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Degree of Master of International Studies
(International Area Studies)

ENHANCEMENT OF SOUTH-SOUTH COOPERATION
IN AFRICA:
AN ANALYSIS OF THE SOUTH-SOUTH TRADE AND
INVESTMENT EFFECTS ON SUB-SAHARAN AFRICA
ECONOMIC GROWTH

August, 2019

Graduate School of International Studies
Seoul National University

Jolyane Desrosier ABENA ATSAMA

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AN ANALYSIS OF THE SOUTH-SOUTH TRADE AND INVESTMENT
EFFECTS ON SUB-SAHARAN AFRICA ECONOMIC GROWTH**

A thesis presented

By

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of the requirements for the degree of
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Seoul National University

Seoul, Korea

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LIST OF ABBREVIATIONS

BRICS: Brazil, Russia, India, China, South Africa

BOP: Balance of Payments

EAP: East Asia and Pacific

FDI: Foreign Direct Investment

FDIS: South-South Foreign Direct Investment

GC: Government Consumption

GDP: Gross Domestic Product

GFCF: Gross Capital Fixed Formation **HC:** Human Capital

HO: Heckscher Ohlin

IMF: International Monetary Fund

IRT: Inflation Rate

K: capital

LAC: Latin America and Caribbean

MDGs: Millennium Development Goals

MENA: Middle East and North Africa

OECD: Organization for Economic Co-Operation and Development

SDGs: Sustainable Development Goals

SSA: Sub Saharan Africa

UNCTAD: United Nations Conference on Trade And development

TRDS: South- South Trade

TOLS: Three Stages Least Squares

WDIS: World Integrated Trade Solution

WDI: World Development Indicator

WB: World Bank

ABSTRACT

This dissertation examines the effect of the so-called South-South cooperation on the Sub-Saharan Africa economic development. Against the backdrop of underdevelopment and economic stagnation, the enhancement of cooperation between developing countries is imperative as it redresses the manifold problems associated with the traditional North to South development framework. Previous researches have duly emphasized the key role of Trade and Foreign investment on economic growth of SSA which has been shown to be positive. Therefore, this research endeavors to evaluate this positive impact of this form of cooperation with particular reference to certain developing countries. Therefore, regard will be had to the respective countries' domestic policies such as domestic investment, inflation rate, government consumption, while taking into account the domestic level of Human capital as well. The per capita GDP growth is used in the study as proxy of the economic growth of forty-two SSA countries over 22 years, from 1995 to 2016.

As assumed in the hypothesis, this study does indeed find that there is a significant impact of the South-South trade and FDI on the economic growth. However, to some extent, the results emphasize the negative role of Trade. Such results are consistent with the weaknesses inherent in SSA countries. This is especially true because of their poor economic governance, which means high inflation rate and heavy debts associated with government expenditure as well as a crippling balance of payment deficit. However, inasmuch as there is a negative correlation of the South-South trade, which mainly stems from the less voluminous trade obtaining within the region, the balance of trade deficit has somewhat been reduced as a consequence of the rise in exports. On the other hand, FDI appears to boost not only the economic growth but the effect of other economic variables as well. It does so by increasing the domestic stock of capital in addition to the trade gains through a spill-over effect. However, the projections of southern flows in the region tend to remain small compared to others regions which may limit the expectations for further growth of the region. In the final analysis, this study posits the triangular cooperation as an alternative to the other forms of cooperation discussed above as it ensures a sustainable development while tackling the lack of finance characterizing the developing economies.

Key words: South-South cooperation; South-South trade; Triangular cooperation

INTRODUCTION

The International trade has been affected by major changes during the past years. Indeed, some of the southern economies, experienced noticeable and rapid growth since the beginning of the 21st century, and the world trade system welcomed new emerging economic powers, mostly coming from South -East Asia and South America, which became some of the new trade leaders in the international system. Following this new trade pattern, the South-South trade phenomenon rapidly increased and spread among developing economies at the expense of the South-North trade which used to be the trade model to promote the development of weak economies. The literature shown that those countries appeared to be a new alternative for weak economies, in terms of development cooperation with noticeable and strong growth performances on the back. In fact, the rise of China in 1990's introduced more actors in the global multilateral cooperation scene, which appeared as a competitive perspective for developing countries. In Africa, many countries took this opportunity to extend their relations on the global market and welcomed the new emerging countries as partners, because they proposed more manageable and friendly conditions of development cooperation than their traditional partners. The economic performances of these south emerging economies led to the establishment of a new global framework where China and India as leader of this movement, experienced high economic growth rates with increasingly trade and investment flows from and towards developing countries compared to most of the northern countries. Indeed, with this involvement in international exchange, the South has given a major boost to the growth in the developing world: considering that between 1996 and 2009, the south-south trade grew by 12% in annual average, which means 50% faster than the North-South trade in the same period (United Nations Conference on Trade and development 2011).

The development of trade has been considered as a key driver in the whole Africa, especially in the SSA area. Nonetheless, the continent is still struggling with its integration on the global trade market and with large trade deficits, looking at the disparities in some international trade agreements. On another note, the new global development cooperation framework favors the South-South

cooperation in the new century to assist the developing countries in achieving a sustainable growth, which is addressing their main development issues. Acknowledging these challenges, the literature related that due to the costly conditions of assistance offered by northern powers and the compelling needs of reconstruction that faced Africa after their independence, the win-win cooperation had been appreciated to be a better alternative in achieving a sustainable development and growth for developing countries. This new economic dynamic could be the good perspective in helping African economies to flourish, especially through the enhancement of south-south trade as the leading economic activity to achieve their development and reduce their balance of payment deficit. In this perspective the south-south cooperation, will aim to further trade exchange between African economies and southern emerging powers, to balance their economies to boost their growth.

Then, the question addressed in this research is: “**Is the South-South trade a better and sustainable alternative for developing countries, in promoting their economic growth?**”. In that regard, this study seeks to broadly examine the impact of foreign trade on the economic growth of developing countries in Sub Saharan African and we will particularly look at the effect of South-South trade of the main southern emerging powers on the economic development of SSA countries, by measuring the elasticity of the Gross domestic Product (GDP) to the foreign exports, imports and foreign direct investment of those countries, in the long run, using a regression analysis. The analysis will show the correlation of each of these variables on the GDP of SSA.

CHAPTER ONE: GENERAL INTRODUCTION

This chapter aims to elaborate the problem of this research, by presenting the background of the present study. This will permit to determine the main objective of this study and present the research question, after highlighting the problem that we intend to solve here. At least, it will explain the significance and specific interests over the research.

1.1) Background of the study

Evidences have shown the importance of trade openness for developing countries, as a key factor to enhance economic expansion. The researchers suggested that the liberalization of developing countries market can positively affect their economic growth by enhancing international trade to facilitate the diffusion of knowledge and technology among partners (*Barro and Sala-i-Martin, 1997; Baldwin et al., 2005; Almeida and Fernandes, 2008*). It also suggests some gains from Foreign Direct Investment, by allowing an increase of the size of markets to maximize the benefit of exchanges (*Alesina et al., 2000; Bond et al., 2005*). They assume that the benefit from trade from weak economies could be significant in encouraging the financing of new investment for the development of Sub Saharan African countries.

The past decade has welcomed the emergence of new powers in Asian continent, especially from Southeast Asia With China or India. Southern economies have shown rapid growth, taking over the trade system, while boosting the expansion if the developing world comparatively to the northern traditional powers: considering that between 1996 and 2009, the south-south trade grew by 12% in annual average, which means 50% faster than the North-South trade in the same period (United Nations Conference on Trade and development 2011). On the one hand, the involvement of southern rising powers in the world economy had been very outstanding since 1995 with an increasing foreign value-added of the share of developing economies, from 38.9% to 52.5% in 2011, only for China, followed by India from 45.1% to 60.2% on the top of this powerful trend. In addition, Africa rapidly increase its involvement in global trade market and was revealed to be the most beneficial partner of this new cooperative framework, improving its trade's share with new emerging southern powers from

25.6% to 49.8% for the same period (1995-2015). While, at the same time, the share of the poor continent to Southern states such as the European continent declined (from 52.6% to 37.5%). On the other hand, most of the Sub-Saharan African countries experienced rapid growth since the early 2000s, the GDP per capita in SSA has grown about 5% since 2000, while it was only 2.4% in the past decade. They grew remarkably faster than the emerging power such as China. Simultaneously, there was also an increase in their exports to southern economies (China, Brazil, India), which were larger than their exports to EU in 2011. However, despite these encouraging prospects for SSA, the main challenges of equal growth and poverty reduction remain for all the countries. In fact, the SSA growth constitute only 2% of the world GDP and the countries growth recently faced a slowdown in their economies due to a rising public debt, exchange rate depreciations in some countries, lack of economic diversification and infrastructure deficits. Nonetheless, it has been observed that the cooperation with emerging powers led to a change in the trade patterns too on the international scene allowing the African continent to raise up and play its cards increasing its presence in the global trade market. Indeed, the south-south trade with the continent increase significantly from \$34 billion from 1995 to \$286 billion in 2008 and an important Foreign Direct Investment as well (837% in 2000-2007). In this trend, with liberalized economies, the multiplication of regional trade agreements with diminishing transport costs played an important role in the facilitation of trade exchanges. Furthermore, the increasing demand of goods from East Asian emerging countries such as Malaysia, Thailand, China deeply further the trade relations between the southern continents. In fact, the East Asian countries growth has constituted the focus of development analysis in assisting the developing countries by improving their trade relationship, rather than cooperating with the North. The result is that, emerging powers will foster the new development cooperation, so called south-south cooperation among developing countries as a strategy based on a mutual partnership benefiting to the boost of economic growth of each partner by increasing investment to southern weak countries. This strategy will be strengthened by the south-south trade to improve the export capabilities of developing economies, by implementing the necessary policies and enhancing their responsibility to collect and raised the necessary resources to achieve a sustainable growth.

As a matter of fact, South-South Trade have been showing some promising result in contributing to the economic development of southern economies. Indeed, Myrdal (1956) or Lewis (1980) revealed that a South-south integration could reduce the dependence of poor countries to Northern powers, by opening to more trade partners from the South, while increasing the size of their markets through the promotion of industrialization. Thus, leading to an export diversification benefit for them. While Amsden (1987) and Lall (1987) emphasized the high industrialized nature of SST which focus on trade of sophisticated manufactures as capital and skill intensive goods, which appear to promote better gains, such as the industrialization and transfer of technology within the South. In fact, it appears that the emergence of new powers, such as China and India, created a new dynamic in trade exchanges by facilitating the shift from Northern demand to the south new powers which instead seems to trade more labor and resource-intensive manufactures, whereas the North is characterized by medium-skill intensive manufactures. Reciprocally, southern economies have been related to demand some of these goods from African powers such as fuels and the primary commodities for their population, which are SSA is relatively abundant in, by then, increasing their demand from SSA and other countries and their exports. Moreover, it has been observed that the cooperation with emerging powers led to a change in the trade patterns too on the international scene allowing the African continent to raise up and play its cards increasing its presence in the global trade market. Indeed, the south-south trade with the continent increase significantly from \$34 billion from 1995 to \$286 billion in 2008 and an important Foreign Direct Investment as well (837% in 2000-2007). In this trend, with liberalized economies, the multiplication of regional trade agreements with diminishing transport costs played an important role in the facilitation of trade exchanges. Furthermore, the increasing demand of goods from East Asian emerging countries such as Malaysia, Thailand, China deeply further the trade relations between the southern continents. In fact, the East Asian countries growth has constituted the focus of development analysis in assisting the developing countries by improving their trade relationship, rather than cooperating with the North.

1.2) Statement of the problem

When focusing in the African continent, there is still a lot to be done according to the literature. On the one hand, the involvement of southern rising powers in the world economy had been very outstanding since 1995 with an increasing foreign value-added of the share of developing economies, from 38.9% to 52.5% in 2011, only for China, followed by India from 45.1% to 60.2% on the top of this powerful trend. In addition, Africa rapidly increase its involvement in global trade market and was revealed to be the most beneficial partner of this new cooperative framework, improving its trade's share with new emerging southern powers from 25.6% to 49.8% for the same period (1995-2015). While, at the same time, the share of the poor continent to Southern states such as the European continent declined (from 52.6% to 37.5%). On the other hand, most of the Sub-Saharan African countries experienced rapid growth since the early 2000s, the GDP per capita in SSA has grown about 5% since 2000, while it was only 2.4% in the past decade. They grew remarkably faster than the emerging power such as China. Simultaneously, there was also an increase in their exports to southern economies (China, Brazil, India), which were larger than their exports to EU in 2011. However, despite these encouraging prospects for SSA, the main challenges of equal growth and poverty reduction remain for all the countries. In fact, the SSA growth constitute only 2% of the world GDP and the countries growth recently faced a slowdown in their economies due to a rising public debt, exchange rate depreciations in some countries, lack of economic diversification and infrastructure deficits.

