Original Research Article

Trade facilitation between China and Africa, Gravity model Analysis How China is benefiting in trade with African countries?

Abstract: This paper studies the impact of trade facilitation on bilateral trade flows between China and African countries**.** This paper presents an analysis on African countries in the context of trade facilitation to enhance how china can benefit from trade with African countries. The econometric approach is based on the augmented gravity based on heckman two stages method, OLS and Poisson model to enhance the efficiency result, The panel data used covers the period from 2009 to 2019 and concerns 50 African countries. The result has been found positively in some variable like GDP and negatively in others Like LPI, infrastructure even though it leads to increase the bilateral trade and follow the advancement of development and economics. we conclude Africa is a potential market with a huge population and advantages.

Keyword: Gravity model, Trade facilitation, African countries, China

1.Introduction

Trade facilitation is a term that, at first glance, may suggest that only the state intervenes to play the role of facilitator of trade activities; but the truth is there are other actors who are also of crucial importance to the process, such as the private sector and other non-customs entities. The issue of trade facilitation has been incorporated into the negotiations of the World Trade Organization (WTO) since the Ministerial Conference in Singapore (1996). Today, globalization play an important role in international , countries seek opening to a new market to grow their activities by changing products between partners in a faster way and more cheaper increase production,people ,reducing wasting costs in addition circulation of information's [1] ,Recenrtly trade become more liberalized through reducing tariff and using Quota for importing or exporting products,in fact , quality logistics of moving goods, document facilitation and transport connectivity are playing an important role to grow international trade flows[2] ,

For the most part, the benefits of trade facilitation and the decrease of transaction process between trading and government are self-evident, customs administrations are facing increasing volumes of trade while having to add new categories of controls and Trade facilitation concepts help customs administrations meet their duties [3]. Trade facilitation view or idea encourage customs administrations to perform their tasks. Similarly, supply chains are business fluid, and the supply chain does not come into sight to be the same. When companies compete for costs, a reduction in transaction costs will be beneficial. Morever

transaction charge threaten the competitiveness of companies and prevent customs from using their limited control resources to the best. No matter how, although the immediate benefit of facilitating trade for business and government [4]. Peter Walkenhorst and TadashiYasui [5] , based on the quality indicator of customs procedures, analyzed the impact of customs procedures on trade facilitation. However, they have stated that the quality indicator of customs procedures can be considered inversely proportional to direct transaction costs and that customs clearance time can serve as a proxy variable for the indirect costs of operations. According to them, transaction costs could be eliminated completely. However, the physical controls of customs services are necessary to ensure the enforcement of domestic regulations. However, increasing the efficiency of customs procedures (eg by reducing customs clearance times) can help lower transaction costs and help reduce the gap between domestic and international prices in the world interest of consumers and producers.[6]According to UNECE [7] four fundamental principal of trade facilitation which are transparency, simplification, harmonization and standardization ,In order for business negotiations to work and be successful, a certain level of confidentiality is necessary, otherwise it would be like showing your own cards to the other player in a game and further it is entirely normal in business negotiations that the talks themselves. Even and the texts discussed are secret to protect the commercial relationship and to guarantee a climate of confidence so that the negotiators can work together to obtain the best possible agreement, multiplies researcher explain the simplification in trade is to eliminate all unnecessary documentations and procedure in trade formalities[8], for harmonization is appear to be frequently used to reduce legal diversity between countries partner ,whereas harmonization is a means that serves to establish the broad outlines of a legal framework by accepting to the different parties in order to integrate the care of completing the common framework with provisions that better correspond to their values, preferences or their level of development. As a business, therefore, harmonization is just a process. [9] , peter said,The TBT agreement show that international standard developed such as voluntary document , can efficaciously binding ,As consequence international standards can straightforwardly force rules on nations since the TBT Agreement stipulates their utilize as the premise for improvement of national regulations and standards. By implication, international standards influence exchange and markets as they decide which items can be exchanged and how, and the assortment, quality and security of items and administrations. [10,11]

