



Review Article

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Value Chain Financing Analysis and Competitive Advantage of Small Holders Farmers in Rivers State

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ABSTRACT

This paper examines the effect of value chain financing on the competitive advantage of smallholder farmers in Rivers State. The researcher focused attention on those smallholders' farmers in four local government areas of Obio-Akpor, Ikwerre, Emohua and Etche in Rivers State. A total number of one hundred (100) of such smallholders' farmers was identified. The data for the study were collected through primary sources such as the questionnaire' and observations. There are two main variables in this study-Value-Chain Financing Analysis and Competitive Advantage. Value-Chain Financing Analysis was measured by boundary analysis, scope of value and governance while Competitive Advantage was the dependent variable. In testing the hypotheses in the study, a multiple regression analysis was employed, and the findings of the study revealed that, boundary analysis and governance has a very strong, positive and significant influence on competitive advantage while, scope of has a strong, positive and significant influence on competitive advantage. The study therefore concludes that, value chain financing analysis significantly influence competitive advantage of smallholders farmers in Rivers State, and recommends that that government should sensitize financiers on the need to adequately fund smallholders' farmers that they may be channel all the way through boundary analysis, scope of value and governance to attract an efficacious competitive advantage.

Keywords: Boundary analysis, Competitive advantage, Governance, Scope of study

INTRODUCTION

For a company to survive in highly competitive environment of today, it must at least temporarily achieve a competitive advantage. Barney (2002) articulates that, a company familiarizes with competitive advantage when its procedures in a business or market generate economic value and when a small number of contending companies are involved in analogous procedures. As such, in order for businesses to achieve competitive advantage, it is necessary to create economic values to customers (Barney & Hesterly, 2010). Value chain analysis financing can help the company concentrate its strategy and accordingly realize a competitive advantage (Hansen & Mowen, 2000) [1]. Value-chain analysis is a perception from strategic management, initially designated and propagated by Michael Porter in 1985. Value chain is the

categorization of actions essential to make a product or deliver a service (Ikwouria & Gate, 2008). Value chain analysis is a mechanism for snowballing customer satisfaction and handling expenses more successfully (Drury, 2008). Value chains outline market admittance for the reason that it categorizes crucial participants, shows them the way inside the chain and empowers vibrant consideration of the "instructions of the desired inclinations (Porter, 1985). Value chain analysis therefore, is a connected set of value-creating happenings beginning from elementary raw materials sources for components suppliers through to the eventual end-use product or service transported to the customer [2].

Value chain financing (VCF) is a viable mock-up to advance right of entry to agricultural finance for

smallholder farmers' enhancement in the financial security of the farmers, and spreading out of the agricultural production, which will subsequently pilot to an advanced altitude of food security. The value chain catalogues the generic value-adding actions of firms or industry, given that, primary activities and support activities are acknowledged and the cost and value drivers are determined for respective value action [3].

It is imperative for managers to appreciate the implication of weighing the performance of their industries based a value chain analysis standpoint. This is specifically beneficial when it concerns SME-subjugated segments, which houses smallholder farmers. Value chain arrangement and features determine the likelihoods of achievement of small enterprises in an industry where production agents are turning out to the lead businesses (Zhang, 2014). Access to finance remains one of the decisive blockages for economic development and expansion, in particular for Small and Medium-sized Enterprises (SMEs) in developing countries (Baas & Schrooten, 2005; de la Torre et al., 2010). Deficiency of admittance to credit produce constriction at start up (Nichter & Goldmark, 2009) and afterward for investment and improvement (Thorsten & Demirgüç-Kunt, 2006; Beck & Demirgüç-Kunt, 2008) [4-8].

SMEs ever more rely on bigger firms for their right of entry to markets, and bigger companies find it fitting and cost-effective to subcontract and portion their actions into a chain of many functions carried out by SMEs in different locations. Buyer-supplier set of connections of companies with impenetrable inter-firm value chain linkages are all the time more common outline of industrial business (Giuliani et al., 2005; Navas-Alemán, 2011). Questionably, many SMEs are creditworthy since they expand and become large firms themselves, but it is difficult and expensive for banks to assess the credit-worthiness of SMEs, and SMEs have less collateral [9-12].

