Advances in Management & Applied Economics, vol. 3, no.6, 2013, 143-157
ISSN: 1792-7544 (print version), 1792-7552(online)
Scienpress Ltd, 2013

SMEs Financing and Development in Nigeria's Shipping Sector: A Case Study

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Abstract

Small and Medium Enterprises (SMEs) have been recognised as critical to economic growth and poverty reduction in developing countries. Shipping businesses represent significant portion of SMEs and have dominated the private sector investments in developed nations. Existing studies have identified funding as a major constraint to SMEs in developing countries. The banking institution statutorily positioned to assist in SMEs funding in these countries are constrained by a host of factors. This paper investigates the factors affecting banks financing and development of SMEs in the maritime shipping sector of Nigeria. Data for this study were obtained from Likert scaled questionnaires which were administered to a randomly selected sample of commercial banks with shipping portfolios. Evidence from data analysis using ordered logit regression model indicates that; risk perception attitude of banks, information constraints on SMEs, lack of skills in SMEs financing and unfavourable regulatory environment are significant factors affecting banks investments in SMEs in Nigeria's shipping sector. Policy implications of the findings are discussed.

JEL Classification: C13, E22, G3
Keywords: SMEs funding, SMEs development, maritime businesses, cabotage fund, ship acquisition fund.

1 Introduction

Small and Medium Enterprises (SMEs) have long been recognised by the World Bank and other multinational agencies as critical to economic growth and poverty reduction. They have increasingly attracted targeted assistance of these international organizations in

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Article Info: *Received* : September 15, 2013. *Revised* : October 19, 2013.
Published online : November 15, 2013

their increasingly attracted targeted assistance of these international organizations in their interventions in developing countries. SMEs include a wide range of businesses, which differ in their dynamism, technical advancement and risk attitude. Many are relatively stable in their technology, market and scale, while others are more technically advanced, filling crucial product or service niches. Others can be dynamic but high-risk, high-tech "start-ups" (Darlberg Global Development Advisors, 2011). SMEs are critical to job creation, contribute to economic growth and provide a platform for the development of entrepreneurial capabilities including indigenous technology. Thus, national governments have been making efforts toward providing for sustainable growth and development of economy through private sector led initiatives. However, one area attracting increasing global attention in the quest for private sector led development is SMEs in maritime shipping sector.

Maritime shipping comprises a large variety of different businesses which according to UNCTAD (2011) can be categoried as follows: Shipping building, ship owning, ship operation (container ships), ship financing, ship scrapping, ship classification, ship registration, ship insurance (Protection & Indemnity), seafarer supply and port operation (container terminal operators). These areas of maritime activities have prospects for sustained growth as supported by the positive trends in value of exports on ships, floating structures and the world seaborne trade shown in Figure 1.

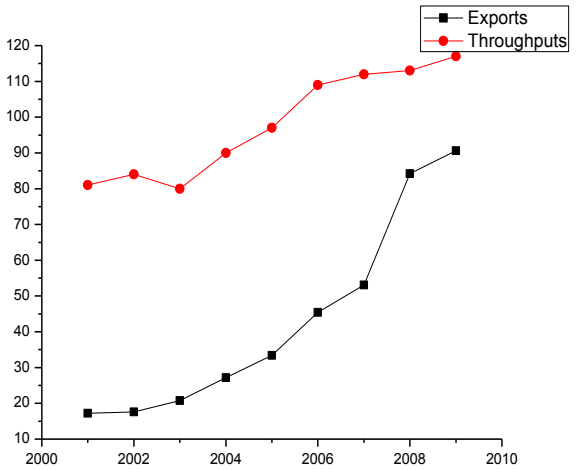

Figure 1: Export values ($) of marine Vsis & seaborne trade
Source: Adapted from UNCTAD (2011)

