

The Moderating Effect of Institutional Environment on Oilseed Export Competitiveness in Sub-Saharan African Countries

Destaw M. Mazengia & Xia Youfu

Abstract:

Oilseeds contribute a significant amount to Sub-Saharan African countries' agricultural products, produced for oil and protein, next to cereals and pulses. The region has a comparative advantage of producing and exporting different types of oilseeds, to serve the increasing demand worldwide. However, these countries experience very low performance in the international market. As a result, it becomes an important area of concern and intervention for the policymakers in these respective countries. There have been various researches done to explore the basic causes of export inefficiencies. Some of the study findings have been complementing, while others are contrasting and many of the researches do not acknowledge the internal and external factors that determine the region's agricultural commodities export competitiveness. Considering relevant panel data in the years 1995 to 2017 and applying the fixed-effect model, the study examines the moderating effect of the institutional environment on the link between factor and demand conditions and the export competitiveness of oilseeds. The result prevails as productivity and export quantity have a significant effect on export competitiveness and the institutional environment significantly moderates their relationship. The study contributes to both theory (competitive advantage, institutional-based view theory) and practice (oilseed industry leaders and policymakers).



IJSB

Accepted 9 February 2021
Published 26 February 2021
DOI: 10.5281/zenodo.4565105

Keywords: *Oilseed industry, export competitiveness, institutional environment, and Sub-Saharan African Countries.*

About Author (s)

Destaw M. Mazengia (corresponding author), Business school, University of International Business and Economics, Chaoyang District, Beijing, P.R. China 100029.
Email: enatdendes@gmail.com, DE201765008@uibe.edu.cn

Xia Youfu, International trade and industrial economics, University of International Business and Economics, Chaoyang District, Beijing, P.R. China 100029.
Email: yofuxia@china.com.

I. Introduction

The agriculture sector is still the largest in the economy of Sub-Saharan African Countries (SSA). According to World Bank 2016 development indicators, it accounts for more than 15% of the total GDP, 50% of foreign currency earnings, and above 50% of employment creation of the region. Furthermore, 80% of it is constituted by smallholder farms. These countries are gifted with abundant land, labor, and natural resources. The wide range of this agro-ecological region is characterized by high solar radiation, fertile soils, tropical climate, and low disease and insect pressures. These conditions result in a high potential for crop production (Tesfaye, 2014). The international trade of SSA countries is primarily based on exporting primary agricultural commodities in which they have comparative advantages (Allaro, 2011). Oilseeds are the major exporting agricultural commodities in the region (Faostat, 2017). They contribute a significant amount to the continent's agricultural product for oil and protein, next to cereals and pulses. The oilseeds contained major fatty acids and were referred to as one of the major sources of edible food and feedstocks as well as medicine and biofuel. Sesame (*Sesamum indicium*), Soybean (*Glycine max*), Groundnut (*Arachis hypogea*), Sunflower (*Helianthus annuus*), Linseed (*Linum usitatissimum*), Niger (*Guizotia abyssinica* Cass.), and Cottonseeds (*Gossypium hirsutum*) are among the most prominent exported oilseeds.

The agriculture industry in the region has been suffered from adverse international conditions. For instance, declining the real prices on the world market has reduced the market access for agricultural commodities. Though the SSA countries have a comparative advantage in the production and exporting of agricultural products, they have very low performance and share in international trade (Koira, 2014). It accounts for not more than one percent of the global gross domestic product (GDP) and two percent of world trade. This situation of the region leads the member countries to many macroeconomic problems that hinder the overall development of the region, like budget deficits, a negative balance of payment, and majorly foreign currency shortage. Likewise, the global oilseed export share of SSA countries is very low as compared to the production potential and its exporting comparative advantage. It accounts for 11.4% of the land, 5.11% production volume, and 1.1 % of the export value from the world (Faostat, 2017).

Several extant studies explored the basic causes of export inefficiencies. Some of the study findings have been complementing, while others are contrasting and many of them do not acknowledge the internal and external factors that determine the region's agricultural commodities export competitiveness. Mzumara et al., (2013) and Chingarande et al., (2013) studies focused on macroeconomic conditions (exchange rate, domestic price, and production cost), while other studies focused on real GDP of the exporting countries and major trading partner countries, real effective exchange rate, agricultural input use, FDI inflow, diversification Index, as a determinant factor (Tesfaye, 2014). But, those diverse views on determinants of export competitiveness in agricultural commodities are not comprehensive. To the researchers' knowledge, no studies have focused exclusively on oilseed export competitiveness and address all internal and external factors. Therefore, this study tried to cover the yet untouched factor like the institutional environment that affect other internal factors of the oilseed export competitiveness.

In many emerging economies like SSA countries, due to unstable institutional environments exporting industries faced challenges to be competitive in the international market, because their economies are largely agrarian and still dominated by institutional factors (Khanna & Palepu, 2013). According to Henisz & Swaminathan (2008), international business

researchers should focus on the institutional environment characteristics to understand the growth and involvement of countries in internationalization processes and transaction between nations. From the theoretical point of view, the institution-based view provides researchers with enough arguments for it to become a source of inspiration for strategic management to explain why similar strategies may offer different results and why countries' export performance differs in different institutional contexts. Therefore; this research is intended to examine empirically the moderating effect of institutional environment on the relationship between factor and demand conditions on oilseed export competitiveness over the period 1995 to 2017, based on the institution-based view (Zoogah et al., 2015) and Porter's "diamond models" of competitive advantage (Porter, 1990).

II. Literature Review

The competitiveness of the agricultural sector has so far been investigated more frequently than that of the agro-food sector. Many empirical pieces of evidence suggest that agricultural commodities export competitiveness is determined by several internal and external factors of the countries, even though those factors couldn't be analyzed comprehensively. Competitiveness has a broad and changing definition depending on the school of thought and on the level of investigation (Latruffe, 2010). Competitiveness is the ability to face competition and to be successful when facing competition. The concept of competitiveness and competitive advantage has been given many interpretations. In some of the literature presented, the comparative advantage was described as providing a static explanation for success in international trade based on relative endowments, while competitive advantage forward a more useful dynamic explanation based upon the up-grading of factors and innovation. Comparative advantage is widely believed by economists to be a key determinant of international production and trade patterns (Neary, 2003). But non-economists typically think otherwise. In business schools and business circles, much greater emphasis is placed on the role of competitive advantage as a predictor of the economic fortunes of the nation as a whole.