Sino-African trade dates back to the 11th century , and became more visible in the the 15th century economic history, with trips to Africa by Chinese navigator Zheng He. However, until the mid-1950s, actual trade was minimal and expanded from 1978 onwards as China embarked on economic reform and liberalization policies under Deng Xiaoping [12]. But it was not until the launch of China's policy of openness and its new focus on its relations with Africa at the start of the 21st century that trade flows between China and the African continent began to fall. Really accelerated, relations between China and Africa have strengthened markedly in recent years on all fronts. Beijing is now the largest trading partner of the African continent, which reflects China's willingness to support Africa's development as part of a win-win partnership [13] .According to Ecofin agency [14] Trades between China and its African partners reached a record level of $ 208.7 billion in 2019, Already, this performance is less vigorous in comparison with that of the previous year. The overall value of trade is only up by 2.2%, a far cry from the 19.7% increase recorded in 2018. At the same time, Agencycofin [15] noted that Africa has lost in exchange. The deficit for the dark continent more than tripled, from $ 5.62 billion in 2018 to $ 17.7 billion in 2019. This configuration is attributable to two factors. While China's exports to Africa rose 8% to $ 113.2 billion, its imports from the continent fell 3.8% to just $ 95.5 billion. Remember that in 2018, this indicator was up 30.8%.

Literature review

Waqas and Nadia(2021)[16] studied the relationship between trade facilitation indicators and trade flow in 44 Asian countries. They used fixed and random affect methodology for estimation and then used Husman test to choose the fixed and random affect results. It showed that 1% reduce in tariff rates can increase 6% of trade flow, 1% reduce in the number of documents can increase 25% exports and 6% imports, 1% reduce in trade infrastucture cost can increase 20% imports and 16% exports. Ge and Yu (2020) [17] used Gravity Model to analyze the impact of trade faciliation from countries of the Belt and Road initiative on China. It pointed out that 1% reduce in the number of documents can increase 2.8% China's exports, 1% reduce in trade infrastucture cost can increase 0.3% China's exports. Xu(2019) [18] used panel data linear regression and negative binomial regression with extended gravity model to analyze the relation between China's agricultural products export scale and ranges and the trade faciliation level of countries from B&R. It demonstrated that 1% increase in the trade faciliation from B&R countries can create 2.9% and 0.8% increase in China's agriculture product export scale and ranges. Guo(2019) [19] used panal data fixed effect model based on extended gravity model to study the influence of trade facilitation on China's cross-border e-commercial export. It showed that 1% increase in the level of trade faciliation can increase 1.36% of the cross-border e-commercial export. Luo, Wang and Cao(2021) [20] took Khandelwal products quality heterogeneity model as reference to introduce trade faciliation into consideration, studying the impact of trade faciliation on China's manufacturing industry export product quality with fixed effect model. By the analysis of dynamic effect, in the long term, trade faciliation plays an positive role on export product quality. All the above has showed that generally China can benefit from trade faciliation in different aspects. Africa countries have developed closer bond with China year by year, there will be large contribution from them to the greater development of China.[21]

Dani Rodrik(2001) [21] analysed the global governance of trade through a development lens, particularly focusing on the assess of the relation between trade, growth and poverty. With the analysis of the strengths and weakness of the current trading system and the assumptions being seriously studied, the paper suggested that multilateral trade regime, its agreement and practices need to be changed in order to better reach of the goals of human development. Hiau, Alessandrro and Marcelo(2009) [22] made the definition of trade restrictiveness more tightly link with trade theory by providing for 78 developing and developed countries clearly defined indicators of trade restrictiveness. By offering an empirical implementation of the work of Anderson and Neary with three theory-based indicators of trade restrictiveness like the TRI, the OTRI and the MA-OTRI, it showed that poor countries are facing higher barriers on their exports with their more restrictive trade regimes. Anne, Silvio, Lionel and Thierry(2009) [23] estimated amount of gravity equations by using BACI data from 1989-2005 covering a wide range of importing and exporting countries and numbers of reproducible cutrual goods. Their estimations show a positive and significant influence of cultural flows on overall trade. It also specifically demonstrated that common language benefits bilateral flow particularly of books and newspapers, the past colonial links reinforces bilateral trade in cultural heritage, the consumption of cultural goods is shown to be addictive.Nuno and Anthony(2000) [24] studied the determinants of transport costs by using three data sets like shipping company quotes, CIF/FOB ratios and bilateral data. Their results showed that infrastructure is a significant and quantitatively essential determinant of transport costs and of bilateral trade flows, being landlocked raises transport costs by about 50%, the median