Shipping as a service sector is an important component of the national economy. It makes a direct significant contribution to GDP, job creation and provides crucial inputs for the rest of the economy. Unfortunately, activities in this sector in Nigeria are dominated by a few foreign firms which afford the enormous capital required in this sector. For example, in terms of ship owning and operation, Okoroji and Ukpere (2011) document that only about eight (8) percent of the total number of vessels that called at the Nigerian port terminal between 1997 and 2006 are owned by Nigerians. Igbokwe (2006) finds that Nigeria has only three vessels duly certified for cabotage shipping services out of one

hundred and fourty (140) needed by the oil industry. These statistics indicate negative implications on the growth and viability of indigenous SME's in the maritime sector as they basically lack adequate capacity to operate competitively. Special intervention policies (albeit unproductive) have been initiated by the federal government in the past to correct this imbalance. These include direct funding through Ship Acquisition and Ship Building Fund (SASBF), Cabotage Vessel Financing Fund (CVFF), cargo reservation and outright Cabotage legislation. However, as is tradition in developed maritime nations, ship acquisition and fleet expansion is better done through debt finance which can only be provided by the banking institutions. This fact questions the commitment of the Nigeria's banking institution especially the commercial banks in providing entrepreneurial finance to SME's in the shipping sector.

Existing studies have identified funding as a major constraint to entrepreneurs in establishing and managing SMEs in developing countries; notable among such studies include: Abereijo and Fayomi (2005), Beck (2007), Hoff et al. and Gibson (2008). According to Dalberg Global Development Advisors (2011), SMEs which play a crucial role in furthering growth, innovation and prosperity in developing countries are unfortunately, strongly restricted in accessing the capital that they require to grow and expand, with nearly half of SMEs in these countries rating access to finance as a major constraint. A number of factors have been adduced to this development; at one extreme the government has been blamed for not providing direct funding or adequate legislative support for financial institutions to do so; see Cumming et al (2006), Lerner and Antoinette (2005); at the other extreme, financial institutions point to entrepreneurship related factor: lack of lender information, risk profile and legal environment etc. Thus, further research is needed to identify the constraints hindering banks funding in development of SMEs or the maritime businesses in the shipping sector. The outcome of this study would provide insight into factors affecting the commercial banking institutions in the provision of credit to private sector led SME development. The findings from this study would also provide basis for designing intervention policies aimed at addressing the funding issues of SMEs in the maritime sector. The rest of the paper is structured as follows: in section two, we develop the conceptual framework of this paper and examine related literature. Section three presents the methodology while results of data analysis of the study is presented and discussed in section four. In section five, we discuss the policy implication of the results and conclude the paper.

2 Conceptual Framework/Literature Review

SME's include a wide range of businesses, which differ in their dynamism, technical advancement and risk attitude. According to the European Union (2003) micro, small and medium-sized enterprises are defined as enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euros. Small and medium enterprises are thus defined as firms with 10 to 250 employees as and more than 10 million euro turnover or annual balance sheet total. Researchers and practitioners agree that SMEs are crucial contributors to job creation and economic growth in both high and low-income countries. Access to finance is necessary to create an economic environment that enables firms to grow and prosper. SME's in developing countries, however, face significant barriers to finance. Financial constraints are higher in developing countries in general, but SMEs are

particularly constrained by gaps in the financial system such as high administrative costs, high collateral requirements and lack of experience within financial intermediaries.

2.1 Shipping Service Demand and Challenges to Shipping Sector Finance in Nigeria

It is estimated that Nigeria generates about 70 percent of the total volume of cargo traffic in the West and Central Africa regions which represents significant cargo shipping opportunities to Nigeria shipping companies. However, analysis of Nigeria's balance of payment for the past three decades indicates three areas of imbalances in the shipping industry, namely:

- Freight earning/conservation: there is loss of revenue through non–participation of indigenous shipping companies,
- Ship–ownership: only five ships (of about 70,000dwt) are owned by indigenous carriers, and
- Cargo sharing: less than 12% of maritime traffic generated is carried with Nigerian ships.

Based on estimates of potential demand for shipping tonnage capacity; according to Ekwenna (2003), Nigerian entrepreneurs need a total of fifty-five (55) vessel of various types as shown in Table I. These vessels may be chartered or purchased outright but each option requires substantial investment that can only be realized through pooling of resources of bank credit.

