, Organizational characteristics, macro-environment, and export performance of manufacturing SMEs. Secondary data pertaining to firm resources, organizational characteristics, macro-environment and export performance specifically on trends were also obtained from financial outcomes, annual reports, and other relevant documents in the public domain. Other sources of information were, Kenya Association of Manufacturers (KAM), Export Promotion Council (EPC), Export Processing Zones Authority (EPZA), Ministry of Trade (MOT), Ministry of Industrialization, and SMEs website.

Data obtained from the field was entered in excel and subjected to cleaning by removing outliers and coding for further analysis. The coded data was analyzed using SPSS version 22.0 for both descriptive and inferential statistics. Descriptive statistics such as frequency distribution, measures of central tendency, measures of dispersion, percentages, t-tests and other tests of significance were computed to analyze data.

Simple regression analysis was used to develop the model expressing the relationship between dependent variable (Export Performance), and independent variable firm resources. Organizational Characteristics and Macro-environment were portrayed as moderating variables. Analysis of Variance was explored and the coefficient of determination (R2) which provides the proportion of variance in the independent variable accounted for by the combination of predictors.

The reliability of the data collection instruments was estimated using Cronbach Alpha Coefficient which assessed the internal consistency or uniformity among the study instrument items. All variables were reliable since their Cronbach Alpha value exceeded 0.7, with the largest Cronbach Alpha value of 0.8269 and the smallest Cronbach Alpha value of 0.7170 in the organizational characteristics.

According to Malhotra (2015), based on the high value, all the variables were reliable, hence the research instrument was reliable and therefore no amendments were required Sekaran (1992) mentions various types of tests of validity that are applied to test the goodness of measures, the validity tests are grouped in to three broad areas, validity of content, validity of criterion and validity of building. Orodho (2008) defines validity as the extent to which a test measures what it intends to measure. Sampling adequacy tests were implemented to determine the validity of the study tool. This allowed the survey to determine whether the latent variables items were suitable for further assessment. Against the results obtained from the sampling adequacy test of Kaiser-Meyer-Olkin (KMO) and the sphericity test of Barlett the findings show that the measurement scales exceeded the 0.5 limit set by Williams, et al. (2012) where; firm resources (0.6854), organisational characteristics (0.5970), and macro-environment (0.5600), and export performance (0.7765). According to Williams, et al. (2012), for sampling adequacy with values above 0.5 being better, 0.50 is appropriate under KMO view.

**Results**

The research established significant correlations among the study variables. Firm resources measured in terms of raw materials, financial and human capital, processes, and ICT and export performance were significantly correlated. This showed that there is a relationship between firm resources and firm export performance. Though, the results demonstrated that firm resources was statistically insignificant in determining export performance. The study further established that, there was positive relationship between organizational characteristics and export performance. The emergent influence was moderating in nature and hence the variable influenced export performance significantly. The moderating effect was tested as there is a crucial direct relationship between organizational characteristics and export performance. This suggests that the manufacturing SMEs rely on organizational characteristics as a significant factor for firms engaged in exporting.

The study demonstrated that there is a positive relationship between macro-environment and export performance and hence had a significant moderating influence on export performance. The findings suggest that macro-environment factors play a critical role in influencing the relationship between firm resources and export performance.
Table 1: Regression results for Joint Effect of Firm Resources, Organizational Characteristics and Macro-Environment on Export Performance

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.559</td>
<td>.252</td>
</tr>
<tr>
<td>Firm Resources</td>
<td>-.201</td>
<td>.114</td>
</tr>
<tr>
<td>Organizational Characteristics</td>
<td>.387</td>
<td>.173</td>
</tr>
<tr>
<td>Macro Environment</td>
<td>.975</td>
<td>.029</td>
</tr>
</tbody>
</table>

Predicator: Firm Resources, Macro-environment
Dependent Variable: Export Performance

**Significance level of 5 percent. Values in the parentheses show t statistics

Source: Research Data by author

According to the results on joint effects of the three variables (firm resources, organizational characteristics and macro environment, it was found that firm resources had a negative relationship on export performance. while organizational characteristics, and macro-environment had a positive effects on export performance. Holding firm resources, organizational characteristics and macro environment constant, export performance increases by 0.559 units.

The findings also revealed that a unit rise in firm resources led to a decline in export performance by 0.134 units holding other factors constant. However, the effect was not statistically significant. On the other hand, it was established that a unit increase in organizational characteristics led to a significant rise in export performance by 0.158 units holding other factors constant. It was determined that, a unit increase in macro environment led to a significant rise in export performance by 0.913 units holding other factors constant. The following was the estimated model:

\[ EP = 0.559 - 0.134FR + 0.158OC + 0.913ME \]

Discussion of Findings
The research established significant correlations among the study variables. Firm resources measured in terms of raw materials, financial and human capital, processes, and ICT and export performance were significantly correlated. This showed that there is a relationship between firm resources and firm export performance. Though, the results demonstrated that firm resources was statistically insignificant in determining export performance. The study further established that, there was positive relationship between organizational characteristics and export performance. The emergent influence was moderating in nature and hence the variable influenced export performance significantly. The moderating effect was tested as there is a crucial direct relationship between organizational characteristics and the performance of export. This suggests that the manufacturing SMEs rely on organizational characteristics as a significant factor for firms engaged in exporting. The macro- environment factors were assessed using the six PESTEL factors against export performance indicators. It was observed that export performance was positively correlated with the
two variables, organizational characteristics and macro-environment with regard to growth in export volumes.