landlocked countries have only 30% of the trade volume of the median coastal economy. By using the results to study Sub-Saharan African trade, it also showed that most of Africa's poor trade performance can be accounted for their poor infrastruture. Simeon, Caroline and Cong(2006)[25] estimated the effect of time costs on trade volumes by utilizing data on trade costs from the World Bank's Doing Business Report, collected from 345 freight forwaders, port and customs officials operating in 126 countries. They used a modified gravity equation controlling for endogeneity and remoteness, finding that averagely each additional day that a product is delayed before being shipped can reduce trade by at least 1%, besides, delays have an even greater impact on developing country exports and exports of time-sensitive goods like perishable agricultural products of which one day's delay can reduce exports by 6%. David and Georg(2012) [26] modeled firms' choice between exporting goods using fast but expensive air cargo and slow but cheap ocean cargo based on the price elasticity of demand and the value. Using US imports data, they estimated that each day in transit is equivalent to an ad-valorem trariff of 0.6-2.3% and that the most time-sensitive trade flows are those involving parts and component trade, suggesting that there is a link between sharp declines in the price of air shipping and rapid growth in trade as well as growth in world-wide fragmentation of production. Jon and David(1998)[27] assessed the effect of preferential trading arrangements on the aggregate and bilateral trading patterns of member countries, and test for three effects of PTAs. The use of gravity equations to test for the effects of regional bias is seriously flawed. However, they used the standard methodology and reinterpret the effects in light of the bias to examine the trade creating and trade diverting effects of the EC and EFTA. They also introduced an innovation that relies on the use of bilateral trade shares to control for omitted variable problems with the standard regression, and to examine the effects of blocs on specific member countries. They found that the EC has a very large extra-EC bias in the aggregate and all EFTA countries have a substantial intra-EFTA bias in their trade. Their results constituted further evidence of the difficulty of interpreting regional bias estimates in the context of the gravity model.[28]

2.Search of Data And Methodology

2.1 Gravity Model

The gravity model has been the most widely used tool in recent years to model international trade. The theoretical model is based on the work of Christopher and Tabitha (2015)[29] and Duval and Utoktham (2014)[30] who were inspired by the gravitational model of Anderson and Van Wincoop (2003)[31] . Consideration of relative costs is paramount in a well-specified gravity model.

Relative costs can refer to common language, common border, landlockedness and whether one country was a colony of the other at any given time. Considering the forces of attraction and repulsion in trade, the Anderson and Van Wincoop (2003)[32] equation can be written

$$X_{ij} = \frac{Y_i Y_j}{Y}\left(\frac{T_{ij}}{P_i P_j}\right)^{1-\sigma}$$

Is the bilateral trade between country i (exporter) and country j (importer), and represent respectively the size of economics i and j valued by GDP, Y represents the size of the world economy (measured by GDP world) and σ is the elasticity of substitution between the goods traded. Represents the cost of trade; Pi and Pj represent the multilateral trade resistance of countries i and j respectively. This reflects the average resistance to trade between a country and all of its partners. Three approaches exist to solve the problem linked to the unobservability of the terms of multilateral resistance: the use of published data on price

indices (Head and Mayer, 2011) [33], the use of the iterative method (Anderson and van Wincoop, 2003)[34] and finally the use of effects fixed exporting and importing countries. The latter approach, due to its flexibility, is widely used in the literature (Baldwin and Taglioni, 2006)[35] .