Table I: Estimated National Shipping Fleet Capacity Needs In Year 2010

TYPE	**NUMBER**
Dry Bulk	12
Wet Bulk	24
General Cargo	9
Containership	6
Fishing Vessel	3
ROLL-On/ROLL-Off	1
TOTAL	55

Source: Ekwenna (2003)

A typical general cargo vessel costs about $150 million to acquire (2012 prices). It is apparent that this size of investment is beyond what a typical commercial bank in Nigeria can finance. This constraint was envisaged by the government of Nigeria; hence the establishment of ship acquisition funds: the Ship Building and Ship Acquisition Fund (SBASF) which was subsequently replaced with Cabotage Vessel Financing Fund (CVFF). It should be noted that SBASF was not effectively managed and did not achieve the intended objective. The Cabotage Fund (CVFF) was subsequently set up by the federal government through Nigerian Maritime Administration and Safety Agency (NIMASA) as part of the 'Cabotage Act' implementation. The object of the fund was to assist SMEs in developing business opportunities in cabotage shipping sector. Unlike its predecessor SBASF; administrative mechanisms have been put in place for its effective utilization. According to Egeolu (2013), four commercial banks (Fidelity, Skye, Diamond, and Equatorial Trust bank) have been appointed to disburse the fund (CVFF)

with the additional requirement that they make 35% contribution to it. It is noteworthy that out of twenty (25) banks approved by the Central Bank of Nigeria after the re-capitalisation programme; only a few has shipping finance as part of their investment portfolio.

2.2 Nigerian Banking Practices and SMEs Funding

In mid-2004, the Central Bank of Nigeria (CBN) requested that all deposit banks raise their minimum capital base from US$15 million to US$192 million by the end of year 2005. This process resulted in a reduction in the number of banks in Nigeria, from 89 to just 25 (Okonjo-Iweala and Osafo-Kwaako (2007)). Moreover, in the process of meeting the new capital requirements, banks raised the equivalent of about $3 billion from domestic capital markets and attracted about $652 million of foreign direct investment (FDI) into the Nigerian banking sector. As a result of this successful consolidation process, the Nigerian banking sector is now fairly well capitalized. Despite this improved performance, credit to the private sector remains constrained. Thus, Nigerian SMEs are not able to get loans that exceed two years.

2.3 Review of Empirical Studies on Bank Financing of SMEs

Beck et al. (2008), conduct a global survey of large banks finance to SMEs and large firms. Their findings indicate that banks in general perceive SMEs as attractive sectors and are involved in their financing as much as with large firms. However, negligible differences exist across developed and developing countries in terms of exposure, lending practices, drivers and obstacles to SME financing. De la Torre et al. (2009) assess the extent of commitment of large and foreign banks to SMEs financing using data from 12 developed and developing countries. Their findings suggest that all types of banks view SMEs as a strategic sector and are expanding or planning to expand their operations aggressively in this sector. However, it is not clear from the study whether the SMEs received adequate financing even though large banks find them as attractive investment areas. Beck (2007) empirically examines SMEs' financing constraints and offers policies to minimize existing obstacles. Results prove that three types of policies would support SMEs in overcoming constraints in accessing capital: (i) market-developing policies aimed at improving a country's contractual and information frameworks and macroeconomic performance, (ii) market-enabling policies, such as regulatory frameworks that enable leasing and factoring and promote competition in the financial sector, and (iii) market-harnessing policies that attempt to prevent imprudent lending. Thus by implication, developing countries' governments should improve their institutional environment, provide regulatory frameworks, and foster competition.

Gibson (2008) evaluates the challenges faced by African commercial banks in providing adequate funding to SMEs and proffers strategies for increasing SMEs' access to risk capital. The findings show that shareholder loans, as opposed to pure equity, reduce investors' risk and increase their current income. Risk capital intermediaries may capitalize their funds using diverse financial instruments which reflect investors' differing return objectives. Governments can initiate tax incentives programs to increase private sector participation in SME risk capital. The implication is that increasing the availability of non-asset-based financing is critical to viability of Africa's SME sector and contribution to the continent's economic growth. Hoff et al. (2007) examine the

environment of financing for sustainable SMEs and identifies key challenges and solutions for sustainable enterprise finance sector. Through interviews with leading sustainable SME funds, the authors identified challenges that the funds faced, including difficulty with fundraising, monitoring and evaluating investments, and providing technical assistance. The conclusion is that to scale-up sustainable SME finance, efforts should focus on increasing collaboration among aggregators, VC funds, and local banks; improving the coordination and effectiveness of blended capital and standardizing monitoring and evaluation approaches. Lerner et al. (2011) seek to identify some of the key challenges and opportunities that private equity investors face in developing countries. They contend that the growth of private equity activity in the developing world can be attributed to the economic progress of developing nations, as well as the perceived decrease in investment opportunities in developed nations. While private equity is similar in some ways across countries, developing nations differ in terms of how they raise funds, invest, and exit. The authors expect that private equity in developing countries is likely to mature over time and become similar to that of developed nations. UNEP Finance Initiative (2007) suggests steps to remedy the demand and supply-side challenges of SME financing. The author posits that investors working in Africa should: educate investors about blended value approaches to financing, build local groups to strengthen local institutions and banks, train African fund managers, conduct more research on SME financing, explore mechanisms to align investor objectives, organize a focused workshop in each region of Africa, and partner or tap into existing institutions and networks to deliver objectives.