SMEs are much more credit constrained than larger firms (Atieno, 2009; Schiffer & Weder, 2001; Beck & Demirgüç-Kunt, 2006) and multiple studies have pointed to the problem of deficiency of access to finance existence of credit-constraints in developing markets. Access to credit for SMEs empowers them to scale up their production, acclimate to new technologies and upsurge cost-effectiveness (Beck & Demirgüç-Kunt, 2008). In value chains, companies at the bottom of the chain require credit to back upgrading strategies so as to become involved in extra value-added actions. Financial institutions require solid, reckonable, confirmable information to evaluate solvency (Biais & Gollier, 1997; Cole et al., 2004; De Haas et al., 2010) which is characteristically traced from financial statements or credit assessments which several SMEs cannot afford. SMEs then face a rancorous loop: they amass assets gradually due to deficiency of finance; this makes banks unwilling to grant credit to back investment which possibly will oblige as collateral [13].

However, a critical review of extant literature revealed very scanty empirical studies on value chain analysis and competitive advantage. The few

available ones are of foreign origin (Tessman, 2020; Navas-Alemán, Pietrobelli & Kamiya, 2015; Akenbor, 2011, Rogan, Nanda & Maharaj, 2010) and therefore their findings are not compatible to the Nigerian situation. It is against this backdrop that this study is being consummated to investigate the impact of Value-Chain Financing Analysis on competitive advantage of a smallholder farmer in Rivers State of Nigeria [14].

Statement of the Problem

In an ideal world, smallholders' farmers are supposed to enjoy adequate financing, however, in contemporary times; the smallholder farmers face a quantity of trials in their financing. From a financier's viewpoint, agricultural investment in overall is professed as high risk emanating from price risk, climate risk, and credit risk. Still, the smallholder agricultural segment is likewise pigeon holed by low productivity and low mechanization. As commercial banks make effort to finance smallholder farmers, there is a requirement of collateral from smallholder farmers. Collateral is a crucial constituent in lending, expressly by money deposit banks offering agricultural financing. Conventionally, in agricultural lending, agricultural land is the main procedure of collateral. A transformed focus on value chain financing analysis is therefore critical as it aids agriculture-led intensification which is effective in plummeting poverty when making use of fitting financing solutions that embrace smallholder farmers. This study therefore, examines the impact of value chain financing analysis on competitive advantage of smallholders' farmers in Rivers State of Nigeria [15].

LITERATURE REVIEW

Network theory

The Network Theory is one of the theories that give emphasis to the significance of sustaining downstream and upstream relationships for the optimization of value within businesses (Heizer, & Render, 2014). The theory explicates that for a business to thrive, it must launch a network with other businesses to enhance its value and processes (Katz, Lazer, Arrow, & Contractor, 2014). The theory advocates business networking with other businesses will give them an advantage of every one company harmonizing each other particularly in area where one business is deficient of faculty which is obtainable in the other. The Network Theory clarifies that businesses within a network intermingle with other businesses by bartering resources and familiarizing themselves with new procedures that result to added value for these businesses (Daastol & Stensrud, 2016). Nevertheless, businesses need to put together mutual trust and openness with each other for success (Katz 2014). For businesses to commence a well-built network they must contain shared interests, diverse resource and valuable two-way communication. The Network Theory will be functional in terms of supplying perception for

determining the item grouping that can be handled at the money deposit banks' premise. Since the theory suggests that a money deposit bank can institute a functioning relationship with smallholders' farmers there must be mutual trust, shared interest, differing resources, two-way symmetrical communication, and cognitive ties, this theory supports the concept of value chain financing analysis [16].

Literature review and hypothesis development

The conjectural concept of value chain was made up by Michael Porter in 1985. Value chain financing encompasses the flow of credit between any or all of the agricultural finance providers, products and support services amongst a mixture of value chain actors (Miller & Jones, 2010). Agricultural value chains that function optimally make use of financial products that convene definite needs. The credit risk is additionally considerably condensed by the method utilized to dispense and bring together funds (Oberholster et al., 2015). It is significant for the success of value chain financing that a valuable lead chain actor is acknowledged (Miller, 2010; Greenberg, 2010). Smallholders' farmers can take action as a useful lead actor as: they enclose an unmitigated countryside footstep [17-20].