The development of trade has been considered as a key driver in the whole Africa, especially in the SSA area. Nonetheless, the continent is still struggling with its integration on the global trade market, looking at the disparities in some international trade agreements. On another note, the new global development cooperation framework favors the South-South cooperation in the new century to assist the developing countries in achieving a sustainable growth, which is addressing their mains development issues. Acknowledging these challenges, the literature related that due to the costly conditions of assistance offered by southern powers and the compelling needs of reconstruction that faced Africa after their independence, the win-win cooperation had been appreciated to be a better alternative in achieving a sustainable development and growth for developing countries. As a result,

this new economic dynamic could be the good perspective in helping African economies to flourish, especially through the enhancement of south-south trade as the leading economic activity to achieve their development. In this perspective the south -south cooperation, will aim to further trade exchange between African economies and southern emerging powers, to balance their economies to boost their growth.

1.3) Objective of the study

This study aims to analyze the impact of trade as a key driver of economic growth in developing countries. Trade has been identified as an important booster of development. Trade has become an important activity in international cooperation, especially since the rising of emerging economies such as China from East Asia which has established a new global dynamic in the world strengthening its power through by improving its trade relations over the world. This new dynamic created a new form of cooperation, which is increasingly spreading across the world among developing countries. Moreover, this new approach has been fostered by the Sustainable Development Goals in 2015, which proposed a better partnership for a better world to achieve the reduction of poverty in the world. The study seeks to address this issue in Sub-Saharan Africa. Then, the emerging countries from southern world area will particularly constitute the main actors in that process to assist the development of SSA.

1.4) Research question

The aim of this research is to assess the impact of a South-South trade between the major economic powers of South-East Asia and the Sub Saharan African countries could have on their economic development. Considering the weak and not sustainable effect of the traditional trade model with Southern powers, we suggest and formulated the following hypothesis, based on the previous literature that the developing countries of the SSA area could get more advantage by enhancing their cooperation with the new growing power of the South benefiting of a significant tariff barrier reduction from other emerging economies, this synergy of gains from the south and the actual gains from the north could be more beneficial for their economic development. Then the question is to know

the effect of a promotion of this south-south trade among developing countries, this implies the following matters:

- Is the South-South approach a better strategy to promote the development of African economies?
- How does the South-South cooperation strategy can promote a more sustainable economic development of the SSA countries?
- How and to what extend does the south-south trade and investment could affect the economic growth of SSA?

Those questions will help us to assess the real impact of this potential new development cooperation framework, so called South-South cooperation by promoting a better relationship within the southern power for a better sustainability.

1.5) Significance of the study

There have been many researches already about the importance of trade on the economic development in the literature, but only few about the impact of South-south trade on the economic growth. In fact, most of the researches done about the South-South trade model were emphasizing its potential effect on giving more opportunities to the developing countries or evaluating the potential gains for this trade model. In this case we would like to further the previous analyzes by focusing on how this potential could be beneficial in boosting the economic development of developing countries, especially on the SSA area. We aim to assess the conditions in which such a cooperation will be beneficial for those countries. In fact, this analysis will permit to evaluate and identify the best cooperation scenario for African economies.

CHAPTER TWO: LITERATURE REVIEW

After presenting the problem of the study in the previous chapter, we will talk about the theoretical framework of the study. The present chapter intend to detail the following articulations: the definitions of key terms and concepts, the main empirical studies and the theoretical foundation that will be used during the research.

2.1) Definition of key terms

In This section we will elaborate the definitions of key terms related to the study:

- **South-South Cooperation**

Even, if there is not yet conventional definition of South-South Cooperation, it can be understood as cooperative relationship between developing countries to foster their development. The concept sounds like a partnership, nor a simple assistance on the contrary to the cooperation between northern and southern economies and it emphasize the principle of mutuality, equality in the relationship with sharing among the partners. It is also called a win-Win cooperation which means mutual benefits. The UN Office for South- South Cooperation defined it as a: *“broad framework for collaboration among countries of the South in the political, economic, social, cultural, environmental and technical domains. ...South-South cooperation is initiated, organized and managed by developing countries themselves; often, Governments play a lead role, with active participation from public- and private-sector institutions, non-governmental organizations and individuals. It involves different and evolving forms, including the sharing of knowledge and experience, training, technology transfer, financial and monetary cooperation and in-kind contributions* (UNOSSC, n.d.)”.

- **South-South trade**

The south-south trade is defined as a trade between developing countries, including African economies, East Europe and Asian economies. The phenomenon has been enhanced due to the good performances in economic growth realized by emerging powers, especially from Asia such as China in

East Asia which increased their demand for goods and services from all countries, including developing countries. It refers also to the shift of global trade framework from North-South to South-South with the reduction of trade barriers between developing countries.

The literature refers to the South-South trade in different ways, from its nature to its advantages and the pattern associated.

Greenaway and Milner (1990) *“focus on the sources of South-South trade in order to attempt to deliver a consistent framework. First, South-South trade can be sustained through dissimilarity and inter-industry specialization founded not only on comparative advantages with technological and relative production differences among countries but also on factorial endowments”*.

For McPherson et al. (2001), it refers to: *“the existence of trade between countries having the same level of development and similar specializations which lead to scale economies, increasing returns and products differentiation. In other words, this kind of trade is based on similarity between trading partners and intra-industry specialization”*.

Then, e. Fugazza and Robert-Nicoud (2006) and Fugazza and Vanzetti (2008) argued that: *“South-South trade allows exporters in those countries to serve more outside markets due to cheaper price of intermediate inputs and the implementation of trade liberalization”*

- **Economic growth**

The concept of economic growth has been defined along the time by economic scholars from Adam Smith with the division of labor as a fundamental resource for the growth, as a classical economist; and later fostered by the neoclassical economist, with the famous Harrod-Domar theory of economic growth; then going further today, the new theories of economic growth so called endogenous theories include more determinants in order to achieve the sustainable promoted by the news development international policies.

In few words the economic growth is defined as *“a long-term rise in capacity to supply increasingly diverse economic goods to its population, this growing capacity based on advancing technology and*

the institutional and ideological adjustments that it demands". In other words, the increasing productivity, the increase in income for consumers and diversification of good, the technological progress and the implementation of necessary policies and institutions to achieve that, goes along with the development of an economy. This definition involves the main and key determinants that have been discussed by most of the famous economic theories of economic growth. We must refer in that study to the three following theories:

- The neoclassical approach of Harrod-Domar: "*The most necessary condition for the growth of an economy is that the demand created due to newly generated income should be sufficient enough, so that the output produced by the new investment (increase in capital) should be fully absorbed*".
- The Solow growth model which explain the process of growth through an increase in labor quantity and quality due to the growth of the population and education, added to an increase of capital with investment and savings and the technological progress (1956).
- The contemporary theories emphasize the role of increasing returns from the use of knowledge rather than labor and capital for the economic growth. They focus on the knowledge creation in order to achieve a sustainable growth in the long run in complement to the implementation of good policies by governments.

The main determinants emphasized here are the generation of new income, as economic output (GDP), the technological progress and knowledge sharing for increasing returns, then the increase of size and diversification of the consumer basket. Those key elements are the one to be possibility fostered by and increasing trade and particularly the south-south trade is the one to have the potential of promote the increasing returns by knowledge creation, while also helping with the transfer of technology to the south. The traditional measure of economic growth is the use of Gross Development Product (GDP) or the GDP per capita or its growth rates.

2.3) Review of empirical studies

This section aims to present the previous researches and the general literature associated to this study.

2.3.1) Economic development in SSA

We will first talk about the evidence about the economic development of Sub Saharan African countries, by identifying the determinants. Then we will present the literature emphasizing the role of trade in achieving that goal, before to present one example related to the effect of trade in an African economy.

2.3.1.1) Determinants of economic growth

These are some of the key factors identified to favor the economic expansion of Sub Saharan African countries:

- Investment: main source of economic growth when it increases;
- Human capital: key factor of development through education and training;
- Research and development: which promote the economic expansion by increase in productivity and growth, through the promotion of technology;
- Trade openness: which promote the technology transfer and diffusion of knowledge, using the comparative advantage trade model;
- Foreign Direct Investment
- Economic policies and macroeconomic conditions: important framework to stimulate the development of the above factors.

The previous studies have suggested the positive role of these factors for the economic development of African countries, and its sustainability.

2.3.1.2) The key role of trade in SSA development: A study of Trade and economic growth in developing countries from Pam Zahonogo

The study aims to analyze the importance of trade in the achievement of economic growth in sub Saharan African countries. The study identifies the trade openness as the independent variable which could impact or not in some extend the economic growth, here identify as the dependent variable. The researcher suggests that the liberalization of developing countries market can positively affect their economic growth by enhancing international trade to facilitate the diffusion of knowledge

and technology among partners ¹(Barro and Sala-i-Martin, 1997; Baldwin et al., 2005; Almeida and Fernandes, 2008). It also suggests some gains from Foreign Direct Investment, by allowing an increase of the size of markets to maximize the benefit of exchanges. (Alesina et al., 2000; Bond et al., 2005).

While some authors argued that the trade openness is not always beneficial to economic growth, because of unequal capabilities among powers and different level of economic development and due to technological or financial constraints, some weak countries may experience difficulties in capturing the effect of trade on their development. Moreover, they assume that the comparative advantage of each economy orientates their policy and their affectation of economic resources, which might affect their development in the long-run (Redding 1999; Lucas 1988; Young 1991).

The analysis conclude that the degree or level of trade openness will affect significantly the growth of countries, but the benefits will be more appreciated in the long run and depending on the policies or measures implemented by government in encouraging the financing of new investment and setting up better institutions, able to allocate properly the resources for the development and adjust the new skills learned. In that sense, SSA countries must monitor their trade openness to boost properly their economic growth.

2.3.1.3) An analysis of the impact of trade on the Economic growth of Ghana

The study analyzed the effect of trade on the economic growth of Ghana. They used a regression model based on the following equation, reporting the impact of the Foreign Direct Investment, imports and exports on the Gross domestic product of Ghana:

$$\log(\text{RGDP}) = \beta_0 + \beta_1 \log(\text{EXP}) + \beta_2 \log(\text{IMP}) + \beta_3 \log(\text{FDI}) + U_t$$

Where EXP_t = exports of goods and services % of GDP; IMP_t = imports of goods and services % of GDP; FDI_t = foreign direct investment % of GDP; U = error term and the constant values $\beta_2 \beta_3 \beta_1$

¹ Pam Zohonogo, Université Ouaga II, Burkina Faso, “**trade and economic growth in developing countries: evidence from sub-saharan Africa**”, <http://creativecommons.org/licenses/by-nc-nd/4.0/>, February 2017.

The ²results showed that the effect of each of these variables were different. In fact, he found that only the exports have a positive and elastic effect on the GDP growth of Ghana in the long run; while the imports and the FDI were found to have a negative impact in the long run:

- More specifically, he found according to the findings of Edoumiekumo et al. (2013), Usman et al. (2012) and Atoyebi et al. (2012), about the exports that: *“at a percentage increase in exports leads to about 3 percent increase in real gross domestic product; while 1% decrease in exports leads to about 3% decrease in economic growth. Additionally, the export coefficient must be statistically significant at 5%”*.
- Concerning the imports effect, the study lead to the following detailed results, in the same regard of the findings of Tong (1995) and Lin (2000): *“an increase of imports will result in a decrease of GDP about 1.5%; while 1% decrease of imports leads to 1.5% increase of the GDP. Ghana where must open to the consumable goods than the capital goods. These results were consistent at 5% level of significance”*.
- Lastly, with a negative and inelastic effect, the FDI was found to affect the GDP according to the following patterns: *“a percentage increase in foreign direct investment leads to about 0.3 percent decrease in real gross domestic product. But a 1% decrease in foreign direct investment leads to a 0.3 increase in real gross domestic product. This coefficient is statistically significant at 5% level of significance”*.

2.3.2) Effects of South-South trade

In this part we will talk about the different impact of the trade between southern economies and benefits to be expected from such model.

2.3.2.1) Impact of South-South Trade

The South-South trade has rapidly increase over the past decades, especially since 1990s, led by Chinese economic growth. Then, over the years, the cooperation between developing countries

² Emmanuel Havi, Patrick ENU, Edmond Hagan; “The impact of Foreign Trade on Economic Growth in Ghana 1980-2012”; september 2013; https://www.researchgate.net/profile/Emmanuel_Havi/publication/266079189_The_Impact_of_Foreign_Trade_on_Economic_Growth_in_Ghana_1980_-_2012/links/5424618f0cf26120b7a7477f/The-Impact-of-Foreign-Trade-on-Economic-Growth-in-Ghana-1980-2012.pdf

have gained in experience, improving the literature toward the potential collaboration of southern economies, with the emergence and industrialization of most of the previous southern developing countries from South Asia and South America. Since, the South-South cooperation have been appreciated in terms of advantages of South-South trade comparatively to other North-South patterns. At the first level, the trade among developing countries is first appreciated in releasing the southern weak countries from their dependency on the Northern markets, through the diversification of economic partners. Then secondly, it appears from the results of Sabolo (1983), that Southern flows are delivering more technology intensive products or high manufactured goods to the developing countries; thus, contributing to the industrialization of those economies and later improve their economic competitiveness. A third aspect could be the similarities of these economies in terms of environment (economy, business, finance, banking....), which facilitate the understanding and the penetration of their goods, more suitable to the needs of such economies, compare to the northern inputs, that initially due to the inequal level of development and capabilities.