Cumming et al. (2006) consider the impact of a country's legal environment on exits of private equity investments using a new dataset of 468 venture capital-backed companies across 12 Asia-Pacific countries. A country's legal system is much more directly connected to facilitating VC-backed IPO exits than the size of a country's stock market. The findings indicate that legality is a central mechanism which mitigates agency problems between investors and entrepreneurs, which thereby fosters IPOs and venture capital markets. Lerner and Antoinette (2005) explore how the nature of a developing country's legal system affects private equity investments. They find that investments in countries with better legal enforcement typically use convertible preferred stock and have greater contractual protections. Investors in countries where legal enforcement is difficult tend to rely on obtaining majority control of the firms they invest in, use debt more often, and have more board representation. Thus, a country's legal system greatly affects the structure of private equity transactions. Abereijo and Fayomi (2005) review SME private equity financing in developed countries, in developing countries (including the experience of Small Enterprise Assistance Funds, SEAF), and in Nigeria through its SMIEIS. They find that to be successful in private equity financing for SMEs, Nigeria's banks have to attend to challenges related to deal flow, investment structuring, monitoring and value enhancement, and exit strategies. The implication is that Nigerian banks may increase equity financing for SMEs by partnering with business development services that will increase the competencies of SMEs, providing training to the banking industry, arranging pre-investment exits, encouraging entrepreneurs to accept external help and ownership, and having a government that can assure a conducive investment and stable political environment. The study by Beck et al. (2005) provides evidence on the links between SMEs and economic growth and poverty alleviation using a new database on SMEs. Although the authors found a significant relationship between the size of the SME sector and economic growth, they did not establish direct causality between SMEs and growth.

In conclusion the following points are noted from the review; SMEs are perceived by banks to be profitable endeavor in developed and developing nations. Thus, little gap exists in relative lending to SMEs and large firms across the globe. However, the gap is appreciable in developing countries due to lack of financial and accounting data, market failures, inadequate regulatory framework, lack of skills requisite for SMEs lending, absence of business development services to increase the competence of SMEs etc. Based on the literature review; the following factors are postulated to affect commercial banks funding to SMEs in developing country like Nigeria: Risk Perception, Lack of Information, Inadequate Skills and Regulatory standards. We want to explore the implications of these findings on SMEs development in the Nigeria's shipping industry.

3 Methodology

The commercial banks have a traditional function of assisting in the funding, development and sustenance of SMEs in the maritime shipping industry. The target population considered for this study is the commercial banks located in port cities in Nigeria. Based on the list of banks quoted in Nigerian stock market, a sample frame of commercial banks was drawn. Four port cities were purposively considered as locations of the study. These cities namely: Port Harcourt, Lagos, Calabar and Warri are home to clusters of maritime activities. The decision to select only banks located in port cities was taken in the hope of capturing the extent of their direct involvement in maritime related activities of shipping firms which are based mainly in these cities. Since all the banks have either main or branch offices in these cities, they were selected using cluster sampling technique. Structured questionnaires designed (based on constructs derived from the research problem and literature review) were distributed to a sample of management staff of these banks to elicit their responses on questions relating to constraints and extent of their involvement in assisting entrepreneurs in shipping business development. A total of ninety five (95) questionnaires out of one hundred and twenty (120) distributed were returned duly filled and were considered for data analysis. The response rate of seventy nine (79) percent was considered representative of the sample population. Descriptive and inferential Statistical models were applied to analyse data collated from the completed questionnaires. The descriptive statistics of the sample were presented with frequency distribution while ordinal logit regression model was used to presents the result of the inferential statistics.