Value chain analysis focuses on the dynamics of complex linkages within a network, wherein both value creation and value capture occur in a value system that includes suppliers, distributors, partners, and collaborators, thus extending the firm's access to resources and opportunities (Zott, Amit & Massa, 2011). Value chain analysis requires the "mapping of the market" to track and analyze the contribution of the different chain actors and the relationships among themselves [21].

The affiliation among the lead chain actor and the smallholder farmer can play a vital role in facilitating access to financial services (Oberholster et al., 2015). Some of the benefits that an agricultural value chain financing offers to smallholder farmers takes account of the lessening of the cost and risk in financing. It additionally offers a mechanism to improve the access to financing for smallholder farmers that, due to 1) a lack of collateral, or 2) the high transaction costs of securing a loan, may otherwise not be available (Miller & Jones, 2010). This existing study inquiries is about investigating whether value chain interactions can advance access to finance for smallholders' farmers and contribute to their competitive advantage.

Dimensions of value chain analysis

Various authors have specified ways of approaching value chain analysis by stipulating the assessment of the value chain's decisive dimensions. Fearn et al. (2012), adopting an extensive point of view by incorporate environmental and social impacts contained by the value chain agenda make sure that the chain realizes sustainable competitive advantage. In order to realize this, they tender three dimensions that can be utilized in value chain

analysis, specifically: (1) the boundary of analysis; (2) scope of value considered; and (3) governance. This study, in line with Fearn et al. (2012) adopts boundary of analysis, scope of value and governance as the dimensions of value chain financing analysis.

Boundary of analysis: Most studies of value chains spotlight on the intra-firm point of view, consistent with Porter's innovative value chain concept. Nevertheless, the boundary of analysis may have to lengthen further than inter-firm, to embrace "end-of-life product management".

Scope of value: Measured in the analysis of value chains, it is imperative to look into the sources and recipients of the value fashioned by the chain. While it is indispensable to spotlight on customer value, there is need for value chain analysis to be extra dynamic and discover how activities and attributes impinge on consumer behavior, in view of the fact that individual customers appraise a product's traits another way, making an allowance for it. It is therefore apposite for value chain analysis to identify and work contained by unambiguous market fragments, as an alternative of regarding customers as a single homogenous cluster.

Governance: From the point of view of value chain analysis, Gereffi (1994) labels governance as "authority and power relationships that determine how financial, material, and human resources are allocated and flow within a chain." Fearn et al. (2012) observed that some prior studies that implemented value chain analysis narrowed their enquiries to spotting the flow of materials and information. This method was unsuccessful to reflect on the impending influence of interactions contained by and alongside the chain that possibly will result in fruitful collaboration indispensable to engendering modernization and guaranteeing the competitiveness of supply chains.

The concept of competitive advantage

In contemporary times, many firms worldwide are striving to cope with increasing competition and the choices they make affect their competitive stand and profitability. Firm profitability is a function of organizational attractiveness (structure) and the firm's relative stand within the industry. A robust comparative view implies that the firm has a competitive gain that can be unremitting against occurrences by competitors and changes in the industry. Using strategic management and strategic planning which is expected to help the firm position itself against their rivals in the quest for upper hand. Since there are many relations and interdependencies among activities in the value chain of firms, the ability to co-ordinate interrelationships is critical to achieving competitive advantage (Porter, 1985). This is undertaken to help the firm position itself against its competitors in the pursuit of competitive advantage. The important elements of competitive advantage pertaining to the creation of values to customers were developed by (Jones, 2003). He invented three

generic strategies, which comprise of cost leadership, differentiation, and focus. Such competitive strategies are able to respond to the objectives of businesses effectively and are commonly adopted by businesses.