Porter, (1990) "diamond model" presents a revealed competitive advantage as a key determinant of superior performance. He tried to explain why a nation achieves international success in a particular industry and he identified four attributes (factor conditions, demand conditions, relating and supporting industries and firm strategy, and structure and rivalry) that affect the competitive advantage of industries. Also, he argues, government policy can affect demand through product standards, influence rivalry through regulation and antitrust laws, and impact the availability of highly educated workers and advanced transportation infrastructure. The revealed comparative advantage (RCA) index of Balassa, (1965) has been commonly used in the empirical studies of export competitiveness and widely used to assess the comparative advantage of export commodities in various studies (Seleka & Kebakile, 2017; Rizwan-ul-Hassan, 2013; Fertö & Hubbard, 2003; Fertö & Hubbard, 2002; Gorton et al., 2000).

Numerous factors explain the poor agricultural commodity export competitiveness of SSA. These include macroeconomic policies, commodity-specific policies, and developments in world agricultural commodity markets, declining marginal export revenues, technological developments, marketing efficiencies, land availability, and population growth. Many of the researchers grouped the determinants of export performance into external and internal components. External components include market access/entry conditions and a country's location to international markets and internal components are related to supply-side conditions (sufficient volume, with required quality and competitive price *Vis a Vis*

international market demand). According to Anderson, (2004) & Fugazza, (2004), external and internal components proved to play an equal role in determining export performance. SSA countries are indebted to their export performance to the evolution of external components. Moreover, good internal conditions are necessary to obtain good export performance. Particularly the macro-economic dimension, good infrastructures, and non-stringent institutions are also necessary to put the export sector on a durable development path. On the other side, foreign market access and supply capacity conditions are equally important for the development of a country's external sector (Redding & Venables, 2004; Fugazza, 2004). Unctad, (2005), notes that high tariff peaks decrease agricultural and non-agricultural commodity export interest in developing countries. UNCTAD acknowledged that high transaction cost has put Africa at a disadvantage as compared to the rest of the world.

Gbetnkom & Khan (2002) revealed export supply is one of the determinants of cocoa, coffee, and banana exports in Cameroon. With a relatively high level of domestic demand, the quantity of resources devoted to export is lower, adding that, at lower domestic demand the surplus production leads to increased export volume. Higher production stimulates export growth, while higher domestic demand dampens export growth. As most studies revealed as foreign demand stimulates export, on the other hand, a huge domestic demand impedes an increase in export of the related commodity. Real output and nominal exchange rate significantly influence oilseeds export performance in Ethiopia (Allaro, 2011). Similarly, Akiyama et al., (1989) revealed that inappropriate exchange rate, producer pricing policies, and lack of support for technological advancement have been major factors for the poor exporting performance of SSA countries. Majeed et al., (2006) revealed, exchange rate depreciation leads to a fall in the relative domestic prices and makes exports competitive in international markets due to increasing export quantity. Sharma & Morrissey, (2006) discovered that the demand for Indian exports increased when its export prices fell, and they argue that the appreciation of the Indian Rupee at one time adversely affected Indian exports. Fosu, (2001) noted that the real exchange rate of a domestic currency does not influence the economy's agricultural exports directly, but instead influences agricultural exports through its effects on the incentive structure. According to Gebreyesus, (2015), a study conducted in Ethiopia revealed that real export price, domestic production, physical infrastructure, and world supply of coffee affects coffee export supply significantly. Ngeno (1996), studied the comparative analysis of economic reform and structural adjustment programs in Eastern Africa. In this study, the researcher has discovered that the export growth is positively related to output level since higher production leads to increased export volumes. In investigating the determinants of export growth rate in Uganda for the period 1987-2006. (Agasha, 2009) found a significant negative association between the foreign price level and exports in the long-run. A similar study in Tanzania, Ndulu & Lipumba, (1990) revealed that foreign prices of primary commodities significantly affect the export performance of the country's involvement in their production.

Institutions can be understood as the rules of the game in a society they are the humanly devised constraints that structure political, economic, and social interaction. Institutional studies distinguish between formal and informal institutions (North, 1990). Formal institutions are understood as laws, rules, and regulations, and informal as culture, norms, and values. Moreover, Institutions are grouped into three categories: regulatory (formal laws and rules), cognitive (shared societal knowledge), and normative (values, beliefs, norms, and assumptions) (Kostova & Roth, 2002); Scott, 2005). The regulatory dimensions of the institution (laws, rules, and the enforcement mechanism) are essential for the effective functioning of a market economy, and in consequence for the strategies and operations of

industries and firms (North, 1990; Scott, 2005; Kostova, 1997). Moreover, institutions are much more than background conditions, Instead, it directly affects a firm's struggle to formulate and implement strategy and to create competitive advantage (Ingram & Silverman, 2002). The institutional impediment for business competitiveness is derived from underdeveloped or absent institutional structures (Peng, 2003a) because in emerging economies, institutional factors changing often and unpredictably. According to Zoogah (2008), the institutional environment of Africa appears to be fertile ground to test and enhance existing institutional theories. Institutional quality can themselves be a source of comparative advantage. Institutional quality affect trade through their impact on other variables like, FDI (Meon & Sekkat, 2006; Gebreyesus, 2015).

III. Conceptual Framework and Hypothesis

3.1 Conceptual Framework

The conceptual framework is developed based on the institutional-based view and Porter's competitive advantage diamond model (Figure 1). We used productivity, export quantity, and domestic demand as an independent variable, from Porter's diamond model of five dimensions that more related to agricultural commodities export competitiveness. Moreover, we used Institutional Environment as a moderating variable and we included three control variables (Unit price, Real exchange rate, and Export diversification) in our analyses, based on the theories and previous studies.