According to Baldwin and Taglioni (2006, 2007)[36] , the bias in the estimation of the gravity model can arise from three errors: (I) an error linked to the omission of certain potential determinants of bilateral trade (Gold Medal Error); (ii) and error relating to the recording of bilateral exports as an average of the flows reciprocal (Silver Medal Error) and (iii) an error induced by the use of real GDP (Bronze Medal Error). To correct for these errors, time-invariant dummy variables and multilateral resistances are both introduced into the model. Thus, a panel data specification is adopted to avoid calculating the average of reciprocal flows, and temporal dummy variables are included in the model

There is no distinct difference in the basic gravity model presented by Tinbergen in (1962)[24] and that of Paas (2000)[37], Mellado et al. (2008)[38] , Anderson, 1999[39] , Baier, Bergstrand, and Mariutto, (2014)[40] , Bora, Kuwahara, and Laird, (2002)[41], or Fontagné, Guillin, and Mitaritonna, (2009)[42]. Indeed, the initial gravity model is based on Newton's law of gravitation and is represented as a trade equation between countries while taking into consideration all the elements that could explain the extent of bilateral trade.

In view of the literature, the gravity model applied to international trade can be a powerful tool for the analysis and for the estimation of the effects of the explanatory variables of bilateral trade, including the impact of non-tariff measures on the volume of trade exchange. There are many methods of estimating gravity equations, we will use some of them which can start first. The ordinary least squares method (OLS) is a method widely used to estimate the parameters of a regression (linear regression, nonlinear regression) whose random perturbation is homoscedastic and occurs in additive form This method can be adapted to various contexts statistics.

Gravity models can be estimated in terms of natural logarithms (ln). The gravity equation becomes a linear equation when we apply a logarithmic transformation. When we add a random perturbation term (ε), the equation becomes verifiable (Burger et al, 2009)[31] .

$$\ln T_{ij} = \ln K + \beta_1 \ln M_i + \beta_2 \ln M_j - \beta_3 \ln D_{ij} + \varepsilon_{ij}$$

Second method is the Heckman Two-stag. The Heckman Two-stage is an example of a selection model. Heckman was one of the first researchers who stressed the importance of modeling sample selection . In this model there are two equations . The first one is selection equation. This equation determines the binary decision. It is whether there's a commercial exchange or not in relation to a product category. The equations can be written

$$\rho_{ij} = \Pr(h_{ij} = 1 | x_1) = G(x_1, \beta_1)$$

In the second stage of Heckman model is the trade equation, which determines the potential size of bilateral trade. The trade equation is estimated using the ordinary least squares method the equation can written as

$$E\{m_{ij} | h_{ij} = 1\} = x_2\beta_2 + \sigma_{12}\lambda_{ij}$$

M_{iJ}: The observed logarithmic trade flow from the country to the country given that the flowobserved commercial is positive,

X_2: The set of independent variables.

H_{ij}: The covariance of the unobserved errors of the selection equation and the business

equation, estimated as a coefficient.

Particular attention has been paid to the possible use of the Poisson model, after the increased resistance against using the ordinary least squares estimator to estimate the gravity equation (Burger et al, 2009)[43]. The model tries to explain the expected value of the trade flow

$$E\{m_{ij}|x\} = e^{\beta x}$$

This equation estimates the expected outcome relative to the characteristics of the trade costs, but we also need to describe the distribution, so choose a form that produces non-negative expected values. According to Verbeek (2012) [44], there is a common assumption which states that the observed value of the trade flow has a Poisson distribution with a conditional mean

$$P\{m_{ij}\} = \frac{e^{-\lambda_{ij}} \lambda_{ij}^{m_{ij}}}{m_{ij}!} \ , m_{ij} = 0,1 \ldots$$