In other terms, South-South trade is meant to be beneficial for developing countries for the following reasons:

➤ **South-South trade can contribute to the increase of the volume of exports**

During the past 30 years was observed a big change in the world, revealing a largest expansion of southern economies, in terms of economic growth than the global North. In fact, the dynamism observed and especially led the boom of Asian driver economies, such as India and China, was driven by the removal of trade barriers within the third world (developing economies) and conducted by an increase in exports volume towards other economies. Indeed, considering that the reduction of tariff barriers among southern economies is suggest to have a higher effect, in terms of potential gains than the removal of trade barriers of northern markets³ (Fugazza and Vanzetti, 2008), by doing so the southern new emerging economies achiever higher economic performances than the northern

³ Marco FUGAZA and David VANZETTI, “A South-South Survival strategy: the potential for trade among developing countries”, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.530.3287&rep=rep1&type=pdf>, United Nation Cooperation of Trade And Development, 2006.

economies; thus, thanks to the potential larger needs or demand from other developing economies, resulting in larger exports within the Southern world.

➤ **South-South trade can generate an increase in the value of goods**

By enhancing the production process or structure of the developing countries firms, through the industrialization, the domestic export basket could be upgraded from low skill intensity and low value added to a basket goods with high skill intensity and higher value added. Indeed, Dahi and Damir(2008) found that: “*the share of manufactures exports had doubled or more during the last three decades⁴*”, over the other sectors and industries. The previous studies also show that for most of the developing countries, especially in Africa, Central ASIA or Latin America, it appears that their exports to the other southern economies were more sophisticated than the exports to the North (Klinger, 2009). Therefore, the southern export pattern is said to be more technology and high skilled manufactures oriented when directed to the developing countries than South-North exports, this involves products such as electrical machinery and equipment, telecommunication equipment and electronics on the top products traded.

➤ **South-South trade is a potential a channel to export diversification**

Researches assume that opening up the south-south trade will upgrade the exports of developing countries, by enlarging their trade partnership and possibilities, including diverse destinations and diverse goods. Such opportunity will release the developing countries from their traditional dependency to the northern markets, while benefiting to the improvement of their Balance of Payments. This will be essentially supported by the complementarities shared among developing countries, facilitating the increase in demand from weak southern economies to the emerging industrialized South. The technology transfer and complementarities will facilitate the penetration of southern inputs comparatively to the North, which must increase their productive capabilities and gains, through the industrialization of production. To support this statement, it appears that,

⁴ Thomas Bernhardt; “ How promising is South-South trade as a contributor to economic development in Asia and South America? Insights from estimating income elasticities of import demand”; https://mpra.ub.uni-muenchen.de/56413/1/MPRA_paper_56371.pdf ; Mars 2014

“importing from other developing countries has the strongest impact on export diversification compared to import from developed countries” (Amighini and Sanfilippo,2014)⁵.

In the case of African southern economies, the results from empirical studies regarding the benefits of trade between developing countries, reveal, in the case of SSA that, when it comes to the BRICs countries, the trade effect is potentially higher toward SSA than other developing countries or region. It shows that Indian exports to SSA is 1.37 times greater toward SSA and 1.64 times for the Chinese exports compared to the other the trade with other BRICS countries. In fact, they found that the Chinese trade with SSA developing countries has a multiplier effect, in the sense that *“the more china exports to SSA, the more the number of SSA export destinations increases in the intra-SSA trade”*.

However, one obstacle to the promising south-South cooperation could be the transportation among those countries, probably higher comparatively to the northern markets. The non-existence or lack of south-South trade channels for long distance exchanges. Else the lack of resources, concerning the financial aspect is also a major structural problem to the enhancement of such collaboration, considering the poor or unstable financial background of those countries.

2.3.2.2) Potential gains from South-South Trade: the potential for trade among developing countries By Marco Fugazza and David Vanzetti

This research examined the effect of south-south trade in developing countries, by evaluating the gains of the liberalization of trade by removing trade barriers among developing economies. The data used were assessing using an equilibrium trade model, the GTAP database which include the preferential tariffs).

The results⁶ indicated that a free trade between southern economies might not be beneficial for all the developing economies. In fact, it showed that the south-south trade might potentially increase their

⁵Houdou Ndanbendia ; *“Exports diversification and knowledge sharing from south-south and south-north economic cooperation: evidence from the Central and West Africa”*; https://mpra.ub.uni-muenchen.de/71571/1/MPRA_paper_71571.pdf; 2014

⁶ Marco FUGAZA and David VANZETTI, *“A South-South Survival strategy: the potential for trade among developing countries”*,

gains and their welfare for most of the developing countries, especially in Asia (republic of Korea, Taiwan, Province of China), ASEAN, the Middle East and North Africa (MENA), China and MERCOSUR countries: while they estimated the gains for developing countries 's trade with the North at \$22 billion, it was \$35 billion for the South-South trade. However, they observed some losses in welfare with negative terms of trade for the Central America, Caribbean, India, Sub Saharan Africa (excluding SADC countries), Central and Eastern Europe and Other South Asian countries. Thus, these results are applied in the manufacturing sectors.

In the case of the Agricultural sector, it appeared that in other Asian regions and in Sub Saharan Africa, there might be a potential positive effect on the welfare by removing the agricultural barriers countries, with the liberalization of the cereal sector, giving \$10.8billion gains to SSA countries.

Moreover, it was revealed that the Africa is the region which could benefit the most from SST with \$0.5 billion gains, driven by SADC countries excluding South Africa. While the Middle East and the North Africa got the highest gain with \$5 billion. Nonetheless, these gains might have reached \$5.6 billion in the case of triangular cooperation with a significant reduction of tariff with both developed and developing countries.

In conclusion, although the South-South trade has the potential to generate 60% more gains for developing countries than the \$22 billion expected from trade with northern markets, it appeared that these gains were mostly expected in the manufacturing sector, more than in other sectors, like the agricultural sector where most of the African countries belong. Another finding is that even if the African countries are the one to expect the highest gains from a south-south trade, the reduction of barriers might be enjoyed better by developing countries when including the developed countries in the equation., with some preferential arrangements.

2.4) Theoretical foundation of the economic growth

This section presents the different theories approaching the concept of economic growth and from different perspectives.

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.530.3287&rep=rep1&type=pdf>, United Nation Cooperation of Trade And Development, 2006.

2.4.1) Trade based growth theories

This part will focus on the argument of economic growth caused by the trade, from the classical perspective to the post Keynesians theories.

2.4.1.1) Classical explanation of trade-based growth

This first sub-section will present the classical theories of economic growth generated by trade.

2.4.1.1.1) Ricardian and Smith Model: comparative advantage and specialization

➤ Smith model of comparative advantage

Known as a famous classical theorist, Adam Smith shared its researches and proposed its theory of economic development in 1776 with the publication of its work: “*An inquiry into the nature and cause of Wealth of nations*”. According to Adam Smith, the achievement of growth is described as an endogenous process, resulting from the effects of labor productivity and capital accumulation. He proposed a supply-side driven model of growth, based on the following function of production:

$$Y=f(L, K,T)$$

Where Y, the final Output of the process of production is determined by a conjunction of factor of production, such as: L, the Labor, K which is the Capital and also the Land, T, all considered as inputs in the process. He proposed that the output growth was the result of the growth of population, the investment, the expansion of the land and an increase of the overall productivity, following an endogenous process and under a perfect competition system, as explained in the following assumptions:

- The population growth is endogenous, as it is naturally influenced by the time, which is likely to promote the increase of workforce or labor;
- The investment depends on the rate of savings. Therefore, the more savings the more investment growth, also endogenously;
- The Land growth to be influenced by the conquest of new lands or some technological improvement of the fertility of lands;

- Acknowledging the division of labor theory or specialization, the technological progress or improvement in machinery is a key advantage to promote the growth and the overall productivity growth, through international trade.

In fact, its theory was mostly driven by the argument of the “division of labor”, which assumes that the labor force is a key factor of the increase in productivity depending on the size of the market. The division of labor pretend that the repartition of the human resources to different activities, lead to an improvement of the productivity of the worker by increasing their dexterity, by saving in time to produce good for a more efficient outcome, resulting in an increase of the production. Additionally, by efficiently dividing the labor, it allows a capital accumulation, through an accumulation of stock production, related to the benefit of the production. In return, it will facilitate the investments in the economy and increase in wages of the workers, which are necessary to allow the economic development of a country.

The Smith’s theory of development proposes an economic development based on an efficient use of factors of products, as the capital, land and labor, by the different economics agents’ owners of this factors to participate and promote the growth. The process of growth is ensured by the endowment of the society in terms of the different factors of the production, to allow the capital accumulation through the different economic activities: agriculture, industry, manufacturing, commerce...

The theory advocates the importance of trade and its gains through the increase of production of goods and services. He argued about the benefit of international trade in promoting the economic development: “a country should specialize in the production of commodities in which they have an absolute advantage and exchange them for those in which they have an absolute disadvantage”. Such process should increase the gains from trade and benefit for the country.

➤ **Ricardian theory of economic development**

Ricardo presented his theory on economic development in his book: “The principles of Political Economy and Taxation”. Ricardo also argued about the benefit of trade, agreeing to the

productivity-based theory of Smith, initially based on the comparative advantage model. Both argued that the country disposing of a specific comparative advantage in production, by efficiently using its factor endowment, is more likely to increase its outputs; therefore, its gains from trade, which might be reinjected in the economy to promote the growth. The division of labor principle, being the key component of this process too achieve the best outcome. According to Ricardo, the economic growth is also allowed by capital accumulation (wages, profits), through the distribution of income by increasing the productivity, with increasing returns, especially in the manufacturing sector.

Ricardo's proposal is contributing through the argument of comparative advantage, rather than absolute advantage. Indeed, acknowledging the disparities among countries concerning their production capabilities, his model proposed a that a country can still gain from international trade regarding the principle of comparative advantage. In that sense, he argued that a country should specialize in the production and exports of goods and services in which he has a comparative advantage, either in terms of time or cost of production, while importing the others commodities from another country.

2.4.1.1.2) Heckscher-Ohlin- Samuelson model

The HO model is an improved theory of the Ricardo and Smith theory of comparative advantage indeed, it assumes that country can trade more efficiently to improve their benefits from trade. The HO model suggest that countries should focus on their natural endowment in terms of resources and factor of production to improve the efficiency of their production. Therefore, they must export the goods that use abundantly the factor of production that the country own and import the good the goods which use the scarce resources. Originally formulated, the theorem stipulates that:

“countries tend to export goods whose production is intensive in factors with which they are abundant; a country will then export the commodity that uses relatively intensively its relatively abundant factor of production, while it will import the commodity that uses relatively intensively its relatively scarce factor of production”⁷.

⁷ Alauddin Azad by Academia.edu; “ H-O Theory “; https://www.academia.edu/9478805/H-O_theory.

In practice, this suggest that Cameroon which is labor abundant and Korea which is more capital abundant must improve their gains of trade by exchanging in their goods in such way that, in the production of cocoa and vehicles:

- Cameroon which is labor abundant must produce better the good which is labor intensive, the cocoa which need more important labor force to enhance the agricultural production. Then Cameroon which is more labor abundant must produce and export clothes, while importing vehicles which uses intensively the capital factor;
- Korea, instead must focus on the production of vehicles, which are capital intensive. Then Korea which is more capital abundant should export and produce more efficiently vehicles than Cameroon.

This model emphasized the mutual benefit from trade, acknowledging the differences in endowments of countries, like developed and weaker economies, when resources are imbalanced.

2.4.1.1.3) Harrod-Domar Model of economic growth

Harrod is an economist, known to be the inventor of the growth modern theory in his book “Essay in Dynamic Theory” in 1939. The fundamental purpose of his researches was to answer the following question: “What must be the rate of growth of an economy to induce enough investment to match planned saving for a moving equilibrium through time? And what happens if the actual growth of rate deviates from this equilibrium path?”.

The model relies on the following equation:

Rate of economic growth(g)=Level of savings(S)/ Capital output ratio (K)

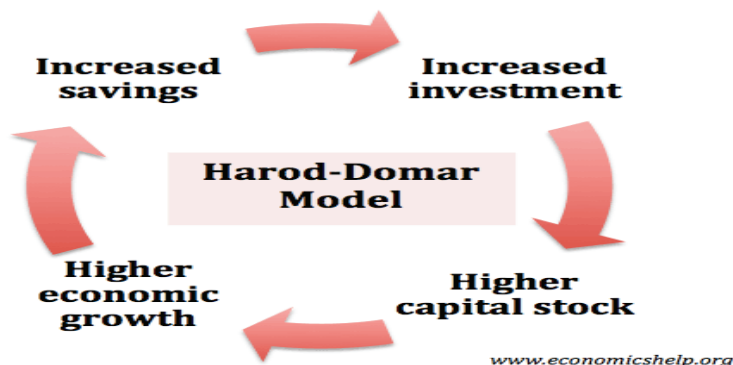
- The level of savings(S) which is the average propensity to save is calculated as the ration of national savings to the national income. It suggests that the more savings will enable greater investment and capital accumulation
- The capital-output ratio is the reverse ratio of the marginal product of capital:
 $K= 1/\text{marginal product of capital.}$

It corresponds to the amount of capital needed to increase the output and suggest that a high capital output ratio reveal an inefficient investment.

He found that the growth of an economy is positively influenced by its saving ratio and negatively to the capital-output ratio. That suggests that the higher the savings rate, the more will be the capital investment, which could be used in return to promote the production capabilities of the country and a higher growth rate of the economy. Harrod argued that the growth rate of the economy is determined by the level of savings and the productivity of capital and depends on the quantity of labor and capital of the country.