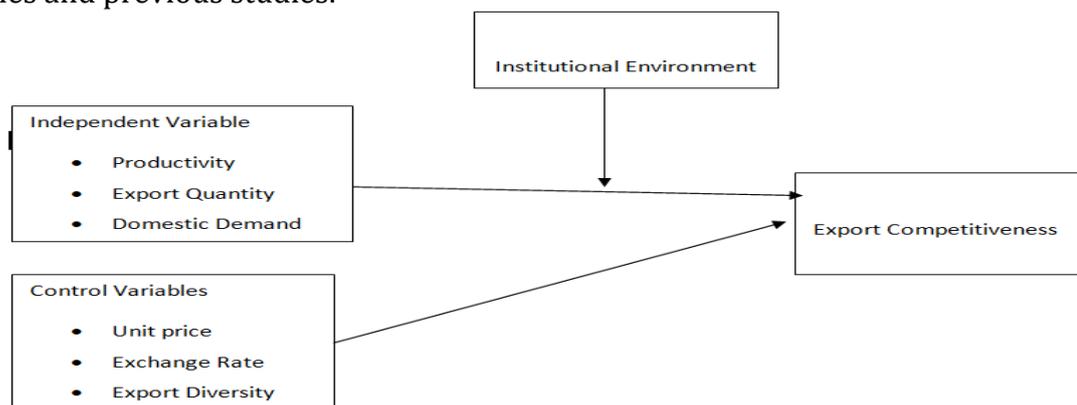


Figure 1. Conceptual framework

3.2 Hypothesis

Productivity: In agricultural crop production, the allocated land quality (fertility), improved technology, human power, improved production inputs (improved seed, fertilizer, and pieces of machinery), and favorable weather conditions are the major factors that determine the productivity of the land. The productivity improvement of oilseed comes up from the quality of production factors, a better knowledge of production processes, and the efficiency of resource allocation. This explains that the higher the land resources allocated and the use of technologies will increase productivity (Ruffin, 2001), in turn, it leads to high export supply and increases competitiveness. Productivity is simply measured as the amount of production per harvesting land area. The higher the productivity of land will minimize the cost of production and increase the volume of oilseed supplied to the international market at a low price and this creates a higher opportunity for countries to be able to supply a higher amount of oilseed to be competent in the international market (Balassa, 1965). Therefore, in line with the empirical findings and theoretical background, we theorize that the productivity of land has a positive relationship with the export competitiveness of the oilseed industry.

H1: Productivity positively affects the oilseed export competitiveness.

Export Supply: It is the countries oilseed export volume in the international market. According to Tesfaye, (2014), the higher the agricultural production the more products will be exported that leads to an increase in agricultural export performance of SSA countries. The higher the export supply, the higher will be the export competitiveness of the oilseed industry. Therefore, export supply appears to be a critical determinant of competitiveness and will have a positive relationship with the export competitiveness of oilseed in SSA countries.

H2: Export quantity positively affects the oilseed export competitiveness.

Domestic Demand: As Funke & Holly,(1992) explained, demand factors are important for determining export performance. The UNCTAD analysis also shows that the role of domestic demand as a stepping stone towards success in international markets. Many studies in the manufacturing industries explained that the character of home market demand can signal the future pattern of demand and can pressure the companies to innovate faster compared to competitors. A study conducted in Ghana indicates an increase in domestic demand for cocoa leads to a decrease in the volume of cocoa beans exported, and this decreases its competitiveness level (Boansi & Crentsil, 2013). The increase in domestic demand can create pressure on export supply volume and it can affect the competitiveness of the country. Therefore, domestic demand for oilseed is an important factor that influences the export competitiveness of countries and in line with (Boansi & Crentsil, 2013) we hypothesis domestic demand has a negative relationship with the export competitiveness of SSA countries.

H3: Domestic demand is negatively affecting the oilseed export competitiveness.

Institutional Environment: Institutional theory literature indicate the role of institutions in understanding why firms differ in terms of competitive advantage and the recognition of the relevance of institutions for competitive advantage (Peng et al., 2008). The difference in export performance of various countries can be due to differences in the evolution of external components (Redding & Venables, (2004), and both internal and external factors (Zou & Stan, 1998). Specifically, internal determinants are informed by the resource-based view, whereas external determinants are supported by an institutional-based view. However, institutions quality across countries is not evenly distributed. Instead, institutions tend to be far more robust in developed countries than in emerging ones, primarily because government policy in emerging economies is often characterized by implicit weak regulatory quality and constrained economic freedom. Institutions have a direct positive effect on the overall export performance (Shinkle & Kriauciunas, 2010). High-quality legal and judicial systems, as well as strong protection of property rights, decrease the transaction cost and operating risks for industries and firms and can increase their exports (Ma et al., 2010). A deteriorated institutional environment in the form of bad regulation is remunerated by corruption.

Institutional environment and Factor conditions: Institutions in emerging economies significantly determine the strategies and performance of export behaviors and performance. Moreover, it determines whether industries can access valuable and rare resources and knowledge to develop their competitive advantage. Industries and exporting firms in natural resources rich countries with weak institutions have ineffective leadership structures and weak property rights and poor regulation systems have weak competitiveness in the international market. Natural resource endowed countries' like SSA countries' ability to deploy their natural resources more effectively and efficiently determined by institutional strength, these have the potential to positively affect industries' operations and performance.

An unstable or unreliable government and institutional environment creates uncertainty and distorts export competitiveness. Public policies and regulations influence producers' decisions regarding resource allocation (OECD & OECD Staff, 2001). Scholars become increasingly interested in inquiring about the role of home country institutions in the internationalization of emerging market firms (Meyer & Peng, 2016). Therefore, based on the theoretical foundations and practical situation of SSA countries, we hypothesize institutional environments influence the relationship between export competitiveness and factor condition. Increasing the quality of regulation and government stability will increase export competitiveness.

Hypothesis 4a: The relationship between export competitiveness and productivity in the SSA oilseed industry is moderated by the country's institutional environment, such that the relationship is stronger for a higher institutional environment.

Hypothesis 4b: The relationship between export competitiveness and Export quantity in the SSA oilseed industry is moderated by the country's institutional environment, such that the relationship is stronger for a higher institutional environment.

Institutional environment and Demand conditions: According to Meon & Sekkat, (2006), the export of primary products may be positively associated with poor institutional quality. In addition to the direct effect, institutions may also indirectly affect export through their impact on other variables that determine market flows like productivity, domestic demand, and export supply. Institutional constraints are major factors for the poor export performance of SSA countries' primary commodities (Carmignani & Chowdhury, 2007). Domestic market instability can have a direct effect on export performance. When the domestic market is stable, firms may have little motivation to explore sales opportunities in the export market, because export markets are comparatively risky. The adulteration of produce had implications for the quality of oilseed, because low-quality exports attracted poor prices in the world market, thus weakening the purchasing interest of buyers. Quality regulation from the sources of supply and the detection and punishment of fraud should be done by the regulatory institutions at all levels for improving industries' competitiveness in the international market. Moreover, when the institutional environment is more stringent the exporters prefer to sell the products to the domestic market, the domestic market computes the export supply that affects the oilseed industry competitiveness in the international market. Therefore, we hypothesize institutional environment moderates the relationship between domestic demand and export competitiveness.

Hypothesis 5: The relationship between the Oilseed export competitiveness and Domestic Demand within an SSA oilseed industry is moderated by the country's institutional environment, such that the relationship is weaker for a higher institutional environment.