Thus, Burger et al (2009) [45] report that Poisson models do not encounter problems related to heteroskedasticity, zero trade flows and logarithmic transformation of variables (including the dependent variable which may be zero). First, the Poisson model estimates are always consistent, even in the presence of heteroskedasticity. Using large samples, estimations are also efficient. Thus, the Poisson model deals with zero trade flows

However, the important disadvantage of the Poisson model estimation is, that this model assumes that the conditional variance of the dependent variable

$$V\{m_{ij}|x\} = e^{\beta x}$$
$$E\{m_{ij}|x\} \infty V\{m_{ij}|x\}$$

The equality of the conditional mean and the conditional variance of the distribution is not always a feasible condition. By also estimating the gravity equation, this condition was questioned

3.Source of Data

This study include 50 african countries which can be divided into subsaharien countries and northern African countries by obtaining the yearly data from 2009-2019,the data used for analysis are Annual data on Gross Domestic Product growth annual (GDP) and Per Capita (PC) , the distance between china and Africa we took the measure in km/S, The total trade between china and African countries, Logistic Performance Index(LPI) is to identify the opportunity and challenges facing in their trade logistic , the trade between china and Africa, infrastructure in Africa 2019,these data was analysed by using the model OLS , Poisson model and heckman two stage, that one was used for grabbing equitable result, during our research no study were focusing in using hackman two stage to examine trade facilitation between china and African countries. The table bellow shows the variable described

Table 1: Description and Measurement of Variables

Variable	Descrpition	Source
Trade $_{IJ}$	Total import export between Africa and china	UNComtrade data from 1992-2018
GDP Growth $_{IJ}$	GDP growth in Africa and china	Bank Mondial from 2009-2019
GDP Per Capita $_{IJ}$	Gdp per capita in Africa and china	Bank Mondial from 2009-2019
Distance geographic $_{IJ}$	Distance geographic from china to African countries	https://fr.distance.to/
connectivity index Transport $_{I}$	Connectivity index of scheduled maritime transport in Africa	Unctad from 2009-2019
Infrastructure Index $_{I}$	Infrastructure index in Africa	African Development Bank Group
Governance index $_{I}$	Governance index in African countries	Mo Ibrahim foundation 2019-2020

The equation of our gravity model is below

$$\text{Log totaltrade} = A0 \text{ Log gdp}_{ij} + A1 \text{ Log gdp capita}_{IJ} + A3 \text{ distance}_{ij} + A4 \text{ Log LPIij} + A5\text{log transport } A5\text{connectivity}_{i} + A6\text{log infrastructure}_{i} + A7 \text{ log governance }_{i} + \text{Xij}$$

4.Result Analysis

Table2: Data Analysis

	POOL OLS	Poisson Model	Hackman two stages
Ln_gdpgrowth$_{ij}$	.2123824		.24391
Ln_gdpcapita$_{ij}$	1.193481		1.34956
distance$_{ij}$	OMITMENT		.1300314
Ln_transportconnectivity$_{ij}$	.0727957		.1839172
Ln_infrastructure$_{i}$	2.633332		1.094147
Ln_customrate	1.323054		.0434745
Ln_LPIscore$_{i}$	.2796531		.8958521
Ln_governance$_{i}$	3.507727		2.400368
constant	9.043233		6.3412602

Source: Author ,STATA

The choice of estimator is very important in statistical analyzes based on non-random samples which may lead to erroneous conclusions. We have zero observations due to the absence of import flows between our two Page partners, deleting these observations risks creating a selection bias. We will therefore opt for an econometric estimator which can take into account the problem of zero flows: Heckman two-stages. The Heckman correction is a statistical approach which consists in making in a first step an estimate by the maximum likelihood of the “Probit” model, and in a second step integrating the conditional expectation by means of the Mills statistic (IMR: Inverse Mills Ratio) in the original equation, and makes an estimate by the method of ordinary least squares (OLS) to assess the effect of explanatory variables on Morocco's exports. We also note that the Heckman two-stages estimator allows to deal with the endogeneity problem