He provided further explanations about the implications of this theory for developing countries. Considering their higher level of labor force and scarce capital endowment, such theory justifies for those weak economies a slow and low economic progress. He argued that developing countries do not have sufficient level of income, enough to enable sufficient level of savings to enhance the necessary investment for their economic development. Being unable to accumulate an important capital stock, the process of growth will be slowed down.

The results of his theory show that the determinants of the growth are the level of capital and savings, accordingly to the following process ⁸ :



⁸Economics.help; « Harrod-Domar Model of Growth and its Limitations »;
<https://www.economicshelp.org/blog/498/economics/harod-domar-model-of-growth-and-its-limitations/>

2.4.2.2) Neoclassical Growth models: exogenous Growth models

The Solow's Theory of economic growth

The model is based on three main assumptions:

- ⁹“The labor force and labor-saving technical progress (labor productivity growth) grow at a constant exogenous rate;
- All saving is invested
- Output is a Cobb-Douglas production function of capital and labor inputs with constant returns to scale and diminishing returns to each of the factors of production”,

$$Y = TK^\alpha L^{1-\alpha}$$

With Y the total output; T the level of technology; α the elasticity of output which implies that $\alpha < 1$ causes diminishing returns; $1 - \alpha$ is the elasticity of output.

Based on these assumptions, Solow predicted some results:

- In a steady state, the level of output per head is positively related to the ratio of saving/investment to the national income and negatively related to the growth of population or the labor force growth;
In a steady state, the growth of output is independent of the ratio of savings/investment to the national income, and is determined by the exogenously given growth of the labor force and the growth of labor productivity which is the natural rate of growth;
- Given identical savings behavior and production functions across countries, there will be a convergence of per capita incomes across countries because poorer countries with a lower capital-labor ratio and a higher productivity of capital, will grow faster than rich countries”.

As a result, he assumed that the economic growth is related to the level of technology and the control of diminishing returns on the factors of production capital and labor. The increase in labor productivity

⁹ RENE .a. Hernandez; “Neoclassical and Endogenous Growth Models: Theory and Practice”;

https://www.researchgate.net/publication/292991147_Neoclassical_and_Endogenous_Growth_Models_Theory_and_Practice/download; May 2003.

positively affect the output growth, while enhanced by the level of technology. Since the injection of capital through investment might be inefficient in some cases, facing diminishing returns, the savings and investment effects appear uncertain or non-constant for some countries. He argues that relevant investment, considering a higher productivity of capital and important labor force will benefit the growth of weak economies, in the case of low level of savings.

2.4.2.3) Endogenous growth Theory

The proponents of this model believe that the growth process, unlike the neoclassical and post Keynesian theories, is endogenous and not exogenous. They basically support the theory that the growth of output per head is positively related to the per capital level of income of countries contrary to the neoclassical assumptions. Therefore, they argued against the diminishing returns of the Solow model, that when a country's wealth is increasing, the marginal product of capital will not necessary decline.

Their results suggest that, unlike the neoclassical approach, the level of savings and productivity of capital will affect the growth in a long term. They believed that investment in human capital(education), innovation (research and development and technical progress) and knowledge are key determinants of the economic development and growth. They assumed the existence the positive externalities and technological spillovers based on the use of these factors to favor the economic progress.

Along with these results they proposed that countries must embrace some good policies to facilitate the implementation of such findings, such as: trade openness; market competition; innovation for technological progress and through entrepreneurship; private sector investment in Research and Development...

2.5) The effect of Foreign Direct Investment on economic growth¹⁰

This part is devoted to present the theories about the effect of FDI on the economic growth.

¹⁰ Hilbert de Jong ; " *South-South cooperation and economic development: the impact of foreign direct investment: An empirical analysis of the impact of FDI flows between developing countries: the case of Africa*"; https://thesis.eur.nl/pub/13692/-FINAL-Master_s-Thesis-South-South-cooperation-and-economic-development-the-impact-of-foreign-direct-investment.pdf ;Juillet 2013

2.5.1) The role of FDI on economic growth

The related studies in economics about the potential effect of FDI on growth, have presented diverse and controversial results over the years. In fact, if most of the scholars found positive correlation between FDI and economic Growth, some others have related some insignificant direct effect between the two variables. On the controversial side, the results of Carkovic and Levine (2005) based on the assessment of FDI inflows' effect on growth for both developing and developed economies, did not show robust effect, nor significant positive results over the period tested, in influencing their economic development, through GDP growth. On the other hand, several others researches found out about the existence of a significant effect of the FDI on the GDP growth of different economies. Nonetheless, the literature revealed different approaches of such result. Balasubramanyam et al (1996) proposed that FDI might result in a higher and more significant effect on countries pursuing the export-promotion trade strategy rather than the import-substitution policy. Then Blomstrom and Al (1992) approached the correlation based on the income of countries and their results showed that the higher the income of developing countries, the higher will be the impact of FDI on their economies; they suggested the existence of a threshold of income for a random developing country to benefit from the effect of FDI significantly. For Borensztein and Al (1998), the FDI must mainly affect the per capita GDP growth in a positive manner, but such effect might be associated to the level of human capital of the country. Overall, the previous studies show that the positive effect of FDI on growth is related to the spillovers generated from technology and capital transfers and know how. Indeed, through the trade, the foreign investment is expected to benefit local markets by enhancing the production capabilities (share and use of high manufactured material to modernize the production) of the host countries, boosting their competitiveness and diversifying their markets with new products and services, potentially with higher manufactured goods, as suggested by Nunnenkamp and Spatz(2003). Additionally, results also showed that such effect might depend on the nature of the sector targeted, as the primary sector related FDI must generate a weaker or even negative and insignificant effect on the growth; on the contrary of the manufacturing sector FDI which revealed a positive and significant impact on the per capita GDP growth rate, instead. So that, in regard to the African economies of the SSA region, Alfaro (2003) affirmed that the effect might be influenced on

such economies, due to the primary sector FDI type attractiveness, highly related to their natural resources endowment and agricultural backgrounds. Therefore, no strong and exclusive results have been demonstrated in addressing the role of FDI for the Sub Saharan Africa countries.

2.5.2) Theories of Impact of FDI on economic growth

The nature of the impact of FDI on growth has been positively evaluated under two major theories. The first theory is emphasizing the role of capital in promoting economic growth, through capital formation and accumulation. Considering the FDI as form of capital, it must play the same role in enhancing the economic level. The “capital formation theory” relies on the neoclassical Solow growth model of 1956, he assumed that “an *increase of the capital stock available in an economy leads to an increase in production, which corresponds to an increase in the growth rate of output*”. It supposed that, if FDI is considered as a source of physical and financial capital for the recipient country, each increase of its volume or size must promote the increase of level of capital stock, thus the increase the production as well. Therefore, it suggests that the additional capital stock created through foreign investment input must drive higher economic growth. However, when considering the diminishing returns of the neoclassical approach, it turns out that the so-called effect of FDI on the domestic output growth rate must not be sustained in the long run at the same level. Brems(1970) suggested that the positive impact of FDI on the growth will be more stable and effective in the short term. Therefore, capital inflows, mostly included in Foreign Direct Investment, which are considered to be more likely stable than outflows are recognized to give longer lasting significant and higher effect, especially in the case of developing countries.

The second theory is putting attention on the spillovers and Knowledge effect of the FDI as driver of the economic growth as supported by the endogenous growth Theory. Studies assumes that, more than contributing to the capital accumulation of the host country, FDI plays a role of diffuser of technology, facilitating the transfer of knowledge, which is meant to improve the production capabilities of the workers and absorb the technological potential of the related investment. Based on such statement, Borensztein & Al (1998) concluded about the role of Knowledge improvement as main

driver of a long-run economic growth. Kinoshita (1999) argued that the transfer of technology is allowed through different mechanisms:

- the imitation effect has to do with the local workers are acknowledging by copying the techniques used by foreign workers when introducing advanced technologies in their process externalization of the production through private foreign investment, in the context of subsidiaries in developing countries;
- the training effect is related to the education of local workers, for them to properly and efficiently use the new technologies used by foreign firms, to significantly impact the output;
- the linkages effect intervenes when local firms purchase advanced goods from foreign firms, thus upgrading the technological level or domestic firms for a better output;
- the competition effect is expected as a combination of the previous effects, when the domestic workers become more efficient thanks to knowledge improvement and production capacities increase with technological progress, which result in an increase of competitiveness of the domestic firms.

Both theories focus on the positive impact of Foreign investment, but the literature does not give any consensus on the general effect on the economic growth. The common evidence is related to the importance and influence of the characteristics of the recipient country, such as: level of income, the level of human capital, the nature of FDI and its purpose or even the economic sectors' development etc.

2.5.3) Evidences about the determinants of FDI ¹¹

Despite the above evidences supported by the proponents of the positive and significant effect generated by the Foreign Investment, further studies rather rally to the critical side. Barro and Lee (1994) supported that the FDI expected could not be as strong as originally expected on the economic growth following the general causality approach. In fact, they agreed on the importance of country

¹¹ Hilbert de Jong ; “ *South-South cooperation and economic development: the impact of foreign direct investment: An empirical analysis of the impact of FDI flows between developing countries: the case of Africa*” page 9-13: *The effect of fdi on growth and the importance of country characteristics* ; https://thesis.eur.nl/pub/13692/-FINAL-Master_-s-Thesis-South-South-cooperation-and-economic-development-the-impact-of-foreign-direct-investment.pdf ;Juillet 2013

characteristics in influencing the level of impact expected. There are several channels conditioning the FDI effect on the host economy.

One important factor, could be the level of development and/or human capital of the host country, appear to be a key factor in boosting the FDI effect on the growth. De Mello (1997) found that the technological advancement and the knowledge capabilities in the host country determine the ability of the country to absorb efficiently the investment provided. He mentioned about the importance of provision of labor training, the enhancement of skill acquisition and diffusion, as determinant goals in delivering the FDI to the host country to facilitate the spillovers by increasing the initial stock of knowledge. Moreover, the improvement of technological level to boost the production capabilities and promote the diversification of output through the incorporation of new inputs, must also matter. In that case, the analysis shows that the domestic investment must have a weaker effect in boosting the growth than FDI, as proposed by Boreinsztein and Al(1998), concluding about the leading role of FDI in allowing transfer of technology enhanced by the level of human capital in the national economy. This must be considered as an indirect effect, revealing that a technological gap due to the unbalance between the FDI provided and the level of production generated by the domestic investment, might constraint the effect on growth (De Mello;1999).

Other characteristics to be considered as drivers of FDI positive impact are the market size, the level of real income of the domestic economy, the availability of infrastructure, including trade policies, the political macroeconomic stability and the abundance of natural resources, said Blomstrom and Kokko(2003). The economic freedom must allow positive trade externalities and increase in foreign investment.

In the case of developing countries, in SSA in particular, the evidences remain quite controversial in the literature. Despite their large natural resource endowment, considering the low level of domestic investment and slow technological progress of most of those economies added to the lack of knowledge of the labor, the lack of infrastructure and instability of macroeconomic environment, the impact of FDI remains highly constrained. Summarizing the determinants of FDI positive effect on the growth of developing countries, the results point out:

- First, the development of the financial system (Hermes and Lensink (2003)), reflecting the macroeconomic stability as key condition to promote the foreign investment penetration in the recipient country, to facilitate its efficient deployment.
- Secondly, the market liberalization or trade openness or economic freedom, as proposed by Balasubramanyam, Salisu and Sapsford (1996), arguing about the importance of the trade regime; They found that export-promoting countries were more subject to attract FDI than closed economies with Import-substitution trade policy.
- Thirdly, the importance of economic sector development also appears as an important matter when it comes to FDI determinant for developing countries. Indeed, studies reveals the services sector could generate a stronger effect than the manufacturing sector for such economies, along with the technological gap between the provider and recipient country.

All conclusions tend to prove that, in the case of developing countries, like Sub Saharan African economies, FDI is mostly keen to promote a long-run growth. Therefore, stronger results are more likely expected for a long-term period analysis.

2.5.4) The impact of South-South FDI¹²

Acknowledging the special and unexpected change in trade pattern since the early 1990's, South-South FDI flows have been recently considered as important and significant pattern toward developing countries, especially in Africa both in absolute size and relatively to the traditional North-South flows. Indeed, the South-South FDI flows appear larger in size than the Northern flows to developing economies, if we consider the southern flows to be deducted from the total flows to developing countries and the northern flows from advanced economies. Such trend relies on the comparative advantage of southern investments, in terms of externalities, of technology transfer led growth, of the size of investments provided or the competitiveness of Multinational southern Companies, including the overall similarities of the economies; hence offsetting most of the constraining conditionalities presented in the case of the traditional FDI flows for such countries.

¹² Hilbert de Jong ; “ *South-South cooperation and economic development: the impact of foreign direct investment: An empirical analysis of the impact of FDI flows between developing countries: the case of Africa*” page 13-15: *South-South cooperation: the role and impact of FDI*; https://thesis.eur.nl/pub/13692/-FINAL-Master_-s-Thesis-South-South-cooperation-and-economic-development-the-impact-of-foreign-direct-investment.pdf ;Juillet 2013

In general, the South-South FDI are determined by different factors from the traditional flows. The previous studies emphasized the role of higher returns in production and portfolio (output) diversification of the recipient country, enhanced by the provision of high and medium raw manufacturing materials; While enhancing the competitiveness of the domestic production, benefiting the export promotion, key policy for growth in developing countries (Aykut &Ratha, 2004). Additionally the low labor costs and economic openness facilitate the transfer of FDI, because firms are looking for large opportunities offered in terms of high returns in such economies, facilitated by the existence of similarities with the domestic business environment as well as cultural and economic environment.