IV. Research Methodology

4.1 Data

This research empirically examines the moderating effect of institutional environment on the association of factor conditions and demand conditions with oilseed export competitiveness of SSA countries, based on a fairly large sample of panel observations throughout 1995-2017 on two major oilseeds (Sesame (*Sesamum indicum*), and Soybean (*Glycine max*)). These oilseeds account for more than 86% of the oilseed export value of the region. According to Baltagi, (2005) & Hsiao, (2005) panel data is relevant because it contains the necessary mechanism to deal with both inter-temporal dynamic behavior and the individualism of the major exporter countries. The relevant country-level data for all variables were collected from the Food and Agricultural Organizations database (FAOSTAT), United Nation Commission on Trade and Development (UNCTAD), World Bank, IMF, World Bank

Governance Indicators, and Fraser Institutes Economic Freedom of the World Index database. To measure the Institutional Environment of a country we used indices for two dimensions of institutional quality, Governance quality indicators (Government Effectiveness, Political Stability, and Absence of violence, Regulatory Quality, and Control of Corruption) and Economic Freedom Index indicators (Property Right, Tax Burden, Trade Freedom, and Investment Freedom). We developed an aggregate institutional environment index by employing principal component analysis (PCA) methods from eight indicators of Governance quality and Economic Freedom Index indicators.

4.2 Descriptions of Variables

Dependent variable

Export Competitiveness: It is more attractive than other measures of performance for exporter industries or countries that are concerned about how much sustainably perform as compared to others. It is the ratio of a firm, industries, or countries' exports in a particular commodity category to its share in total merchandise exports (Balassa & Noland, 1989). It has been applied in numerous reports and academic publications to measure the export competitiveness of firms, industries, or countries. The revealed Comparative Advantage index has values between 0 and $+\infty$. If it takes a value less than 1, this implies that the firms, industries, or countries have no competitive advantage in international trade. If the index takes a value of more than 1, implies competitiveness in the international market. Therefore, the values of RCA are calculated as follows.

$$RCA = \left(\frac{x_{ij} / \sum_i x_{ij}}{\sum_j x_{ij} / \sum_i \sum_j x_{ij}} \right)$$

Where,

x_{ij} Denotes total oilseed "I" exports of at SSA country "j",

$\sum_i x_{ij}$ Denotes total agricultural sectors exports of SSA country "j",

$\sum_j x_{ij}$ Denotes "world" exports of the oilseed sector "i",

$\sum_i \sum_j x_{ij}$ Denotes total "world" exports agricultural sectors.

However, the mean value of a country or a commodity's RCA scores, in general, is not the same. It implies that the same magnitude of RCA might signify different levels of competitiveness for different countries or commodities. That means, using the non-adjusted RCA in regression analysis (or statistical analysis) distorted the result because it gives much more weight to values above 1 compared to observations below 1. Hence, several alternative RCA indexes have been proposed to improve Balassa's RCA index, to address the asymmetric property, the logarithm of RCA (Vollrath, 1991), and symmetrical RCA index (RSCA) (Laursen, (2015). The logarithm of RCA on a commodity with zero export would be undefined which is not applicable in regression analysis. RSCA scores symmetrically range from -1 to +1 with 0 being the neutral point. This index has similar properties to the logarithm solution but can be defined in the case of zero exports. After we calculate the value of oilseed export competitiveness of the data the result showed not asymmetric on the other hand some of the countries didn't export in certain years. We decided to use RSCA to assuage the above problems. It is calculated as follows:

$$RSCA = (RCA - 1) / (RCA + 1)$$

Where;

RSCA denotes revealed symmetric competitive advantage

RCA denotes revealed competitive advantage

Independent Variables

Factor Conditions are the dependent variables. They are a conventional pool of resources, such as land, labor, capital, raw materials, and those created and continually upgraded. The competitive advantage of nations and industries is associated with basic production factor endowments. The relatively abundant resource in that country more intensively and the quantity of each commodity that a country produces depends on its factor endowment and its production technology (Gupta, (2015). Porter, (1990) pointed out; nation's competitiveness is largely determined by factor endowments and by demand conditions as suggested by the availability of resources in a country that provides. For this research based on Porters' competitive "diamond model", productivity, and export supply are selected as a determinant variable from factor conditions.

Productivity is the ability of production factors to produce the output. It is measured by quintal per hectare; it is calculated by the ratio of annual oilseed production in quintal per area of harvesting land in hectare based on FAOSTAT data (2019).

Export Supply: It is the countries oilseed export volume in the international market. It is measured by the amount of oilseed supplied annually for the international market in a ton.

Demand Conditions: It refers to domestic and foreign market demands. For this research, we tried to explore the effect of domestic demand on the export competitiveness of oilseeds. It is the total amount of oilseed domestically consumed annually for different purposes (agro-processing, seeding, local consumption, etc.). It is measured in tons.

Institutional Environment: It is the rules of the game in a society they are the humanly devised constraints that structure political, economic, and social interaction. We used Formal or Regulatory types of institutional quality. Most of the researchers argue that an important issue in empirical research is how to conceptualize the theoretical constructs. Especially Institutional environment factors are latent factors within the economic system, and it is hard to find one proxy which would suitably represent the quality of the institutional environment. Therefore, we developed an aggregate country-level institutional environment index by employing principal component analysis (PCA) methods from Governance quality indicators (Government Effectiveness, Political Stability, and Absence of violence, Regulatory Quality, and Control of Corruption) and Economic Freedom Index indicators (Property Right, Tax Burden, Trade Freedom, and Investment Freedom).

Control Variables

The unit price: it is the price of oilseed exported annually in the international market in US dollars per ton. Agricultural commodities unit price is mainly determined by quality, preference of buyers, production and packaging quality, importers' phytosanitary standards, and supply volume. The increased price of commodities led to a proportionally increasing the number of earnings that increases competitiveness level.

The real Exchange Rate: It is the average real exchange rate of the local currency from the US dollar. It is measured in the US dollar. The real exchange rate is positively associated with exports indicated that appreciation in real exchange rate increases the export price, which raises the demand for exports in the market (Kemal & Qadir, 2005; Ngeno, 1996). Theoretically, a fall in the relative domestic prices due to exchange rate depreciation makes exports cheaper in international markets resulting in increased demand for exports.

Export Diversification is measured using concentration indexes, counts of exported products to assess and monitoring of export competitiveness. It measures the relative shares of oilseeds from different export commodity sectors in the country. This is because; they are often highly dependent on relatively few primary commodities for their export earnings. The

index of trade concentration or Hirschman index was used to measure export diversification. The value of the index is close to zero, which indicates a less concentrated trade structure.