Empirical review

Tessmann (2020) focused on synergies between the commodity-producing and related manufacturing and service sectors in the perspective of the Ivorian cashew industry. Whereas these shared preparations are fundamental for bargaining inter-firm associations beside global value chains, this study discovered minute substantiation that they have kicked off improvement for local industries. As an alternative, the materialization of international buyers as strategic partners for policy-makers has produced openings for these pilot actors to buttress their foremost position, emanating from entrée to finance and technology

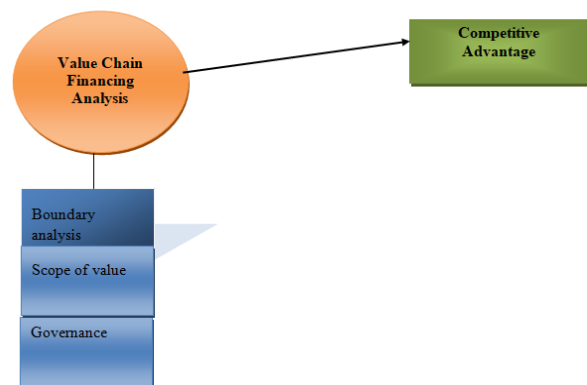
Navas-Alemán et al. (2015) explored inter-firm linkages and SMEs access to finance by means of original enterprise-level data (agro-industry in Argentina, furniture in Brazil and ICT in Costa Rica). The study evaluated sources of value chain finance and talked about the responsibilities of financial apparatuses anchored on 'hard data' and relationship finance. Findings validated the significance of value chain financing and the responsibility of governance in SMEs' access to finance [22].

Akenbor and Okoye (2011) investigated the influence of value-chain analysis on competitive advantage of manufacturing firms in Nigeria on a population consisting one hundred manufacturing companies quoted in the Nigerian Stock Exchange Fact book of 2009. Data were composed by means of secondary sources such as the companies' Annual Reports of an assortment of years and CBN Statistical Bulletin of 2009. The study adopted the multiple regressions analysis to test the hypotheses confirmed in this study. The outcomes exposed that value-chain analysis has a positive but insignificant influence on competitive advantage of a manufacturing firm in Nigeria.

Rogan et al. (2010) used qualitative value chain analysis to consider the responsibility of market and regulatory formation in the creation of an enabling environment for the supply and promotion of emergency contraception, by means of in-depth and semi-structured interviews with contraception clients, providers, industry respondents, and stakeholders from national and provincial government. Outcomes of the study designated probable rationales for the low use of emergency contraception. A significant finding is that fiscal and structural blockades impede the provision of emergency contraception to public and private health facilities. Value chain analysis was established to be a supportive implement in examining the industry, predominantly the supply-side constraints [23].

From the review of literature, the study developed the following conceptual framework:

Figure 1: Conceptual Framework of Value Chain Financing analysis and Competitiveness.



Source: Designed by the Researcher, 2021.

From the conceptual review, the following hypotheses were formulated:

Ho 1: Boundary analysis does not significantly influence competitive advantage of smallholders' farmers in Rivers State.

Ho 2: Scope of value does not significantly influence competitive advantage of smallholders' farmers in Rivers State.

Ho 3: Governance does not significantly influence competitive advantage of smallholders' farmers in Rivers State.

MATERIALS AND METHODS

For the purpose of this study, the survey method of research design was employed by the researcher. The choice of this design is because it offers the researcher the opportunity to generate a large volume of data from different organizations and institutions thereby providing a valid generalization of research findings. More so it investigates beliefs, opinions, attitude, preferences or disposition of the population elements without subjecting them to any form of manipulation and control (Akenbor, 2011). In this study, the researcher focused attention on those small holders' farmers in four local government areas in (Obio-Akpor, Ikwerre, Emohua and Etche) in Rivers State. A total number of one hundred (100) of such smallholders' farmers was identified. The data for this study were collected through primary sources such as the questionnaire' and observations.

There are two main variables in this study-Value-Chain Financing Analysis and Competitive Advantage. Value-Chain Financing Analysis was measured by boundary analysis, scope of value and governance while Competitive Advantage was the dependent variable. In testing the hypotheses in this study, a multiple regression analysis was employed,

which was computed with the aid of the Statistical

Package for Social Science (SPSS)Version 22.

RESULTS

On the basis of the above analysis, the influence of value chain financing dimensions (Boundary Analysis, Scope of Value and governance) on competitive advantage is now evaluated. The study sought after ascertaining whether value chain financing analysis had significant effect on competitive advantage of smallholder farmers in Rivers State. The results are presented next.

Test of Reliability

Reliability Cronbach’s α was conducted to examine the internal consistency of multi-item constructs. All constructs prove their reliability. The exact results of the scale reliability analysis are reported in Table 1.