The first step in gravity model modeling is to estimate the parameters of the trade probability equation using the PPML.

the Gross Domestic Product has a positive and significant impact on the probabilities of trade in African countries. The increase in the GDP in Africa influences positively the chances of trade with china;However, when there is a large gap between Morocco and its trading partners in terms of GDPper capita, it seems that the probability of trade decreases. This partly confirms the work of Lambrechts, Erin, and Rule (2012) [46] who suggests that there is a strong correlation between a country's level of trade freedom and its GDP per capita.

Thus, the analysis of the Liner Shipping Connectivity Index shows that trade become more likely when it comes to trade with partners better connected to liner shipping, The increase in this likelihood can be explained by the lower costs of transporting to access to international shipping. In the same context, when the logistics performance in Africa increases, the probability of having exchanges and the facilitation of trades also increases too.This result is in line with the results of the study by Hausman, Lee, and Subramanian (2013) [47] which suggest a strong relationship between the logistics performance of countries and the bilateral trade that takes place.The equation of customs rate show that every country applicate taxed to protect their economics, even though the rate is higher ,there’s not any negative impact to let china can’t do business with African countries

The parameters of the trade equation are estimated using the ordinary least squares method. The results of the second estimate take into account the results of the first estimate made using the Probit Maximum Likelihood model, in order to avoid problems related to selection bias

The GDP of country i contributes positively and significantly to its bilateral trade. Indeed, the increase in income induces a additional purchasing power. This additional purchasing power encourages imports, increases the means of production with a multiplier effect on production and the volume of trade, therefore, on the country's total trade.The parameter estimation shows that when the GDP of both partners increases, bilateral trade also increases. This implies an increase in the value of Moroccan exports when it trades with countries of large economic size. This finding is perfectly in line with the results of Kee et al. (2009) [48] and Lambrechts, Erin, and Rule (2012) [49] who provide strong evidence for a strong correlation between a country's trade volume and its GDP.

The customs tariff is also an obstacle in Africa. The estimation of the parameters shows that the tariff and non-tariff measures have a greater impact are more restrictive . We therefore manage to confirm the literature of international trade, in particular the work of Haveman andHummels (2001) [50] and Disdier et al (2008) [51] who show that the volume of bilateral trade is strongly linked to the tariffs imposed. The authors insist in this regard on the close link between trade and customs duties applied by the destination markets of the products.

The geographical distance seems to have a negative impact on the volume of African trade.This also presents empirical evidence that the costs of transport between countries are relative to the distance between the countries of origin and destination of products, despite the evolution of transport technologies which fail to eliminate the effect of distance. on the volume of bilateral trade. In the same context, the work of Arribas, Pérez and Tortosa-Ausina (2009) [52] and of Rault, et al (2009) [53] underline that geographical distance has a negative impact on the costs of international transport. According to these authors, transport costs directly linked to geographical distance represent a major obstacle to international trade.

As a result, the effective distance between countries is greater than the physical distance measured under the gravity model. The higher transport costs between the countries of the sub-region constitute a major handicap to the development of their trade. According to the study by Limoa and Venables (2000) [54] on a sample of African countries, mentioned by Lisigne (2005) [55], a reduction in the cost of transport leads to a double increase in the volume of trade

The result of logistic infrastructure has an impact on exports and import corroborates its crucial role in facilitating trade, and more specifically in increasing flows. Conversely, inefficient logistics infrastructures hamper trade by imposing an additional cost in terms of time and money. As a corollary, the implementation of a well-organized logistics infrastructure is a key element to keep pace with global competition and assert quality not only in terms of logistics services,logistics infrastructures condition the speed of shipments, this time variable, it follows the same logic of studies which affirm the role played by the time factor in defining the extent of trade growth.Symmetrically to the work of David Hummels (2001) [56], Djankov, Freund and Pham (2006) [57] who have shown that the extra days of delay in a delivery reduce the scope of trade, and that meeting deadlines will lead to an expansion of trade.