4.3 Model Selection and Specification

We used the econometric model of panel data regression techniques. Panel data involves different models that can be estimated (pooled, fixed effects, and random effects). The best estimating model was decided after employing different appropriate tests, which is convenient and it has been successfully used by other studies (Hausman & Taylor, 1981).

The Pooled Panel data regression technique is a usual OLS regression that helps to see the effect of independent variables on the dependent variables disregarding the fact that data is both cross-sectional and time series. **A random-effects model** is unlike the fixed effects model, the variation across countries is assumed to be random and uncorrelated with the independent variables included in the model. **A fixed-effects model** is used to analyze the impact of variables that vary over time and used to remove the effect of time-invariant characteristics (Hausman & Taylor, 1981). We employed multicollinearity, heteroscedasticity, unit root tests, country-specific effects, and Hausmann tests by using Statistical software STATA 13.

As presented in table 1 Multi-collinearity test, the VIF is 1.25 & 1.67 for Sesame and Soybean respectively. The VIF result shows that there is no collinearity problem between variables.

Table: 1 Multicollinearity Test

Sesame			Soybean		
. vif			. vif		
Variable	VIF	1/VIF	Variable	VIF	1/VIF
UNP	1.33	0.750443	DDM	2.13	0.468652
PRDY	1.33	0.753056	EXDV	1.87	0.535957
INSE	1.30	0.766299	INSE	1.53	0.651741
DDM	1.18	0.849498	PRDY	1.53	0.654733
EXR	1.17	0.851181	EXPQ	1.35	0.740314
EXDV	1.16	0.858850	EXR	1.31	0.766034
Mean VIF	1.25		UNP	1.26	0.796287
			Mean VIF	1.57	

The heteroscedasticity test result indicated in table 2, the null hypothesis suggests the presence of constant variance which means data is homoscedastic in the case of Sesame and Soybean. However, the p-value is 0.000 which is significant enough to reject the null hypothesis.

Table: 2 Heteroscedasticity result for panel data analysis in STATA

Oilseeds	Heteroscedasticity test result
Sesame	<pre>. hettest Breusch-Pagan / Cook-Weisberg test for heteroskedasticity Ho: Constant variance Variables: fitted values of RSCA chi2(1) = 124.52 Prob > chi2 = 0.0000</pre>
Soybean	<pre>. hettest Breusch-Pagan / Cook-Weisberg test for heteroskedasticity Ho: Constant variance Variables: fitted values of RSCA chi2(1) = 141.33 Prob > chi2 = 0.0000</pre>

Table: 3 Hausmann Test

Oilseeds	P-value	Proposed panel regression
Sesame	$\chi^2(19) = (b-B)' [(V_b-V_B)^{-1}] (b-B)$ $= 60.71$ $\text{Prob}>\chi^2 = 0.0000$	Fixed effect
Soybean	$\chi^2(18) = (b-B)' [(V_b-V_B)^{-1}] (b-B)$ $= 96.45$ $\text{Prob}>\chi^2 = 0.0000$	Fixed effect

Notes: ***, **, * shows rejection of null hypothesis at 1%, 5%, and 10% level of significant.

Therefore, the dataset has heteroskedastic variances in Sesame and Soybean data. The Levin Lin Chu (LLC) panel unit root tests were employed, following the procedure described by (Bornhorst & Baum, 2006); Baltagi, 2005). The results are presented in table 4. The pooled regression result “p” values equal to 0.000, confirms it is not free from the joint effects of country dummies. This implies pooled regression is not a preferable technique. Therefore, we employed the Hausmann test to identify whether the time-invariant characteristics of countries are correlated with other country characteristics or not. The results presented in appendix table 2 showed that the Hausmann tests reject the null hypothesis and this indicates that country-specific effects are correlated with repressors. This suggests that the fixed effects model is the preferred model for this empirical study. The fixed-effect model equation of this study is:

$$RSCA = \beta_0 + \beta_1 PRDY + \beta_2 EXPQ + \beta_3 DDM + \beta_4 EXR + \beta_5 UNP + \beta_6 EXDV + \beta_7 INSE + \beta_8 INSEPRDY + \beta_9 INSEEXPQ + \beta_{10} INSEDDM + u_{it}$$

$$u_{it} \sim iid(0, \sigma_u^2)$$

Where

- RSCA_ is the dependent variable (DV)
- β_0 - Represent the intercept,
- β_{1-3} - is the coefficient for the independent variables (IV),
- β_{4-6} - is the coefficient for the control variables (CV),
- β_7 - is the coefficient for the moderating variables (MV),
- β_{8-10} - is the coefficient for the interaction of the moderating variables (MV),
- u_{it} ...is the error term, varies over i and t.

To reduce nonessential collinearity between interaction terms and their components and computational problems (Jaccard et al., 2003), we used the mean-centering score for all variables (Dawson, 2014).

Table 4: Unit root test result

Variable	SESAME (<i>Sesamum indicium</i>)				SOYBEAN (<i>Glycine max</i>),			
	At Level		At 1st difference		At Level		At 1st difference	
	P-value	Order of integration	P-value	Order of integration	P-value	Order of integration	P-value	Order of integration
RSCA	0.000	I ⁰			0	I ⁰		
PRDY	0.002	I ⁰			0.0015	I ⁰		
EXPQ	0.460	I ¹	0.000	I ⁰	0.9352	I ¹	0.000	I ⁰
DDM	0.1083	I ¹	0.000	I ⁰	0.9163	I ¹	0.000	I ⁰
EXR	0.9989	I ¹	0.000	I ⁰	0.9996	I ¹	0.000	I ⁰
UNP	0.0451	I ⁰			0.1994	I ¹	0.000	I ⁰
EXDV	0.002	I ⁰			0.0017	I ⁰		
INSE	0.531	I ¹	0.000	I ⁰	0.000	I ⁰		
INSEPRDY	0.0201	I ⁰			0.0025	I ⁰		
INSEEXPQ	0.516	I ¹	0.000	I ⁰	0.3963	I ¹	0.000	I ⁰
INSEDDM	0.2074	I ¹	0.000	I ⁰	0.009	I ⁰		

"I⁰" indicates stationary at levels and "I¹" indicates stationary at 1st difference levels

Key: RSCA- revealed symmetric competitive advantage, PRDY- productivity, EXPQ- export quantity, DDM- domestic demand, EXR- real exchange rate, UNP- unit price, EXDV- export diversification, INSE- institutional environment, INSEPRDY- the interaction of institutional environment and productivity, INSEEXPQ- the interaction of institutional environment and export quantity, and INSEDDM-interaction of the institutional environment and domestic demand.