Meanwhile, it has also revealed that the natural and large endowment of natural resources in such economies could be the main driver of the Southern FDI to other developing countries. As a matter of fact, Anyanwu (2011) suggested that the investment decision from Southern donors to Africa were made depending on criteria, such as: importance of market size; trade openness; the level of government consumption expenditures, relatively to the promotion of domestic investment; the natural resources endowment; and the implementation of Export-oriented trade policy. He concluded that such factors are to benefit recipient countries from a higher level of FDI.

Emphasizing the cooperation issue, South-South flows appear relevant in terms of substitution rather than complement of the Northern flows to developing countries. Knowing that most low-income countries with small market size are less keen to receive an important value of FDI form advanced economies, Southern flows are revealed to offset the diminution North FDI effect for such countries. Therefore, they must contribute in balancing the development of the southern area, enlarging the investments opportunities to those economies, based on the similarities they shared. At the same time, developing donors tend to focus on less capital and technology intensive sectors, according to Lipsey and Sjöholm (2011).

It is important to know that the main southern investors to developing countries in Africa are the BRICs countries as Brazil, the Russian Federation India and China, whom trade and investment flows have tremendously and rapidly increased over the last years since the early 2000s era. China has been the leading provider in this group, owning more than half of the investments flows to those economies

and topping the northern traditional flows. Although South Africa has been the top recipient of the group, others countries followed as well, and the southern donors are continuously increasing their investments toward more African economies, and especially involved in infrastructural projects and natural resource sectors in Sub-Saharan Africa, especially during the last decade (Mlachila & Takebe, 2011). As a result, it turned out that BRICs investments participated to:

- The improvement of Balance of Payment; mostly in deficit status for most of the African countries, by contributing to the export increase, especially concerning the natural resources;
- The improvement of production capacities and increase in competitiveness, especially in the manufacturing process;
- The technological progress, through the knowledge sharing (Know-How) and use of high manufactured materials, etc.

As a conclusion, it is the duty of those economies to attract more investments by fostering a better macroeconomic environment and policies implementation, to facilitate the effect of FDI in the long term on their economies.

CHAPTER THREE: OVERVIEW OF SUBSAHARAN AFRICA ECONOMIC DEVELOPMENT

3.1) Generalities

Sub-Saharan Africa constitute the largest region located on the south of Sahara part of the whole African continent. The region is divided in 4 sub areas: Central Africa, West Africa, East Africa and the Southern sub region. The territory is large of 22 431 000 km² for a population of about one billion (1 022 664 451 inhabitants, 2017)¹³, divided into a total of 48 different economies according to the World Bank, listed as presented in the following table:

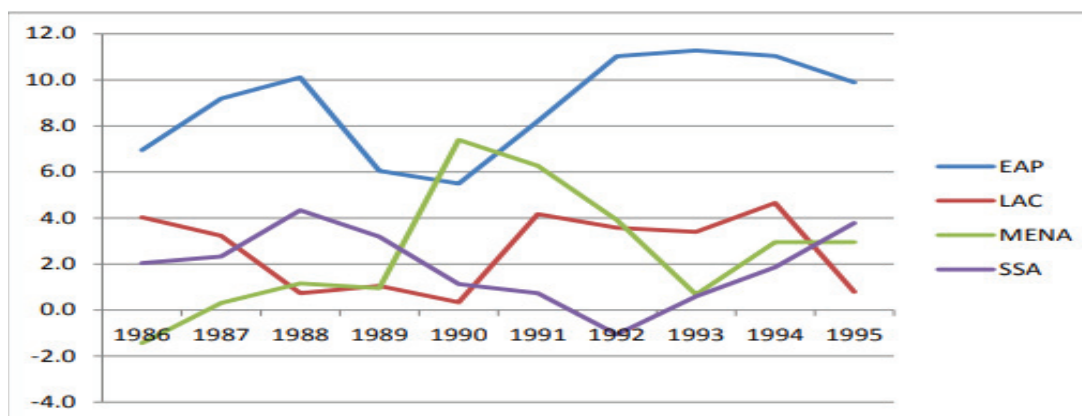
Angola	Ghana	Republic of the Congo
Benin	Guinea	Rwanda
Botswana	Guinea-Bissau	Sao Tome and Principe
Burkina Faso	Ivory Coast	Senegal
Burundi	Kenya	Seychelles
Cameroon	Lesotho	Sierra Leone
Cape Verde	Liberia	Somalia
Central African Republic	Madagascar	South Africa
Chad	Malawi	South Sudan
Comoros	Mali	St. Helena
Dem. Rep. of the Congo	Mauritania	Sudan
Djibouti	Mauritius	Swaziland
Equatorial Guinea	Mayotte	Tanzania
Eritrea	Mozambique	Togo
Ethiopia	Namibia	Uganda
Gabon	Niger	Zambia
Gambia	Nigeria	Zimbabwe

Historically, SSA has experienced an unstable and periodic economic development over the past decades, since the independence era in 1960. In fact, after the Independence era, the region experienced great performances in terms of economic growth with an average of 4% growth over 15 years. Then the post-independence era hit the region due to the implementation of structural adjustment programs by the International Monetary Fund (IMF) and the World Bank (WB) from 1986

¹³ Portail de l' 'Afrique, Wikipedia ; « Afrique Sub- Saharienne » ; [Annuaire statistique 2017](#), p. 13.

to 1995 over the different countries to face the instability and high level of indebtedness and poverty generated after the great period. In fact, the SSA face a severe crisis, due to the drop of commodities' prices, in response of the oil shock, which caused a structural deficit of the Balance of Payments of the different countries. As a result, the region faced low economic development during that period, experienced the lowest world growth during the early 1990s.

Figure 1 Annual GDP Growth Rates: Africa and Other Developing Regions, 1986-1995



Source: World Bank (2011) World Development Indicators

The recovery period in the 1990s and more intensively from 2000, made Africa the second fastest world growth behind Asia and the SSA region achieve its highest growth records with the biggest score of more than 10% growth between 2003 and 2004, under the Millennium Development Goals (MDGs) period. Most of the countries achieved high economic performances and greater development, such as Nigeria, Ethiopia, Angola, South Africa, etc. The graph below traces back the evolution of the annual growth rates of the region during that period.

Figure 2 Sub-Saharan Africa annual GDP growth rate



Source: World Bank Development

The recent records, show a slowdown of the economic growth of the region. Indeed, in 2016, SSA recorded its lowest performance with an average growth of 1.4%. The region is currently facing difficulties after the crisis generated by the severe drop of oil and commodities prices after 2014, with a modest 2.6% growth in 2017, driven by the timid rise of the strong oil producers' countries such as Nigeria, Angola, and also South Africa recent economic performances. The growth observed over the region has actually been driven by the increase in trade, especially led by China or India from the emerging Asia, which intensively increase its partnership and cooperation with African countries, especially the promising Sub-Saharan African area. The emerging continent, with the high participation of China has been an important part of the African trade increase, being the main importers of the SSA market, especially the oil producer countries. In fact, the region is getting involved in the current South-South trade trend, movement also known as the "integration of the third world".

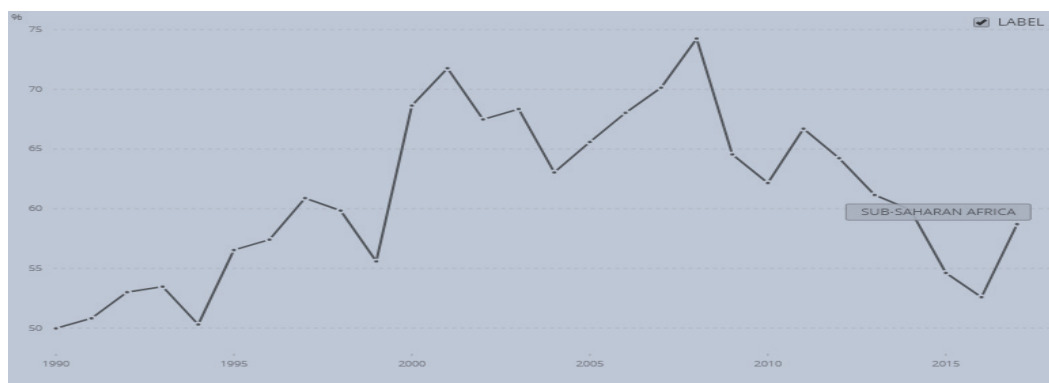
3.2) Outlook of the South-South trade in Sub-Saharan Africa

3.2.1) Generalities about Trade in Sub-Saharan Africa

The region is currently facing a downturn of its economy, related to the decline in trade performances, especially due to the decrease in export value since the oil and commodity prices crisis

in 2014. In fact, according to the statistics, SSA is facing an important deficit as reflected by the trade balance (\$ -64,017.00 US millions, 2016)¹⁴. Trade appears as a key driver of the economic growth of the region over years, looking at the evolution of trade share of GDP (Cf below graph), with about 60% in 2016, and not less 50% despite the slowdown observed from 2013/2014.

Figure 3: Trade % of GDP (1995-2017)

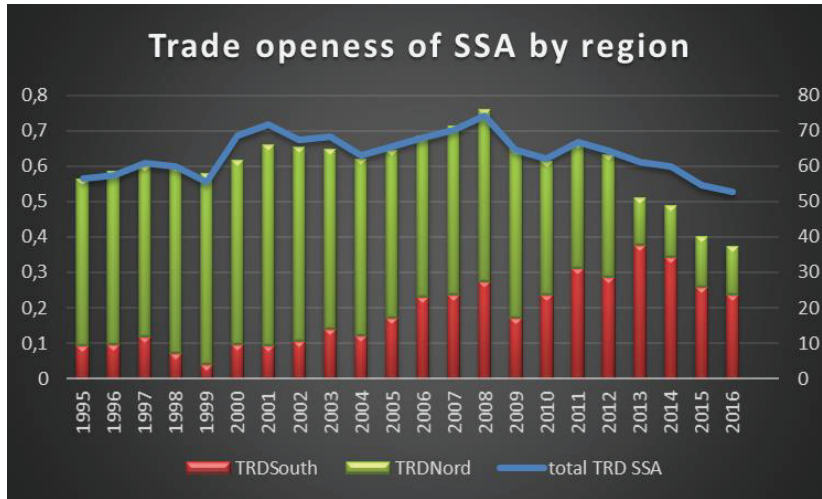


For a bit more than half a decade by now, since 2007 to 2008, with the financial crisis, African countries exports and imports toward the world were hit by the decline in activities of their partners, especially the northern developed economies. The volume of import and mostly exports severely decreased by 2016¹⁵, for less than \$150 US billion exports (\$121,456 US billion) and \$161,657 US billion imports of goods. The region experienced an important decline of the volume of exchanges with the OECD northern economies, while we observed a continuous and rapid growth of the southern flows share to their economies, especially during the post financial crisis period, as observed in the graphic below.

¹⁴ WTIS ; “Sub Saharan Africa Trade at a glance”; <https://wits.worldbank.org/countrysnapshot/en/SSF>

¹⁵ WTIS, “Sub-Saharan Africa Trade Summary 2016”; <https://wits.worldbank.org/CountryProfile/en/Country/SSF/Year/2016/Summary>

Figure 4: Trade Openness of Sub Saharan Africa by region (1995-2016)



Indeed, most of the African economies are led by the trade merchandise, due to the structure of their markets, dominated by the primary sector. In general, Sub-Saharan African main exports goods are mainly agriculture (15%-20%), then the first commodity traded remains fuels (about 60%), while manufactured products account for 20% average of the exports. While imports are dominated by raw materials for more than 40% share¹⁶, such as fuels, chemical products, agricultural products, then 31% share for machinery and transport equipment products and others manufactured goods accounted for 23% (UNCTAD, 2014).

3.2.2) Snapshot of the rise of South-South trade in Sub-Saharan Africa

In terms of partners, the region seems to embrace a new trend, from EU and US as main partners to the South, with China topping other economies. The main destination of SSA products reveal the domination of China with a share of 17%, followed by India with 8%, while other European economies gather a 26% share and US accounting for 7% (Cf table 1). Indeed, the current pattern shows that Southern flows have now topped the North to South flows toward the region. In fact, as

¹⁶ UNCTAD, Africa's position in Global trade, 2014; https://www.swp-berlin.org/fileadmin/contents/products/projekt_papiere/Africas_Position_in_Global_Trade.pdf

reflected in the table below, South -South trade led by China as major import and export partner in 2016¹⁷.