3.1 Model Formulation: Ordinal Logit Regression Analysis

The ordered logit model in its modern form was proposed by McElvey and Zavoina (1969, 1971, 1975) for the analysis of ordered, categorical, non-quantitative choices, outcomes and responses. The model is used to describe the data generating process for a random outcome that takes one of a set of discrete, ordered outcome. Ordered choice models are appropriate for a wide variety of settings in the Social and Biological Sciences. Some areas where they have been applied in the Social Sciences include: job training [Groot and van den Brink (2003)], job classification in the military [Marcus and Greene (1983)], labour supply [Heckman and MaCurdy (1981)], product quality [Prescott and Visscher (1977)], Stock Price Movements [Tsay (2005)], Vehicle Ownership [Train

(1986)], and work disability [Kapteyn et al (2007), among others. Since the dependent variable for this study is based on the ordered Likert scale of "Strongly Disagree", "Disagree", "Unsure", "Agree" and "Strongly Agree", the ordinal logit regression model is appropriate in analyzing and testing the hypotheses of the study.

3.2 The Model

The logit regression is based on the logistic model given by:

$$f(\varepsilon) = \frac{\exp(\varepsilon_i)}{\left[1+\exp(\varepsilon_i)\right]^2} \tag{1}$$

The model platform is an underlying random utility model or latent regression model:

$$y_i^* = \beta^T x_i + \varepsilon_i; \quad i = 1, 2, ..., n \tag{2}$$

in which the continuous latent utility or "measure", y_i^* (Banks funding in SMEs markets and Development) is observed in discrete form through a censoring mechanism:

$$\begin{aligned} y_i &= 0 \text{ if } y_i^* \le 0, \\ &= 1 \text{ if } 0 < y_i^* \le \mu_1, \\ &= 2 \text{ if } \mu_1 < y_i^* \le \mu_2, \\ &\cdot \\ &\cdot \\ &\cdot \\ &= J \text{ if } \mu_{J-1} \le y^*, \end{aligned} \tag{3}$$

The vector $\mathbf{x_i}$ is a set of K covariates that are assumed to be strictly independent of ε_i; β is a vector of K parameters that is the object of estimation and inference [Greene and Hensher, 2009]. The K covariates in this study are Risk Perception, Information Inaccessibility, Skill Acquisition and Regulatory constraints. All the hypotheses are tested at 5% level of significance. It is noted that the computer output gives its significance level in terms of p-values. If α is greater than the p-value, H_o is accepted; otherwise it will be rejected.

4 Empirical Result and Discussion

The descriptive summary of profile of banks sampled, designation and educational qualification of the respondents are shown in table 1. From the table, we note that more than 80% of the banks sampled have a workforce size of 20 or less. Only about 14% of the banks have greater than 30 persons in their employ.

Table 1: Profile of Sampled Banks/Respondents

No. of Employees	**Freq.**	**Percent**	**Cum.**
<= 15	37	38.95	38.95
16-20	45	47.37	86.32
> 30	13	13.68	100.00
Total	95	100.00	
Designation of Respondents			
Designation			
Branch Manager	25	26.32	26.32
Head of Operations	26	27.37	53.68
Relationship Manager	18	18.95	72.63
Marketer	26	27.37	100.00
Total	95	100.00	
Educational Qualification of Respondents			
Qualification			
OND/NCE	8	8.42	8.42
HND/B.Sc	59	62.11	70.53
M.Sc	19	20.00	90.53
Others	9	9.47	100.00
Total	95	100.00	

Although, size of workforce has no effect on the research problem under investigation, however the distribution confirms that the head offices (presumably housing more staff) were not specifically targeted but the banks situated in maritime clusters or cities. Thus, it appears that more of branch offices were sampled than their head offices. Table 1 also indicates that many of bank personnel who completed the questionnaires are in decision making positions and possessed higher academic qualification. Thus, it can be accepted that the response to questionnaires were given by informed bank staff. The summary of their rating responses are shown in table 3 in the appendix. To test the hypotheses of this study, the relationship between funding/market development of SMEs and constraining factors- risk perception, lack of information, skill gaps, regulatory or institutional limitations are tested. Market development (the dependent variable) is proxied by five rating response variables, see variable description in table 3. While the constraining factors (or independent variables) are proxied by rating response sub-variables as shown in table 3 also. Mathematically, the empirical log linear model of this work is as follows:

$$\ln SMEsDev = \beta_0 + \beta_1 \ln Risk\_perception + \beta_2 \ln Info\_constraints + \beta_3 \ln Skill\_gaps + \beta_4 \ln Regulatory\_constraints + \varepsilon \quad (4)$$