V. Empirical Result, Discussion and Conclusions

5.1 Empirical Result

The empirical results are presented independently in table 5 for the two oilseeds (Sesame and Soybean). According to the logic of hierarchical regression, a base model regression (Model 1) with only the control variables, Models 2 presents the result of the main effect, which means the relationship between independent variables and export competitiveness, and Model 3-5 presents the interaction of independent variables and moderating variables on export competitiveness. Therefore, the regression results of control variables' effect on export competitiveness show that the unit price statistically significant positive effect on the improvement of the competitiveness on Sesame. In the case of Soybean, the real exchange rate and export diversification have a statistically significant negative and positive effect on the improvement of competitiveness respectively. The result is in line with prior researches (eg., Allaro, 2011; Gebreyesus, 2015).

Regarding the main effect variables, Model 2 shows, hypothesis 1 in Soybean and hypothesis 2 both in sesame and Soybean is supported. The export quantity and institutional environment of Sesame have positively affected the export competitiveness and statistically significant ($\beta=0.0319$, $p<0.05$, and $P<0.01$) respectively. In the case of Soybean productivity, export quantity and institutional environment are positively affect the export competitiveness and statistically significant ($\beta=0.0319$, $p<0.01$, $p<0.05$, and $P<0.05$) respectively. On the other side hypothesis 3 is not supported in both oilseeds. The effect of domestic demand (DDM) on export competitiveness is statistically not significant, which means it has no significant effect on export competitiveness, but the coefficient sign is as expected.

Hypothesis 4a is supported in the case of Soybean as Model 3 shows, the institutional environment moderates the relationship between productivity on export competitiveness

significantly ($\beta=0.0139$, $P<0.05$). Moreover, hypothesis 4b is supported in both Sesame and soybean.

Table 5: The Regression Result of Sesame and Soybean

Variables	Sesame					Soybean				
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 1	Model 2	Model 3	Model 4	Model 5
EXR	0.000173 (0.00033)	0.00011 (0.00034)	0.00011 (0.00034)	0.000011 (0.000344)	0.000132 (0.00035)	-0.000004 (0.000003)	-0.000008*** (0.0000023)	-0.000005 (0.000002)	-0.0000087*** (0.000002)	-0.000008*** (0.000002)
UNP	0.201*** (0.0704)	0.177** (0.0708)	0.179** (0.0708)	0.182*** (0.0697)	0.176** (0.0705)	0.0000761 (0.00581)	0.00216 (0.00509)	0.0000621 (0.00524)	0.00258 (0.00498)	0.00237 (0.00514)
EXDV	-0.0126 (0.0327)	-0.0172 (0.0332)	-0.0164 (0.0334)	-0.0196 (0.0336)	-0.0181 (0.0333)	0.00309 (0.0296)	0.0369* (0.0204)	0.0370* (0.0199)	0.031 (0.0196)	0.0374* (0.0204)
PRDY		0.104 (0.0739)	0.126 (0.0856)	0.123 (0.0765)	0.101 (0.0739)		0.235*** (0.0312)	0.261*** (0.0367)	0.231*** (0.0313)	0.234*** (0.031)
EXPQ		0.00100** (0.0004)	0.00111** (0.00044)	0.00247*** (0.000736)	0.00104** (0.00041)		0.00542*** (0.0013)	0.00550*** (0.00124)	0.00777*** (0.00132)	0.00540*** (0.00132)
DDM		0.000047 (0.00066)	-0.000026 (0.00066)	-0.000073 (0.000656)	0.000535 (0.00092)		-0.000117 (.000144)	-0.00012 (0.000142)	-0.000202 (0.000136)	-0.000124 (0.00015)
INSE		0.0767*** (0.0282)	0.0765*** (0.0283)	0.0785*** (0.0274)	0.0808*** (0.0286)		0.0416** (0.0182)	0.0474** (0.0195)	0.0369** (0.0177)	0.0437** (0.0191)
INSEPRDY		0.0509 (0.0583)					0.0668** (0.0306)			
INSEEXPQ				0.00149*** (0.000413)					0.00338*** (0.000834)	
INSEDDM					0.000638 (0.00043)					-0.000043 (0.000082)
Constant	0.369*** (0.0259)	0.326*** (0.0319)	0.323*** (0.033)	0.335*** (0.0339)	0.342*** (0.034)	0.884*** (0.0115)	0.879*** (0.0107)	0.868*** (0.0139)	0.881*** (0.0109)	0.881*** (0.0113)
Observations	330	330	330	330	330	220	220	220	220	220
R-squared	0.638	0.649	0.649	0.654	0.65	0.365	0.698	0.708	0.724	0.698

Note: Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Declaration: I would like to declare, I am responsible for any conflict of interest that arises on this manuscript.

The institutional environment positively moderates the relationship between export quantity and export competitiveness of Sesame and Soybean significantly ($\beta=0.0339$, $p<0.01$) and ($\beta=0.0109$, $P<0.01$), respectively. This implies that when the institutional environment index level is high, the effect of export quantity on export competitiveness is higher in both Sesame

and soybean. The result is consistent with Allaro, (2011) & Carmignani & Chowdhury, (2007). Hypothesis 5 is not supported both in sesame (*Sesamum indicium*) and Soybean (*Glycine max*). Model 5 regression results show the institutional environment does not moderate the relationship between domestic demands and level of export competitiveness in the international market. But the coefficient signs are as expected.

5.2 Discussion

The regression results from both oilseeds (Sesame, and Soybean) support Porter's diamond model and institutional-based view. The result revealed that oilseed industries with greater productivity, export quantity, and good institutional environment are likely to have a higher level of competitiveness in the international market. Porter (1990) revealed the competitive advantage of nations or sectors is associated with basic production factor endowments such as land and natural resources, labor, human capital, physical capital, and infrastructure. The result also affirms propositions by prior research findings. Factor endowments are utilized within the firm that ultimately determines its competitiveness in the international market (Ajitabh & Momaya, 2004), Export supply plays a significant role in changing export performance (Ngeno, 1996), the higher production stimulates growth in volumes of export. Similarly, Nwachuku et al., (2010) found a significant positive association between cocoa production and exports. Ngeno (1996) also discovered that higher production leads to increased export volumes. On the other hand, the result indicates, domestic demand has no significant effect on export competitiveness. This is because of the lower number of oilseed millers (processing industries) in most SSA countries the domestic demands for oilseed is very low. However, contrary to Porter's competitive theory the negative coefficient of domestic demand indicates greater domestic demand and lower competitive level. The possible explanations are, first, unlike manufacturing industry products; higher demand for domestic consumption for agriculture products of emerging economies can reduce the export volume affects export competitiveness. Second, the higher the domestic demand for agricultural commodities results in high domestic market competition and domestic price. As a result, the export competitiveness will decrease. It means a higher domestic demand will reduce the export competitiveness of agricultural products.