Table 1: Sub Saharan Africa Top 5 Exports and Imports partners

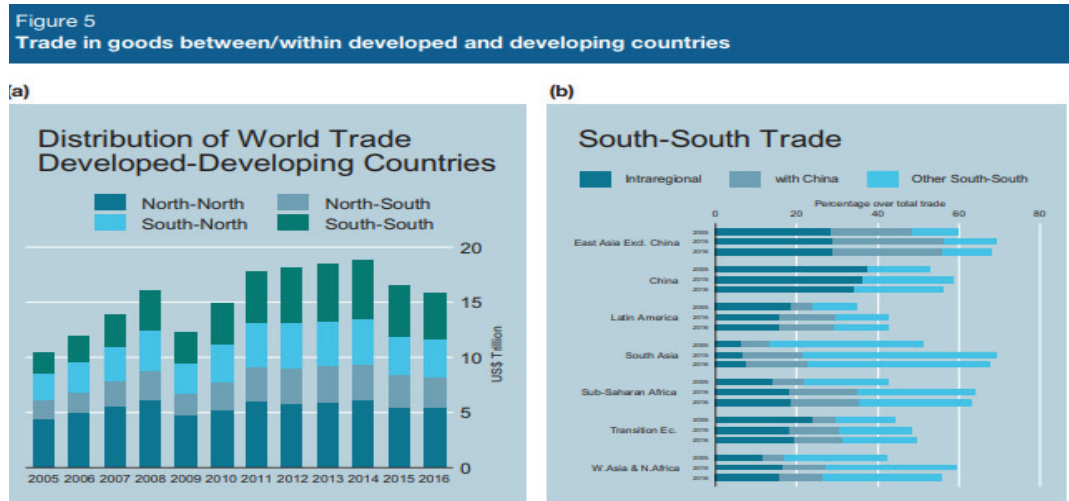
Sub-Saharan Africa top 5 Export and Import partners					
Market	Trade (US\$ Mil)	Partner share(%)	Exporter	Trade (US\$ Mil)	Partner share(%)
China	9,478	7.80	China	28,296	17.50
India	7,120	5.86	South Africa	12,212	7.55
United States	7,019	5.78	Germany	10,888	6.74
South Africa	6,629	5.46	India	9,253	5.72
Germany	6,069	5.00	United States	9,163	5.67

The statistics show that the distribution of partners in the world have change over the past decade, embracing the increase in South-South flows between developing countries and the flows to the south and Asian countries are leading this new trend, mostly led by the involvement of China in trade with other developing economies. In the case of SSA, the region shares the largest part from Chinese flows, and the total South-South trade cumulate more than 60% share of the world trade value totalized by the region. The graphs below give a brief picture of the recent evolution of trade distribution for SSA¹⁸.

¹⁷ WTIS, Sub- Saharan Africa top 5 imports and exports partners
<https://wits.worldbank.org/countrysnapshot/en/SSF>

¹⁸ Keys statistics of trade in SSA, 2017; https://unctad.org/en/PublicationsLibrary/ditctab2017d6_en.pdf

Figure 5: Trade between/Within developed and developing countries

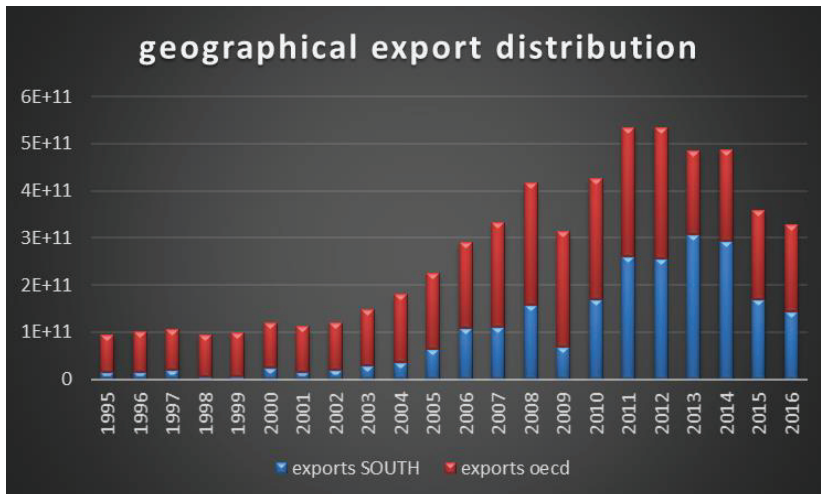


Source: UNCTAD secretariat calculations based on COMTRADE data.

Source: UNCTAD

Nonetheless, despite a rapid growth of the southern flows, the volume remains lower than the exchanges with the north, looking at the geographical export distribution over the research period.

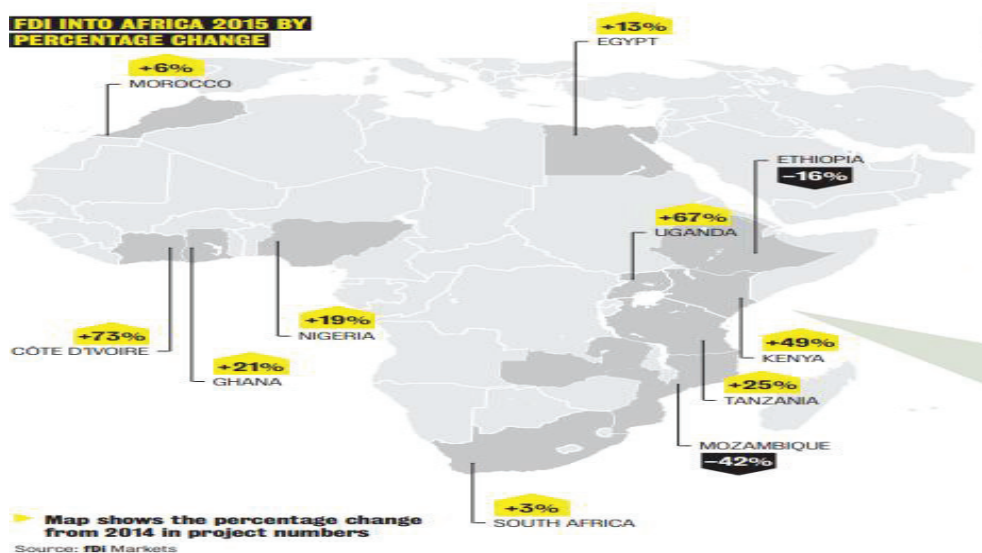
Figure 6 geographical export distribution in Sub Saharan Africa (1995-2016)



The evolution of the export distribution shows a rapid and massive increase of the exports within developing countries with the SSA region over the period observed and significantly from 2008 to 2015 with an average growth of 85% comparatively to an overall growth of 185% over the period 1995-2016. Meanwhile the financial crisis hit the developed OECD volume of exports which shrink by -28.5% after the crisis (2008-2016).

3.3) Overview of the Foreign Direct Investment in Sub-Saharan Africa

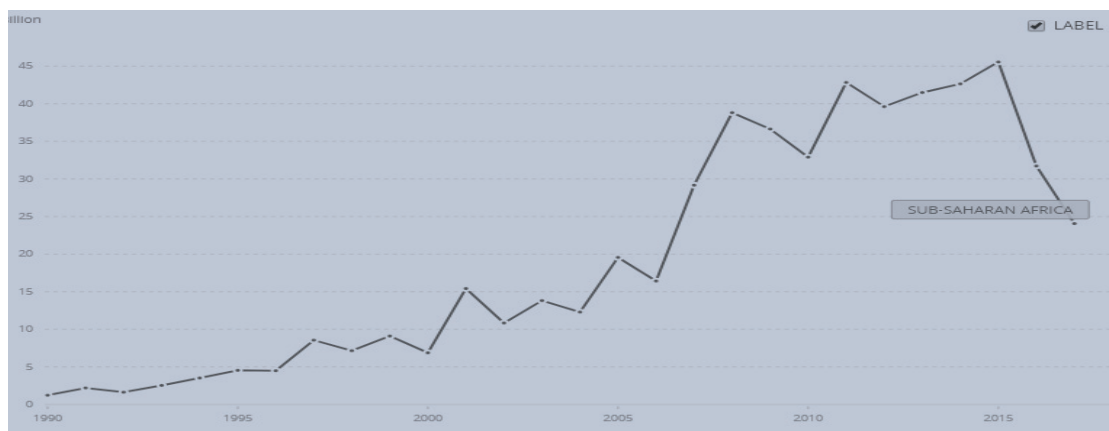
Africa currently represent one of the top destination of world FDI and among those, the Sub-Saharan Africa share remained quite high and has increased during the past years as show the map below¹⁹.



Indeed, the volume of FDI inflows to the region has been continuously increasing during the past decades, especially since 2005 with an important rise about three times larger value accumulated between 2005(about \$20 US billion) to 2015(about \$45US billion), despite the late downturn (cf Table).

¹⁹ Africa Investment Report, 2016; <https://www.camara.es/sites/default/files/publicaciones/the-africa-investment-report-2016.pdf>

Figure 7: Foreign direct investment, net inflows (BoP, current US\$)



Source: World Bank Development Indicators

On the other hand, the share of FDI for SSA increased drastically from the early 1990s to achieve a 4.5% share by 2000. However, it appeared this rise was quite unstable later and first dropped severely from 2000 to 2005 (2% FDI to GDP ratio) and stacked on an average of over 2.5% ratio until 2016²⁰. The late decline was reported to be led by the recent crisis related to the decline in oil and commodities' prices²¹. In general, the FDI flows to Africa suffered from this crisis and declined by 28% in 2017 to the current value of \$28.5 US billion. That was reflected as followed for the different sub-regions: the central Africa share decreased by 22%, while West Africa received \$11.3 US billion (-11%), the eastern area which performed the fastest growth in Africa, only faced a decline of 3% (\$7.6 billion, 2017) and lastly the southern Africa which underperformed \$3.8 billion only, the largest decline (-66%). This shows a very small effect of Foreign investment for the region and a low level of investment attractiveness for the countries. The unstable business and financial environment, as well as the lack of infrastructures could be the main reasons of such trend. Therefore, this reveals the

²⁰ World Bank Data, FDI net inflows; <https://data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS?end=2017&locations=ZG&start=1990&view=chart>

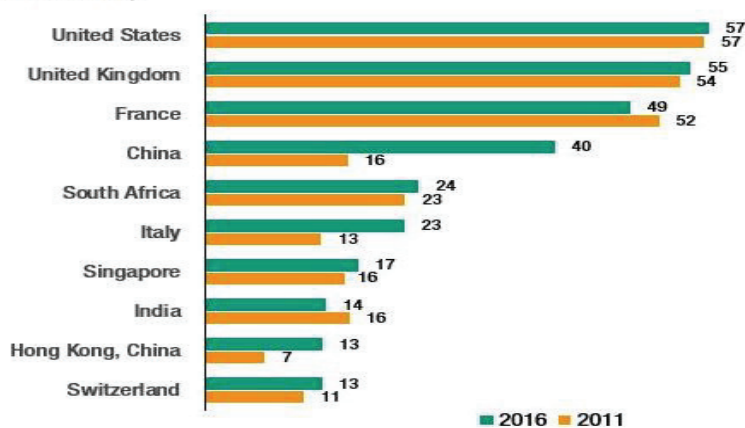
²¹ UNCTAD World Investment Report, 2018; <https://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=461>

appealing need of investment for the region. Nonetheless, despite the timid recovery of commodities prices, the FDI inflows show high expectations of +20% increase by 2018²², in Africa.

In terms of partners, Africa is receiving more diversified investment flows. As a matter of fact, Asian economies, have increased their participation to the economic development of other developing countries during the past years, and especially towards Africa. China, at the 4th place, appears as the major provider of FDI to African countries on the top 10 investors, with India(8th) among the southern donors. However, their participation remains quite low, despite great prospects and improvement in 2016(cf figure 6 below). Else, as we can observe from the statistics, other southern flows appear too less significant compare to the northern flows to Africa to actually yet balance the effect of FDI inflows North on their economies, when taken individually.

Figure 8: Top investors economies in Africa (2011-2016)

Figure 2: The top investor economies in Africa, 2011 and 2016
(Billions of dollars)



Source: UNCTAD, World Investment Report 2018.

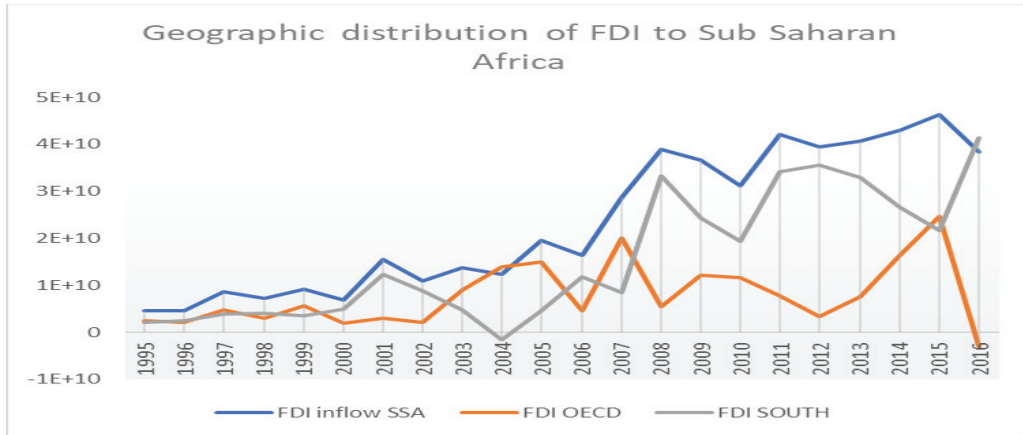
Source: UNCTAD; World Investment Report, 2018

Nonetheless, we can observe that the trend of FDI from the global Southern region of the world to SSA has continuously been increasing since 1995 and has topped the North to South FDI in

²² UNCTAD World Investment Report, 2018;
<https://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=461>

the region, especially after 2008 when it grew rapidly; while the developed OECD countries significantly reduce their investment to SSA countries, when hit by the financial crisis as indicated in the following graphic.