Where *SMEsDEV*: SMEs development; *Risk_perception*: Risk perception attitude of the banks; *Info_constraints*: Information about SMEs businesses; *Skill_gaps*: knowledge or skill gap in SMEs financing ; *Regulatory_constraints*: the regulatory environment of bank operation; and ε is the error term. $\boldsymbol{\beta}$ is vector of parameters of the model to be estimated. The dependent and regressor variables of the empirical model are constructs (based on literature) but were derived from responses of the respondents on related statements, see

table 3 in the appendix. Factor analysis technique was applied to classify the statements (i.e. the latent constructs) to identifiable or observable variables as shown in equation (4).Table 4 in the appendix presents the Rotated Matrix output of the factor analysis but details of the steps applied are skipped for sake of brevity. Based on the output from factor analysis we obtained the ordered logit regression results as shown in table 2 below:

Table 2: Ordered Logit Regression Output

Variable	**Coef.**	***Std. Err.***	***t*-stat**	***p*-value**
Risk_Perception	0.171**	0.068	2.510	0.012
Information_ Constraints	0.757***	0.135	5.610	0.000
SMEs_ Skill.Gaps	0.273*	0.150	1.820	0.069
Regulatory_Environment	0.683***	0.094	7.290	0.000
Model Fitting Information				
No of Obs. =	95			
LRchi2(4) =	108.140			
Prob > chi2 =	0.000			
Pseudo R2 =	0.347			

****p*<1%, ***p*<5%,**p*<10%; [a]*Dependent variable: SMEs Development.*

The result of the empirical model in table 2 indicates that risk perception attitude, information constraints of banks (i.e. SMEs opacity), skill gaps in SMEs areas (significant at p<10%) and regulatory environment are significant factors affect banks contribution to SMEs development in the shipping sector of the Nigeria's maritime industry.

5 Conclusion

The findings indicate that more focused administrative instruments should be put in place by the apex financial regulatory authority- the Central Bank of Nigeria to encourage more banks involvement to SMEs financing. Specific measures should target information transparency through maintenance of data base accessible to the commercial banks. Thus, this calls for more survey research to collect relevant data on SMEs. Fiscal incentives should also be employed to encourage active participation of the commercial banks in this direction. The oversight responsibilities of the maritime regulatory authority- Nigeria Maritime Administration and Safety Agency (NIMASA) should complement the role of the banks. NIMASA is expected to collaborate with the banks regulatory authority to ensure the smooth take off of the maritime banks already constituted by it. The major limitation of this study is non-inclusion of entrepreneurs or operators of SMEs as respondents, i.e. bank personnel were sampled. To further expand the scope of this work, future studies should consider the perspectives of entrepreneurs or SMEs managers in identifying the constraints to SMEs development and hence expand the frontiers of this research work.

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Appendix

Table 3: Descriptive Statistics: Mean Values of Rating Response to Questionnaires

***B: RISK PERCEPTION**	**Mean**	**Std. Dev.**
My Bank perceive Shipping industry as a profitable sector and have shipping company clients	3.021	1.473
My bank views shipping companies as strategic businesses and is expanding our operations aggressively in them	2.979	1.345
My bank often earn high returns in our core markets and we have little incentive to undertake additional risks in the shipping industry	3.179	1.368
My bank incurs higher administrative costs in lending to businesses in the shipping sector	2.947	1.532
Lending to businesses in the shipping sector is sometimes hampered by market failures	3.095	1.407
***C: ABSENCE OF INFORMATION**		
My bank has little information about shipping business to provide funding to entrepreneurs	2.916	1.478
Fund managers lack knowledge of investor objectives regarding SME financing	3.221	1.322
***D: LACK OF SKILLS**		
My bank has little skills to engage in SME lending in the shipping sector	2.758	1.382
***E: INSTITUTIONAL / REGULATORY CONSTRAINTS**		
My bank is hampered by absence of requisite regulatory framework to engage in lending to shipping businesses	3.105	1.387
Regulatory authorities should initiate market developing policies aimed at improving the country's contractual and information frameworks and macroeconomic performance	2.874	1.401
Regulatory authorities should institute market enabling policies that enable leasing and factoring and promotion of competition in the financial sector	3.095	1.337
Regulatory authorities should institute market-harnessing policies that attempt to prevent imprudent lending	3.021	1.414
Regulatory authorities should put in place legal framework to mitigate agency problems between investors and entrepreneurs	2.979	1.466
Tax incentives should be introduced to increase private sector participation in SME risk capital	2.989	1.491
***F: SMEs FUNDING / DEVELOPMENT**		
My bank provides entrepreneurs access to finance to enable them enter new markets like cabotage shipping	2.863	1.419
My bank provides entrepreneurs access to finance to enable them exploit growth and investment opportunities	2.979	1.422
My bank provides entrepreneurs access to finance to enable them boost their operations	3.116	1.465
My bank provides entrepreneurs access to finance to enable them expand their fleet	3.189	1.461
My bank provides funds in foreign exchange to entrepreneurs when they need such	2.800	1.411
*Latent constructs are measured by sub-statements (which are rated based on Likert scale). Reliability of Test Instrument: Cronbach's alpha ($\sigma = 0.55$)		