The quality of governance affects trade through the expected returns from international trade operations. Failed institutions, with cumbersome and bureaucratic and even arbitrary and approximate regulations, act as a trade tax. Rodrik (2002) [58] points out that the main obstacle to international trade may be that of contract enforcement. The results show that the measure of governance is statistically significant and has the expected sign. An improvement in the quality of governance is likely to promote trade between countries. Anderson and Marcouiller (2002) [59] reached a similar result in the case of Latin American countries. They showed that trade is hampered as much by the high level of formal trade barriers as by weak institutions.

4.Conclusion

The main objective of this article is to know if Africa good continent for business and how China could benefit from trade with African countries. Our result has found positively in some variable and negatively in others even though that still explains Africa can be a

potential market for bilateral business wither in our time being or future. We used gravity model due to its importance and usefulness as an estimation tool In order to assess the observed level of trade in relation to its potential level taking into account the economic, geographic, historical and cultural characteristics of the countries of the region, the data panel was from 2009 to 2019 even though the lack of information of all African countries and last update data

Our result found positively in GDP and has positive effect in the trade ,the geographic distance which form the basis gravity models show negative result which affect in the shipping price ,the tariff measure in African countries still higher to protect their economie, many literature shows that despite technological progress the transportation cost will always add in products , the measure of governance is statistically significant and has the expected sign. An improvement in the quality of governance is likely to promote trade between countries.

With a view to finding solutions to improve the trade bilateral between China and Africa, the development of logistics in Africa requires a serious holistic approach, one that addresses several pillars. African countries must continue to modernize the infrastructure of transport and telecommunications, prioritize the development of general economic and social infrastructure for each region in order to strengthen the trade, is favorable to introduce and disseminate new concepts for multimodal freight transport systems, in order to alleviate the pressure exerted by the congested road network and contribute to a more connected and fluid logistics system.

To avoid high transport cost and improve the trade effectiveness between China and Africa, we suggest delocalization ,delocalization is the act, for a company, of transferring part of its property, capital and / or activities to another place, generally from a country of origin to a foreign country, They are mainly of an economic nature. It is generally a question of reducing the costs of the activity and maximizing the profits made, on a large scale. This saving occurs mainly on the wages of the employees. The savings are reflected as much in the payment of a reduced salary as in the reduction or exemption of social charges linked to jobs. On-site structures can also be less expensive. This can be the case for the rental of a factory, warehouses or even machines. The interest can also be fiscal: the host country can thus grant tax advantages such as deductions to the company that sets up and creates jobs. The local tax cost can also be lower than in the country of origin absence of land tax, for example.Our suggestion is confirmed by(Bernard , CHATMI and ELASR) [60] whome talked in their paper about delocalization of activities and specific country effect.