Moreover, our theoretical arguments and empirical findings contribute to institutional-based view literature (Peng, 2003b) showing that the quality of the institutional environment has major effects on the export competitiveness of industries involved in exporting the oilseed in Sub-Saharan African countries. Institutional quality plays a key role in successful export competitiveness. Therefore, the empirical results of cross-country prior studies revealed, that institutional quality plays a higher role in an efficient reallocation of factor resources to increase the export quantity, improve productivity, and reduce transaction cost of exported agricultural commodities. The result suggests that the institutional environment positively moderates the relationship between productivity and export quantity with export competitiveness. It implies that the effect of productivity and export quantity on export competitiveness is higher for firms in countries with strong institutions than for those in countries with weak institutions. It reiterates the importance of quality regulatory and economic freedom to enhance agricultural productivity and increase export supply, and hence increase the export competitiveness of the industry.

5.3 Conclusion

Our study results contribute theoretically to the extant literature on "Porter's competitiveness theory and institutional-based view of oilseed industry in examining the factors that influence oilseed export competitiveness. We tested these relationships

empirically using 23 years comprehensive Panel data set on two major oilseeds products (Sesame, and Soybean) in Sub-Saharan African Countries. Oilseeds are mainly produced for commercial purposes in SSA countries. Due to global oilseed demand increase, the presence of abundant resources (like natural resources, human, and labor), and favorable agro-ecology and weather conditions these countries produce oilseeds. Though oilseed exporting is one of the major sources of foreign exchange and revenue for these countries, they experience very low performance and share in the international market. One of the main competitiveness criteria is maintaining and improving one's position in the global market. No studies have exclusively based on the institution-based view and competitiveness theory in developing countries' agricultural commodity export, to explore the effect of institutional environment on oilseed export competitiveness. The existing competitive advantage literature is focused on manufacturing and service industries. They gave little attention to developing countries' small-scale landholding agricultural commodities.

The result contributes theoretically to the extant literature of "Porter's competitiveness theory of factor and demand conditions and institutional-based view literature that, the quality of the institutional environment has major effects on export competitiveness of industries involved in exporting the oilseed in SSA countries. Moreover, it contributes to the international business (IB) literature by examining how the interaction between factor and demand conditions with the institutional environment shapes the level of export competitiveness in emerging economies. It is an eye breaker for developing countries' oilseed export, making it an important issue for research. Moreover, it contributes to policymakers, oilseed industry leaders to wisely intervene in generating better export business strategy in improving the export competitiveness and tackle those factors that inhibit competitiveness and helping them to attain those factors that affect their performance. Furthermore, it has a significant contribution to the private sectors that have the potential to invest in oilseed production and export in SSA countries which have a higher comparative advantage on agricultural production and trading.

Based on the results of the study we recommend to policymakers, oilseed industry leaders, and exporting firms to enhance their competitiveness in the international market. First, the oilseed industry should be an important area of concern and intervention for SSA countries, as its comparative advantage on oilseed production and international market demand increased aggressively. Second, increasing productivity and export quantity, and creating conducive institutional environments should be the major focus areas of oilseed industry-level strategy to be competitive in the international market. Third, SSA countries' oilseed industry should focus on organic products, on those higher demanded in the international market, and high-value oilseeds, like Soybean and Sesame.

Although we believe this study significantly enhances our understanding of the determinant of export competitiveness and the moderating role of institutional environment on the relationship between factor and demand conditions and export competitiveness, several limitations affect the reliability of our study. This in turn gives a chance for researchers to further study the issue. First, we investigate the effect of productivity and export quantity from factor conditions and domestic demand from demand conditions on export competitiveness. Adding more variables can reach the finding and indicate more options for business strategy development. Second, although we believe our study was done on major two oilseeds (sesame, and soybean) it will add more understanding when we study other oilseeds. Moreover, we encourage future research using other measurements of export performance at the firm level other than competitiveness.

References

- Agasha, N. (2009). *Determinants of export growth in Uganda (1987-2006)*.
- Ajitabh, A., & Momaya, K. (2004). Competitiveness of firms: Review of theory, frameworks and models. *Singapore Management Review*, 26(1), 45–61.
- Akiyama, T., Larson, D. F., & Mundial, B. (1989). *Recent trends and prospects for agricultural commodity exports in sub-Saharan Africa* (Vol. 348). World Bank.
- Allaro, H. B. (2011). Export performance of oilseeds and its determinants in Ethiopia. *Journal of Cereals and Oilseeds*, 2(1), 1–15.
- Anderson, K. (2004). *The world's wine markets: Globalization at work*. Edward Elgar Publishing.
- Balassa, B. (1965). Trade liberalisation and “revealed” comparative advantage 1. *The Manchester School*, 33(2), 99–123.
- Balassa, B., & Noland, M. (1989). “Revealed” Comparative Advantage in Japan and the United States. *Journal of International Economic Integration*, 8–22.
- Baltagi, B. H. (2005). *Econometric analysis of data panel*. England: John Wiley & Sons Ltd.
- Boansi, D., & Crentsil, C. (2013). Competitiveness and determinants of coffee exports, producer price and production for Ethiopia. *Munich Personal RePEc Archive Paper*, 6(48869).
- Bornhorst, F., & Baum, C. (2006). *LEVINLIN: Stata module to perform Levin-Lin-Chu panel unit root test*.
- Carmignani, F., & Chowdhury, A. R. (2007). *The role of primary commodities in economic development: Sub-Saharan Africa Versus the rest of the world*. United Nations Economic Commission for Europe.
- Chingarande, A., Mzumara, M., & Karambakuwa, R. (2013). Comparative advantage and economic performance of East African Community (EAC) member states. *Journal of Economics*, 4(1), 39–46.
- Faostat, F. (2017). Available online: [Http://www. Fao. Org/faostat/en/# data](http://www.Fao.Org/faostat/en/# data). QC (Accessed on January 2018).
- Fertö, I., & Hubbard, L. J. (2003). Revealed comparative advantage and competitiveness in Hungarian agri–food sectors. *World Economy*, 26(2), 247–259.
- Fosu, A. K. (2001). Political instability and economic growth in developing economies: Some specification empirics. *Economics Letters*, 70(2), 289–294.
- Fugazza, M. (2004). Export performance and its determinants: Supply and demand constraints. Available at SSRN 1281486.
- Funke, M., & Holly, S. (1992). The determinants of West German exports of manufactures: An integrated demand and supply approach. *Weltwirtschaftliches Archiv*, 128(3), 498–512.
- Gbetnkom, D., & Khan, S. A. (2002). *Determinants of agricultural exports: The case of Cameroon*.
- Gebreyesus, T. (2015). Determinants of coffee export performance in Ethiopia. *Journal of Economics and Sustainable Development*, 6(5), 147–158.
- Gupta, S. D. (2015). Comparative advantage and competitive advantage: An economics perspective and a synthesis. *Athens Journal of Business and Economics*, 1(1), 9–22.
- Hausman, J. A., & Taylor, W. E. (1981). Panel data and unobservable individual effects. *Econometrica: Journal of the Econometric Society*, 1377–1398.
- Henisz, W., & Swaminathan, A. (2008). *Institutions and international business*.
- Hsiao, C. (2005). Why panel data? *The Singapore Economic Review*, 50(02), 143–154.
- Ingram, P., & Silverman, B. (2002). *The new institutionalism in strategic management*. Elsevier.
- Kemal, M. A., & Qadir, U. (2005). Real exchange rate, exports, and imports movements: A trivariate analysis. *The Pakistan Development Review*, 177–195.