Figure 9: Geographical distribution of FDI in SSA(1995-2016)



CHAPTER FOUR: METHODOLOGY AND DATA

4.1) Introduction

Each research is meant to assess a specific issue or scientific problem, that we intend to solve, using a specific methodology. As we try to “find a way to systematically solve the research problem”, according to this definition from Kumar (2008), we may require the use of a “research methodology”. This chapter will present the methodology, as techniques or scientific approach used for the purpose of this research, from the identification of the sample, to the data collection and the model applied for the analysis to test our hypotheses.

4.2) Research Design

A research design refers to “the overall plan for relating the conceptual research problem to relevant and practicable empirical research” (Gauri and Gronhaug, 2005, pp.56). Such method is generally used by authors to “answer research questions (Saunders et al.2007). In this study, we would like to apply the casual descriptive research design type, identified by Zikmund in 2003 and defined as the most appropriate method to assess a problem in a more detailed way, where the researcher is assigned to “collect secondary data through different data collection techniques” (Gauri & Gronhaug, 2005).²³

Our analysis is meant to describe the correlation between the dependent variable (GDP growth rate) and independent variables identified along the study, in order to understand and explain the relationship among them. Precisely, we intend to analyze the correlation, as the effect of the trade generated among developing economies from the South and the investment related, so called FDI from Southern economies, comparatively to the North FDI and Trade, on the economic growth of SSA

²³ UK Essays; Definition of research methodology, 2016;
<https://www.ukessays.com/essays/management/definition-of-research-and-research-methodology-management-essay.php>

countries. Therefore, we will assess the causality of these independent variables during the selected period, to predict their future effect on the expansion of the country's economic output.

We intend to analyze the effects of trade coupled with FDI as motors of economic growth in SSA. We suppose that south-south trade and investment have a more significant effect on the economic development of the country, than North-South trade. Therefore, the larger effect of investments provided through the south-south cooperation might appear more effective in enhancing the growth of the countries.

Hypothesis 0: south-South trade and FDI do not have a positive nor significant impact on the SSA economic growth

Hypothesis 1: South-South trade and FDI have a positive and significant impact on the SSA economic growth.

4.3) Data collection

The analysis in this study has been conducted on the countries located in the Sub-Saharan Africa area, which is about 46 countries according to the United Nations. We must precise here that, we aim to analyze the causality of these variables, referring to the main developing economies of the Area, thus excluding the data collected here do not include the high-income economies of the region. The period examined for this assessment is related to the penetration of southern flows in African territories and especially paired with the evolution of the world trade pattern, from early 2000's, also depending on the availability of reliable data.

As we attempt to measure and analyze the specific effect of South-South trade and South-South FDI, our study requires the identification of southern economies, independently to the Northern partners. Thus, for that purpose we referred to previous researches from Aykut and Ratha, stating that to differentiate the southern flows of FDI from the North, we must consider the Northern flows as provided by the OECD countries to African economies; therefore, they assume that:

FDI inflows from the South = total FDI inflows – FDI inflows from OECD

We will apply the same method to differentiate the southern trade flows.

In that regard, this study involves the examination of different sources and previous researches, in collecting the necessary data. We particularly refer, in the present case to reliable database such as: OECD stat; World Development Indicator (WDI) and WDIS (World Integrated Trade Solution) from World Bank and UNCTAD for the international sources.

4.4) Data and variables

Our study is focusing on 34 countries of SSA. This research intends to assess the role and impact of south-south partnership with the host country comparatively to the traditional northern cooperation in boosting the economic growth of developing countries from SSA. It also aims to measure the potential effect of South FDI enhanced by trade with other developing countries, in stimulating the national business environment, by attracting more FDI flows for diversified partners.

We shall use a time series data analysis for this study, to analyze whether there is a significant relation between Sub-Saharan African countries' GDP annual growth rate and the southern flows of trade and FDI in the host country, from 1995 to 2016/2017. The Data are collected from different sources and databases, in annual basis, so we have sixteen (21) observations for this study.

4.4.1) Dependent variable

- ❖ “g” represents the growth rate of Gross Domestic Product (GDP). We use time series data, collected on an annual base, from the WDI database from 1995 to 2016, for a period of 21 years.

4.4.2) Independent variables

Our model requires two main independent variables:

- ❖ “**SouthTRD**” is the trade as the sum of exports and imports of goods and services expressed between developing southern economies, identified as a ratio of the GDP. The data are collected from different data bases, from OECD stat and WDI and calculated following the methodology below:

$$\text{SouthTRD} = (\text{Total TRD} - \text{OECD TRD}) / \text{GDP}$$

- ❖ “**South_FDI**” is the Foreign Direct Investment flows, mainly in terms of inflows, between southern economies, expressed as a ratio of GDP. The data are collected from OECD stat, UNCTAD and WDI data bases, then calculated with the following methodology:

$$\text{SouthFDI} = (\text{Total FDI} - \text{OECD FDI}) / \text{GDP}$$

There are also other independent variables used to make our model more robust, and meant to measure the strength and consistency of the effect of Trade and FDI in our research:

- ❖ “**HC**” is approximated by using the school enrollment at secondary school as percentage Gross. The data are collected over the period estimated for the research from the WDI database.
- ❖ “**GFCF**”, which is the Gross Capital Fixed Formation, represent the domestic investment of the host country, and it is expressed as a ratio to the GDP. The data are extracted from the WDI database.
- ❖ “**G0**” is the initial stock of GDP. The data were extracted from WDI database and it is expressed in logarithm of the constant value.
- ❖ “**IRT**” is the inflation rate. We choose the to use the annual rate of inflation expressed in GDP deflator, extracted from the WDI.
- ❖ “**GC**” represents the Government Consumption, expressed for the purpose of the research as a percentage of GDP. The data were collected from the WDI database.

4.4.3) Other independent variables: interaction variables

The model uses some interaction variables, to weight the coupled effect of the interaction between some independent variables:

- ❖ “**FDITRD**” represents the interaction of South FDI with South Trade. The data are calculated by multiplying the values of the interactive single independent variables.
- ❖ “**FDIHC**” measure the interaction between the single variable HC, multiplied by the South FDI.

- ❖ “**FDIGFCF**”/ “**FDIK**” represents the interaction between the domestic investment (GFCF) and the Foreign Investment (South FDI).

4.5) Method of data analysis

For the purpose of this research we will use a quantitative approach. We will assess the relationship between the dependent variables, mostly the FDI and trade flows of southern countries share with developing countries of Sub-Saharan Africa, and the economic growth of the related economies. In that regard, we will use an econometric model testing the combined effect those specific variables using a three stage least squares regression model.

4.5.1) Seemingly Unrelated Regression (SUR)/ Three Stages Least Squares (TSLS)

The SUR estimates regression model is a generalized linear regression model of a system of several equations, each equation using a standard Ordinary Least Squares (OLS) approach, proposed by *Arnold Zellner* in 1962. Each equation uses its own dependent and explanatory or independent variables, using a simple linear regression model.

For the purpose of this research, our model will use a Three Stages Least Squares (TSLS) approach, which consist in a system of three independent equations, using the research variables. Each equation represents a stage of the global period of the study and the variables are expressed in terms of average of the period as following: (1) 1995-2000; (2) 2001-2008; (3) 2009-2016.

We acknowledge that the SUR model and TSLS approach allows for each equation some errors variances and also permit to overcome potential biases related to the endogeneity problems between FDI and economic growth.

Our model uses a multiple regression equation defined as following, with the variables presented above:

$$g = a + b1FDI + b2TRD + b3HC + b4K + b5G0 + c1FDIS * TRD + c2FDIS * HC + c3FDIS * GFCF + d1IRT + d2GC + e$$

The correlation between the different variables and the main dependent variable will be tested with a system of equations, and at three different stages with:

- ❖ (1st) stage of main single independent variables: Human capital (HC); domestic Investment or GFCF; Trade openness to the southern developing economies (TRDS); Foreign Investment from other developing countries to the host economies (FDIS) and the initial level of per capita GDP turn to its natural logarithm($\ln \text{GDP}_{c0}$);
- ❖ (2nd) stage to assess the correlation of the combined independent variables with the FDI, on the Per capita GDP growth rate: the combined effect of FDI and Trade (FDISTRD), of FDI and the level of Human Capital (FDISHC) and the correlation with the FDI coupled to the domestic investment (FDIGFCF);
- ❖ (3rd) stage involves the macroeconomic policies effect of the host economies which could interact with the FDI and trade impact on the economic development, such as the Inflation rate (IRT) and the Government Consumption.

CHAPTER FIVE: EMPIRICAL RESULTS, DATA ANALYSIS AND INTERPRETATIONS

5.1) Introduction

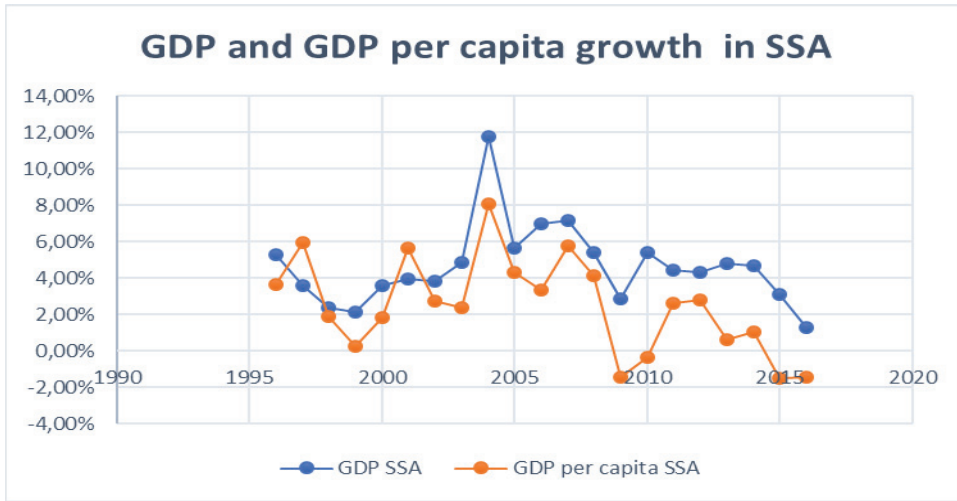
This chapter discuss the empirical results and main findings, regarding the hypotheses formulated for our research. As a reminder, we attempt to analyze the effects of trade and FDI share between developing countries from the southern world, to the growth of Sub-Saharan African economies. Then, we will evaluate the results of econometric and statistical assessments along with the initial research questions.

5.2) Descriptive statistics

Our model refers to one dependent variable, which is the per capita GDP growth rate, used to approximate the economic development of the economies investigated. The variable measures the evolution of the economy at an individual level, which corresponds to the global level of an economy (GDP) as perceived depending to the volume of the population. we measure the interactions between the different variable independent variables (Human Capital, Domestic Investment, Trade openness, Foreign Investment, Inflation rate or Government expenditure) with the per capita GDP growth rate of our sample.

The following statistics reveal the general trends of the main dependent and independent variables under the evaluated period for our sample.

Figure 10: Sub-Saharan Africa GDP and per capita GDP growth (1995-2015)

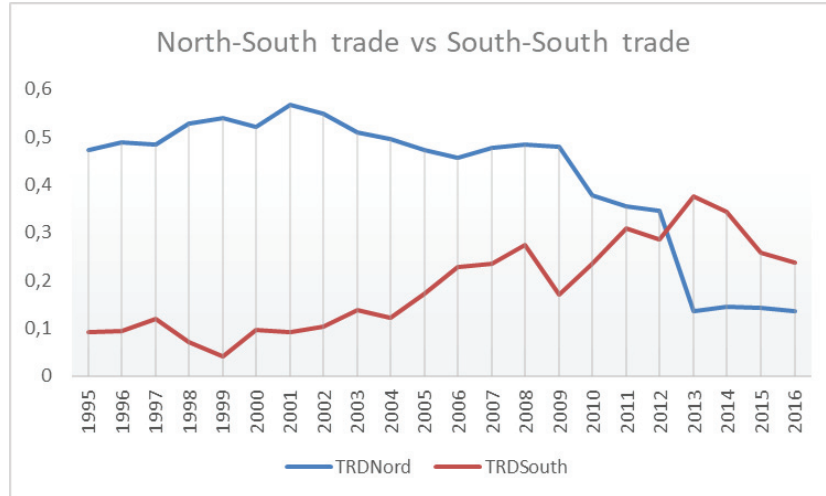


The regional economy was strongly hit since 2005 after a five years important growth, since, the value of per capita GDP has been continuously declining without any sign of improvement, shrinking to a negative performance of -1.42% growth by 2016.