Reference

[1] Marius,R.S,& Camelia,S.(2015).International Trade, Globalization and Economic Interdependence between European Countries: Implications for Businesses and Marketing Framework.
[2] Czinkota, M., Ronkainen, I. (2007). International Marketing, 8th Edition, Thomson Higher Education, Thomson South-Western, Mason, USA.
[3] Graham,G.(1997). Customs and Trade Facilitation: Challenges and Opportunities in Sub-Saharan Africa
[4] Hatim, K.(2020).Trade logistic in Morocco, Problem and Solution, Master thesis
[5] Walkenhorst. P. ,& TadashiYasui.(2017). Quantitative assessment of the benefits of trade.
[6] Ana M., Fernandesa ,Russell.H . ,&Alejandra, M.(2017). Trade Effects of Customs Reform: Evidence from Albania, *The World Bank Purdue University*
[7] united nation.(2012) , Trade facilitation principles and benefits , Available at http://tfig.unece.org/details.html
[8] Pegah,S.(2008). Trade Facilitation in the Multilateral Trading System - An Analysis of the Doha Round Negotiations on Trade Facilitation
[9] Christian,T.(2011). Some Thoughts on the Harmonisation of Commercial Law and the Impact on Cross-Border Transactions.
[10] Janet ,G., Angelo,L.,& Jay.B.(2020). astm Standardization News, Available at https://sn.astm.org/?q=first-person/role-standards-international-trade-nd19.html%2010
[11] Walkenhorst,P., TadashiYasui. (2017) Quantitative assessment of the benefits of trade. 2017
[12] Renard M.-F., 2011: « *China's trade and FDI in Africa* », African development bank (AfDB), Working paper series No 126, May
[13] Anastasia,Z.(2020) China in Africa: the history of Sino-African relations, place of Africa in Chinese Foreign Policy and the main spheres of cooperation
[14] EcoActu,chine-afrique-communaute-de-developpement/2020 Journal Available At https://www.ecoactu.ma/chine-afrique-communaute-de-developpement/
[15] Agencecofin ,Chine-Afrique : le déficit commercial du continent a plus que triplé en 2019 pour des échanges records de 200milliards $,2020 Idriss linge Available AT https://www.agenceecofin.com/economie/2801-73233-chine-afrique-des-echanges-commerciaux-moins-vigoureux-en-2019-et-le-continent-noir-perd-encore-plus-au-change#:~:text=(Agence%20Ecofin)%20%2D%20Les%20%C3%A9changes,donn%C3%A9es%20n%C3%A9gatives%20pour%20l'Afrique.
[16] Christopher, H.O., Tabitha, K.N.(2015).Trade facilitation and foreign direct investment flows in Kenya, World Trade Organisation
[17] Duval,Y., Utoktham, C.(2014). Impact of Trade Facilitation on Foreign Direct Investment, ESCAP Trade and Investment Division, TID Working Paper, No. 04/14, 18 August 2014. Bangkok
[18] Anderson & Van,W.(2013) Gravity With Gravitas: A Solution to the Border Puzzle
[19] Anderson & Van,W.(2013) Gravity With Gravitas: A Solution to the Border
[20] Keith,H., &Thierry,M.(2011)GRAVITY EQUATIONS: WORKHORSE,TOOLKIT, AND COOKBOOK

[21] Anderson & Van,W.(2013) Gravity With Gravitas: A Solution to the Border Puzzle

[22] Baldwin & Taglioni.(2006).Gravity for Dummies and Dummies for Gravity Equations

[23] Baldwin & Taglioni.(2006).Gravity for Dummies and Dummies for Gravity Equations

[24] Tinbergen.(1962)- *Shaping the world economy. Suggestions for an international economic policy*

[25] Paas.(2000). "Gravity Approach For Modeling Trade Flows Between Estonia And The Main Trading Partners," University of Tartu - Faculty of Economics and Business Administration Working Paper Series 4

[26] Gonzalez Mellado A., S Hélaine, M. L. Rau and M. Tothova (2010), “Non-tariff measures affecting agro-food trade between the EU and Africa”, JRC Reports European Commission, Joint Research Centre, Institute for Prospective Technological Studies

[27] Anderson JE, Marcouiller D.(1999) Trade, location and security: an empirical investigation. NBER working Paper No 7000

[28] Scott L. Baier, Jeffrey H. Bergstrand, Ronald Mariutto.(2014).Economic Determinants of Free Trade Agreements Revisited: Distinguishing Sources of Interdependence

[29] Bijit Bora, Aki Kuwahara and Sam Laird.(2002).Quantification of non-tarrif, *UNCTAD*

[30] Fontagné, L. and Mitaritonna, C.(2009). Assessing Barriers to Trade in the Distribution and Telecom Sectors in Emerging Countries. Technical report, CEPII research center.

[31] Burger M, van Oort F, Linders G-J.(2009) On the Specification of the Gravity Model of Trade: Zeros, Excess Zeros and Zero-inflated Estimation. Spatial Economic Analysis 4 (2):167-90