Table 1: shows the reliability measure of Value Chain Financing analysis and Competitiveness.

Scale	Dimension	Items	Reliability
BA	Boundary Analysis	5	0.866
SV	Scope of Value	5	0.876
G	Governance	5	0.82
CA	Competitive Advantage	4	0.806

Source: SPSS 22.0 Output, based on 2021 field survey data.

Boundary Analysis (BA), Scope of Value (SV) and Governance G) have values of 0.866, 0.876 and 0.820 respectively. In the interim, Competitive Advantage (CA) attains value of 0.806. All constructs have the values that exceed the normally conventional threshold value of 0.7 and are sufficient for the succeeding phase of multiple regression analysis.

Test of Hypotheses

Table 2 shows that for hypothesis one, two and three, the significant is .000 which is lesser than 0.05; there is a significant, influence of boundary analysis, scope of value and governance on competitive advantage with the R-square (Coefficient of Determination) that there is 89.4%, 77.9% and 92.8% direct influence of the boundary analysis, scope of value and governance on competitive advantage. This shows that the dimensions of value chain financing can affect competitive advantage to a high degree.

Table 2: Influence of Dimensions of Value Chain Financing Analysis and Competitive Advantage (n=100).

Independent Variables	Dependent variable	Estimate	P Conclusion
Boundary Analysis	Competitive Advantage	0.0894	Supported (P > 5%)
Scope of Value	Competitive Advantage	0.0779	Supported (P > 5%)
Governance	Competitive Advantage	0.0928	Supported (P < 5%)

Note: *,** Significant at <0.10 and <0.05 respectively

found that, Value-Chain Financing Analysis dimensions (boundary analysis, scope of value and governance) have positive and significant influence on Competitive

Advantage of smallholders’ farmers in Rivers State. This lends support to previous studies such as Urbig (2003) and Schiebel (2005). Urbig (2003) findings informs that the value chain analysis facilitates companies’ executives to control cost drivers better than competitors and thus creating above-average performance in operational efficiency, profitability, market share, customers’ satisfaction, innovation, and quality and assets utilization. The findings of Schiebel (2005) reveal that value-chain financing analysis enhances a firm’s competitive advantage.

DISCUSSION

A critical examination of a connected set of value creating activities to enhance competitive advantage has been reported by this present study. The results of hypotheses one, two and three show that boundary analysis and governance have a very strong, positive and significant influence on competitive advantage (0.894:0.000<0.05) and (0.928: 0.000<0.05) respectively. While scope of value has a strong, positive and significant influence on supply chain performance (0.779: 0.000<0.05). These points out that boundary analysis, scope of value and governance facilitate for competitive advantage of smallholders’ farmers in Rivers State. By positioning value chain financing analysis resource fullness, the smallholder’s farmer can exploit boundary analysis, scope of value and governance to build up sustainable competitive advantage and improve its existing programs by putting forward innovative agricultural activities efficiently to meet societal demand for food supply. Thus, in this study, it was

CONCLUSION AND RECOMMENDATIONS

This study investigated the effect of value chain financing analysis dimensions on competitive advantage of smallholders’ farmers in Rivers State. The results of regression analysis indicated that boundary analysis, scope of value and governance have significant positive effect on competitive

advantage. This means that, smallholders' farmers in Rivers State competitive advantage was as a result of their implementation of satisfactory boundary analysis, scope of value and governance activities. The findings from this study has shown that value chain financing analysis contributes significantly to smallholders' farmer scavenging to stay productive in their enterprises depending on how they have access to adequate financing, which subsequently lead to their competitiveness. The study therefore, concludes that, value chain financing analysis significantly influence competitive advantage of smallholders' farmers in Rivers State, and recommends that:

- Government should sensitize financiers on the need to adequately fund smallholders' farmers that they may be channel all the way through boundary analysis, scope of value and governance to attract an efficacious competitive advantage.
- Training to heighten financial interest possibly should be provided to the smallholder farmers.
- Government should sensitize financiers to fund smallholder farmers adequately to enable them perform creditably in their agricultural programmes to boost food production in the State.
- Government should extend assistance in terms of grants accessible for deposits when smallholders farmers use the funds for agricultural purposes.
- There should be restriction on the interest rates charged by banks when offering agricultural credit to smallholders' farmers.

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