- Khanna, T., & Palepu, K. (2013). Spotting market voids. *Emerging markets: Look before you leap. Expert Insight*, 17, 44–51.
- Koira, A. (2014). Agribusiness in sub-Saharan Africa: Pathways for developing innovative programs for youth and the rural poor. *Agribusiness in Sub-Saharan Africa: Pathways for Developing Innovative Programs for Youth and the Rural Poor*.
- Kostova, T. (1997). *Country institutional profiles: Concept and measurement*. 1997(1), 180–184.
- Kostova, T., & Roth, K. (2002). Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects. *Academy of Management Journal*, 45(1), 215–233.
- Latruffe, L. (2010). *Competitiveness, productivity and efficiency in the agricultural and agri-food sectors*.
- Laursen, K. (2015). Revealed comparative advantage and the alternatives as measures of international specialization. *Eurasian Business Review*, 5(1), 99–115.
- Ma, Y., Qu, B., & Zhang, Y. (2010). Judicial quality, contract intensity and trade: Firm-level evidence from developing and transition countries. *Journal of Comparative Economics*, 38(2), 146–159.
- Majeed, M. T., Ahmad, E., & Khawaja, M. I. (2006). Determinants of exports in developing countries [with comments]. *The Pakistan Development Review*, 1265–1276.
- Meon, P., & Sekkat, K. (2006). Institutional quality and trade: Which institutions. *Which Trade*, 06–06.
- Meyer, K. E., & Peng, M. W. (2016). Theoretical foundations of emerging economy business research. *Journal of International Business Studies*, 47(1), 3–22.
- Mzumara, M., Karambakuwa, R., & Chingarande, A. (2013). Intra-Sectoral Export Supply Capability of Burundi. *Greener Journal of Economics and Accountancy*, 2(3), 083–091.
- Ndulu, B. J., & Lipumba, N. H. (1990). International trade and economic development in Tanzania. *Trade and Development in Sub-Saharan Africa*.
- Neary, J. P. (2003). Globalization and market structure. *Journal of the European Economic Association*, 1(2–3), 245–271.
- Ngeno, N. K. (1996). *Comparative Analysis of Economic Reform and Structural Adjustment Programs in Eastern Africa*.
- North, D. (1990). *Institutions, institutional change and economic performance* Cambridge University Press. *New York*.
- Nwachuku, I., Agwu, N., Nwaru, J., & Imonikhe, G. (2010). Competitiveness and determinants of cocoa export from Nigeria. *Report and Opinion*, 2(7), 51–54.
- OECD & OECD Staff. (2001). *OECD economic outlook*. OECD Publishing.
- Peng, M. W. (2003a). Institutional transitions and strategic choices. *Academy of Management Review*, 28(2), 275–296.
- Peng, M. W. (2003b). Institutional transitions and strategic choices. *Academy of Management Review*, 28(2), 275–296.
- Peng, M. W., Wang, D. Y., & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, 39(5), 920–936.
- Porter, M. E. (1990). The competitive advantage of nations. *Harvard Business Review*, 68(2), 73–93.
- Redding, S., & Venables, A. (2004). Geography and export performance: External market access and internal supply capacity. In *Challenges to globalization: Analyzing the economics* (pp. 95–130). University of Chicago Press.
- Ruffin, R. J. (2001). Quasi-specific factors: Worker comparative advantage in the two-sector production model. *Journal of International Economics*, 53(2), 445–461.

- Scott, W. R. (2005). Institutional theory: Contributing to a theoretical research program. *Great Minds in Management: The Process of Theory Development*, 37(2), 460–484.
- Seleka, T. B., & Kebakile, P. G. (2017). Export competitiveness of Botswana's beef industry. *The International Trade Journal*, 31(1), 76–101.
- Sharma, K., & Morrissey, O. (2006). *Trade, growth and inequality in the era of globalization*. Routledge.
- Shinkle, G. A., & Kriauciunas, A. P. (2010). Institutions, size and age in transition economies: Implications for export growth. *Journal of International Business Studies*, 41(2), 267–286.
- Tesfaye, E. (2014). Determinants of agricultural export in Sub-Saharan Africa: Evidence from panel study. *American Journal Of Trade And Policy*, 1(2), 62–70.
- Unctad, T. (2005). Development Report. *United Nations, New York and Geneva*.
- Vollrath, T. L. (1991). A theoretical evaluation of alternative trade intensity measures of revealed comparative advantage. *Weltwirtschaftliches Archiv*, 127(2), 265–280.
- Zoogah, D. B. (2008). African business research: A review of studies published in the Journal of African Business and a framework for enhancing future studies. *Journal of African Business*, 9(1), 219–255.
- Zoogah, D. B., Peng, M. W., & Woldu, H. (2015). Institutions, resources, and organizational effectiveness in Africa. *Academy of Management Perspectives*, 29(1), 7–31.
- Zou, S., & Stan, S. (1998). The determinants of export performance: A review of the empirical literature between 1987 and 1997. *International Marketing Review*.

Cite this article:

Destaw M. Mazengia & Xia Youfu (2021). The Moderating Effect of Institutional Environment on Oilseed Export Competitiveness in Sub-Saharan African Countries. *International Journal of Science and Business*, 5(4), 189-206. doi: <https://doi.org/10.5281/zenodo.4565105>

Retrieved from <http://ijsab.com/wp-content/uploads/714.pdf>

Published by