Table 4: Rotated Matrix; Variable Reduction Output Used for the Ordered Logit Regression

Variables	Risk_Perception	Info_Constraints	Skill_Gaps	Regulatory_Constraints
b1	0.4075			

b2	0.5568			
b3	0.6574			
b4	0.5384			
b5	0.4261			
c1		0.4018		
c2		0.4947		
d1			0.6328	0.4946
e1				0.5079
e2				0.4082
e3				0.4580
e4				0.5144
e5				0.5987
e6				0.5138
(blanks represent abs(loading)<.35)				

Plse Tick √ as Appropriate in Spaces provided

TYPE OF BANK: Commercial Bank [ ] Others [ ]
SIZE OF WORKFORCE (No of Persons Employed): <= 15 [ ] Between 16 and 25 [ ] above 25 [ ]
YOUR POSITION OR RANK: Branch Mgr [ ], Head of Opr. [ ], Relatnship Mgr. [ ], Marketer [ ]
EDUCATIONAL QUALIFICATION: OND/NCE [ ], HND/B.Sc [ ], M.Sc [ ], Others [ ]
Plse Tick as applicable: A: Strongly Agree, A: Agree, UD: undecided, D: Disagree, SD: Strongly Disagree

	SA	**A**	**UD**	**D**	**SD**
PERCEPTION					
My Bank perceive Shipping industry as a profitable sector and have shipping company clients					
My bank views shipping companies as strategic businesses and is expanding our operations aggressively in them					
MARKET PENETRATION					
My bank provides entrepreneurs access to finance to enable them enter new markets like cabotage shipping					
My bank provides entrepreneurs access to finance to enable them exploit growth and investment opportunities					
OPERATIONAL PERFORMANCE					
My bank provides entrepreneurs access to finance to enable them improve their operational performance					
FLEET EXPANSION					
My bank provides entrepreneurs access to finance to enable them expand their fleet					
HIGH RISK					
My bank often earn high returns in our core markets and we have little incentive to undertake additional risks in the shipping industry					

My bank incurs higher administrative costs in lending to businesses in the shipping sector					
LACK OF FUNDS					
My bank have difficulties providing long term capital					
My bank have difficulties providing tailored foreign exchange products					
ABSENCE OF INFORMATION					
My bank has little information about shipping business to provide funding to entrepreneurs					
Fund managers lack knowledge of investor objectives regarding SME financing					
LACK OF SKILLS					
My bank has little skills to engage in SME lending in the shipping sector					
REGULATORY CONSTRAINTS					
My bank is hampered by absence of requisite regulatory to engage in lending to shipping businesses					
MARKET FAILURES					
Lending to businesses in the shipping sector is sometimes hampered by market failures					
INSTITUTIONAL CONSTRAINTS					
Regulatory authorities should initiate market developing policies aimed at improving the country's contractual and information frameworks and macroeconomic performance					
Regulatory authorities should institute market enabling policies that enable leasing and factoring and promotion of competition in the financial sector					
Regulatory authorities should institute market-harnessing policies that attempt to prevent imprudent lending					
Regulatory authorities should put in place legal framework to mitigate agency problems between investors and entrepreneurs					
Tax incentives should be introduced to increase private sector participation in SME risk capital					