The findings are supported by empirical studies which confirmed that no single factor is responsible for firm performance but it is instead dependent among many different factors. The findings are supported by empirical studies which confirmed that no single factor is responsible for firm performance but it is instead dependent among many different factors (Okeyo 2013; Kithusi, 2015).

The results show that jointly, firm resources, organizational characteristics and macro-environment factors influence export performance. Individually, however, macro-environment factors exhibited the biggest influence, specifically on growth of export volumes. The study therefore concluded that the joint effect was different from the individual effects and that jointly, the three variables have a greater influence on firm export performance than individually.

Conclusions and Recommendations

The research concludes therefore that firm resources are important in determining export performance, but not statistically important in influencing the same. Secondly the study concluded that firm size, and age of the firm and ownership under organizational characteristics significantly influence the relationship between firm resources and export performance. Thirdly, the study concluded that Political, economic, social cultural, technological, environmental and legal factors significantly influence the relationship between firm resources and firm export performance. Finally, the study concluded that macro-environment with the considered indicators, and organizational characteristics with its respective indicators were jointly significant in influencing the relationship between firm resources and export performance.

The study recommends that decision-making process in the firm should be autonomous and independent of the influence of the owner specifically to promote growth of revenue from exports. The SMEs owner should embrace flexibility in the management style for example, to empower senior managers exert expertise and to make independent decisions without fear of retribution. This then brings the issues of financial resource and generally implication of being responsive to the economic indicator for the industry and at firm level. SMMEs need to be encouraged to plan well and monitor their businesses based on resource endowment and externally, being responsive to the Macro- environment.

The Export Promotion agencies especially the Export Promotion Council (EPC), including the ministry of Trade, should be adequately funded for capacity building activities including training, participation in external networking forums with other foreign agencies and exposure of entrepreneurs to foreign markets. On the other hand, the Export Promotion Zone Authority(EPZA) needs to venture and establish more zones in line with vision 2030 to cover deserving counties that have potential for exporting. This should be a priority so as to correct the imbalance in trade volumes which is skewed towards Kenya’s foreign trading partners.

Limitations of the Study

The study focused on SMMEs operating in the manufacturing sector within the Nairobi City County. The study therefore limited its scope to Nairobi City County and excluded other SMMEs in other counties within Kenya. The fact of limiting the study to one geographic area, limits the possibility of a larger population and equally limits the sample size which in this case was limited to Nairobi City County. The contextual limitation therefore restricts the generalization of the study findings to the SMMEs operating within the manufacturing sector in Nairobi City County. Considering that the total number of manufacturing enterprises operating in Nairobi City County is dynamic and geographically diverse, some firms were in areas lacking good infrastructure areas and not easily accessible prompting delays in obtaining data. In addition, some are not licensed. The study focused only 265 of the licensed SMEs in manufacturing and exporting. Also, the list of the population of SMMEs provided by concerned agencies was composite and did not list the enterprises into the six sub-sectors and the researcher had to resort to the respective sub-sectors.

Third, in some instances, data on financial outcomes was missing, and thus estimation was used by respondents. The study recommends that all export promotion agencies encourage enterprises involved in manufacturing and exporting to register their businesses in an effort to assist future researchers, agencies, and planners while conducting research or in evaluating performance. The SMMEs owners and managers
were chosen as the respondents on the basis of their knowledge of the respective enterprises. The element of bias could not be ruled out because they would wish their firms to be perceived in a positive manner, notably with regard to organizational characteristics. The future studies should consider using multiple respondents in order to minimize the element of bias. The respondents in future studies should include employees in other cadres and also customers.

Suggestions for Future Research
This study should be replicated in SMMEs operating in Counties outside Nairobi to establish if similar results can be achieved. Also the study can be replicated to cover SMEs in other sectors to see whether variations would occur. Under limitation, every effort should be made to have the population of enterprises in manufacturing and exporting broken into three categories: small, medium and large enterprises. These will assist in population classification and sample selection criteria to ensure proper coverage and adequate sample size. In the current study, cross-sectional research design was used, as opposed to longitudinal which would review all the export performance determinants overtime. A longitudinal research can provide a more understandable viewpoint of the situation and the changes that occur at a variety of points in time (Aaker et al., 2005; Malhotra 2007). Future researchers should use a longitudinal design and compare the findings with those obtained using cross-sectional research design.

References