On the other side, the South-South trade has shown impressive growth over the related period. Indeed, thanks to the rapid development of emerging southern economies, the South-South trade has been considered as the promising trend to assist to the economic boost of other developing countries. Sub-Saharan Arica has been one of the most targeted regions for the investment flows of the global south, benefiting to the increase of exports towards other economies, which allowed the region to experience a significant structural transformation on its economy. AS observed in the graphic below the OECD developed economies shows an opposite trend comparatively to the developing Southern flows of trade which tremendously increase to the extent that they oversized the North-South trade after 2012 with a share about 40% to the GDP of the countries by 2013, compare to about 10% share of the GDP for the OECD trade. On the other hand, it also shows a very small share of the Southern flows in the region GDP.As a matter of fact, looking at the different periods selected for the study, it results that the most important growth of trade openness/ share of trade in the GDP occurred from

1999 to 2008, respectively from 4% to 27% share which relate to a 203% growth, while it only grew by 23% on the late period after 2008.

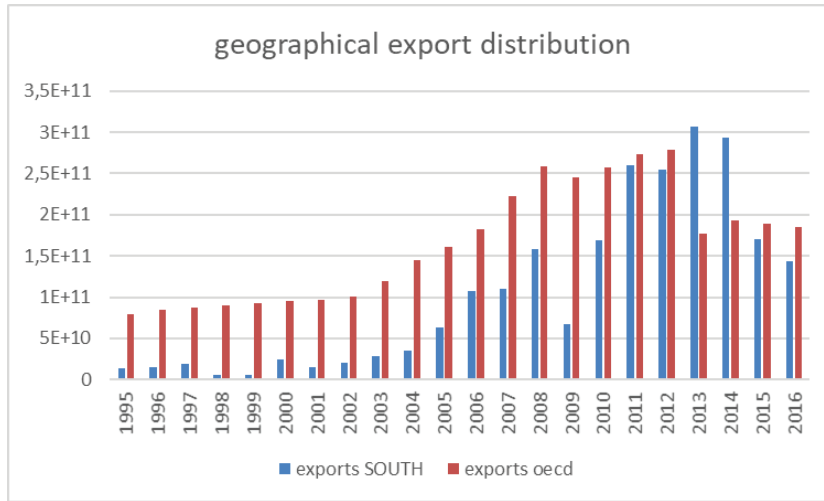
Figure 11: Evolution of North-South VS South-South trade in SSA (1995-2016)



Thus, especially considering the structural deficit of the balance of Payments, characterizing most of the countries in that region. Along with such trend, the OECD²⁴ reported that the increasing participation of developing economies to the global share had significantly contributed to the maintain of most of the weak economies of the South during the financial crisis of 2007 to 2008. Such transformation seems to be the result of rapid export growth of 85% of other developing economies to SSA, after 2008, catching up with the OECD countries flows were slowing down of the export flows (-28%). Moreover, with \$3,06E+11billions in 2013 the South-South trade volume topped the OECD flows, but decreased from 2015 to \$1,69662E+11 billions. However, the trend of the southern flows still appears to be lower in average value compared to the northern OECD trade flows.

²⁴ Mohammad A Razzaque and Laura Gosset; "Trading with the Rising South: Challenges and Opportunities for SubSaharan Africa", page 1; <https://www.oecd-ilibrary.org/docserver/5jxt2tzvzq26-en.pdf?expires=1540990938&id=id&acname=guest&checksum=3EB787F0AA3126DA0D3D4FFD036776F8;> 2014

Figure 12: evolution of developing south VS developed OECD to SSA (1995-2016)



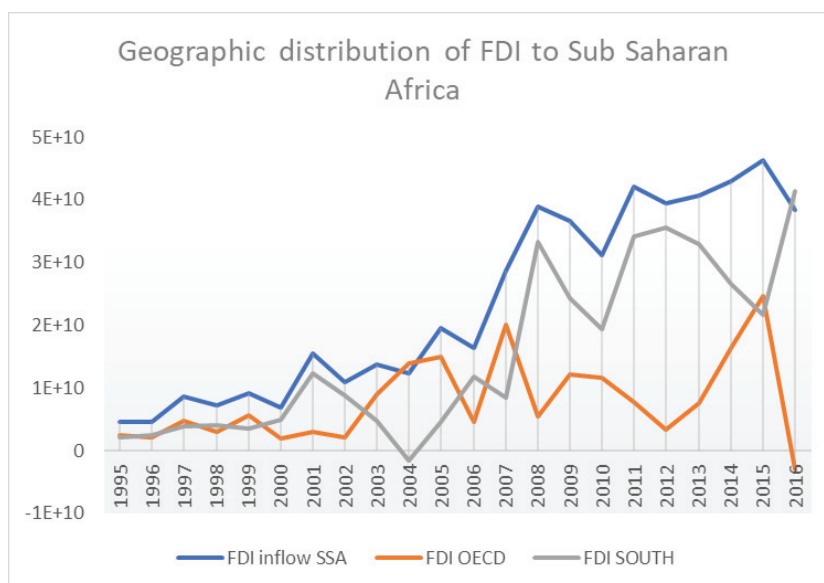
The above observations suggest that the rapid growth of south-south trade may have contributed to the GDP growth of the economies over the period of the study, especially after the financial crisis when the developing economies flows oversized the OECD developed countries’ trade. Nonetheless we may expect a significant impact on the growth of the SSA sample, as a reason of the increase in trade openness from the early 2000s to 2008, when we noticed the more significant growth of the volume of trade.

Thirdly, in terms of investment, the African region share of Foreign investment from southern regions has reached the level of 25%, only from the BRICs countries, during the late years and despite a slice shrink, most of the economies in SSA (South Africa, Nigeria, Sudan, Zambia, etc.) were getting increasing high investment flows and projects mostly related to services and manufacturing activities²⁵; and China has been the main aid provider and investor from the South to African countries(with \$75US billion). The flows provided to SSA countries from developing countries tremendously increased over the past decades and the region received a higher volume of investment from other developing economies from the South than the developed economies, here relating to the

²⁵ Mohammad A Razzaque and Laura Gosset; “Trading with the Rising South: Challenges and Opportunities for SubSaharan Africa”, page 5; <https://www.oecd-ilibrary.org/docserver/5jxt2tzvzq26-en.pdf?expires=1540990938&id=id&acname=guest&checksum=3EB787F0AA3126DA0D3D4FFD036776F8;> 2014

OECD countries. It turned out that the FDI flows provided by the South oversized drastically the volume of OECD Foreign Investment after 2007 with a growth of 153% (2008-2015) compare to only 22% growth for the OECD members.

Figure 13: Distribution of South and OECD FDI to SSA (1995-2016)



Thus, the impact of FDI on the economic growth of the sample should then be significant after 2007, yet starting from 2004, based of the above graphic and observations.

Following the previous descriptive analysis of the raw data of this research, here below are the key descriptive statistics of the above variables:

Table 2: Descriptive statistics

variable	Mean	Standard deviation	Minimum	Maximum	observations
GDPc	2.47	5.406	-8.782	44.591	120
lnGDPc0	6.88	1.02	5.403	9.696	120
GC	14.39	8.527	0	73.699	120
GFCF	20.37	16.553	0	170.896	120

IRT	26.31	134.02	-4.368	1289.393	120
FDIS	0.043	0.101	-0.205	0.813	120
TRDS	0.28	0.9801	-8.107	2.966	120
HC	36.57	21.28	5.564	93.580	120
FDISTRDS	0.022	0.197	-0.795	1.921	120
FDISHC	1.52	4.089	-13.192	29.472	120
FDISK	1.96	11.19	-4.80	121.013	120

Most of the data provided by African countries appear to be either incomplete or less reliable. Therefore, for the above variables, the high level of standard deviation for some variables is a consequence of, first the difference of level of development within the region and also related to the macroeconomic environment of these countries, especially during the 1990's, when most of them experienced heavy indebtment and were under structural adjustment programs. That must explain the standard deviation coefficient of the Inflation rate, which has been extremely high for most countries in the SSA region during the 1990's and following their independence. Hence, this explain the standard deviation coefficients observed here, for the variables.

5.3) Correlation Matrix Results

The table describe the cross interaction between the variables. According to our observation, it reveals that:

- **(Finding 1)** The **per capita GDP growth** (GDPc) is significantly and positively related to the domestic investment (0.63) represented by the Gross Fixed Capital Formation (GFCF). It also shows an average positive interaction with the Foreign Direct Investment delivered by southern economies, with a coefficient of 0.45, while affecting also the different combined variables to the FDI: FDIS*TRDS (0.65); FDIS*HC (0.51) and especially highly correlated with the combined effect of FDI and the domestic investment for the host economy FDIS*K(0.73). With a low coefficient of correlation of 0.06, the Human capital is positively related to the GDP

per capita growth, however its effect might be insignificant. On the contrary, the Trade seems to have only a slight but rather negative impact on the evolution GDP per capita growth (-0.027), together with the Government consumption (-0.086) at the same level as the inflation rate with a coefficient of 0.03. We are expecting similar statistical results for our estimation test.

- **(Finding 2)** The **Domestic investment**, here the GFCF, appears to be positively and significantly correlated with the level of foreign investment (0.50) and the trade (0.40) which appears significant but with a lower influence. Therefore, due to its high correlation with the FDIS, it results in a significant correlation with the combined terms FDISTRS (0.81), FDISHC (0.59) and FDIK (0.87). This suggests that we can expect a positive and significant impact of the domestic investment of the countries for our estimation model when related to their economic development over the period.
- **(Finding 3)** the **Foreign investment (FDIS)**, is only highly and significantly correlated with the other variables paired with FDI. It shows a positive but almost null correlation with the trade TRDS with a coefficient of 0.01. While, the **Trade (TRDS)**, share a significant correlation with the combined term FDISTRDS (0.52) and less important with FDISK (0.26).

The above findings suggest that half of the variables share a significant interaction together, which may result in an average chi square for the estimation. In fact, the model appears coherent for most of the variables with the data collected, which supports a certain confidence in the expected statistical results of our study. The three-stage least squares estimation model will balance the errors related to the estimations and low correlation among the variables.

Table 3: Correlation matrix

```
. correlate GDPc lnGDPc0 GC GFCF IRT FDISs TRDSs HC FDISTRDS FDISHC FDISK
(obs=120)
```

	GDPc	lnGDPc0	GC	GFCF	IRT	FDISs	TRDSs	HC	FDISTRDS
GDPc	1.0000								
lnGDPc0	0.1010	1.0000							
GC	-0.0866	0.0490	1.0000						
GFCF	0.6328	0.2847	0.1278	1.0000					
IRT	-0.0322	-0.0121	-0.1312	-0.1126	1.0000				
FDISs	0.4565	-0.0817	0.0199	0.5047	0.0211	1.0000			
TRDSs	-0.0274	0.3853	0.1731	0.4015	0.0225	0.0102	1.0000		
HC	0.0622	0.4968	-0.0175	0.1620	-0.1331	-0.0285	0.1089	1.0000	
FDISTRDS	0.6525	0.1702	0.0531	0.8138	0.0035	0.4551	0.5211	0.0521	1.0000
FDISHC	0.5144	0.0006	-0.0069	0.5964	-0.0294	0.9500	0.0779	0.1229	0.5732
FDISK	0.7356	0.0905	0.0119	0.8735	-0.0196	0.6626	0.2553	0.0413	0.8867

	FDISHC	FDISK
FDISHC	1.0000	
FDISK	0.7453	1.0000

5.4) Empirical results of the impact on the economic growth

Our study seeks to assess the impact of the South-South trade and South-South FDI between developing countries, on their economic growth, here approximated by the per capita GDP growth. we focused on the developing region of Sub-Saharan Africa for a total of 42 countries.

5.4.1) General assessment from 1995 to 2016

The three least stage square regression analysis permit to assess the influence of these two main independent variables, when interacting with the other variables; depending on the effect of the paired variables and macroeconomic conditions of the host economies. The test is realized using the average values of the three periods identified and per country. The tables below summarize the results of the assessment.

Table 4: Three Stages Least Square regression / Seemingly Unrelated Regression

Dependent variable				
GDP per capita growth (GDPc)				
Independent variables	1.0	(1st) stage 1.1	(2nd) stage 1.2	(3rd) stage 1.3
FDIS	18.41 (1.51)	14.89*** (3.82)	13.951*** (3.68)	13.554*** (4.19)
TRDS	-2.747*** (-5.82)	-1.215*** (-3.02)	-1.813*** (-5.11)	-1.924*** (-5.25)
GFCF	0.040 (0.90)	0.121*** (5.57)	0.259*** (2.61)	
HC	0.0098 (0.52)	-0.0037 (-0.36)		
Constant	-2.778 (-1.17)	-4.163 (-1.62)	-4.136* (-1.95)	-4.196* (-1.94)
lnGDPc0	0.717* (1.87)	0.58 (1.48)	0.839*** (2.72)	0.917*** (2.92)
FDISTRDS	18.40*** (3.81)		10.759*** (6.95)	13.20*** (8.31)
FDISHC	-0.528 (-1.60)		-0.017 (-0.29)	
FDIGFCF	0.102 (0.94)		0.003 (0.14)	
IRT	-0.001 (-0.46)			-0.0001 (-0.30)
GC	-0.046 (-1.26)			0.0016 (0.19)

(1.1) R^2 : 0.4459; (1.2) R^2 : 0.5527; (1.3) R^2 : 0.5577; (1.0) R^2 : 0.6636

“t” value is in parentheses

*Significant at the 10% level of confidence

**Significant at the 5% level of confidence

***Significant at the 1% level of confidence

The econometric assessment reveals that the Foreign Investment and Trade are strongly correlated to the per capita GDP growth rate over the period, at 99%, the first level of confidence and at each stage of the estimation equations. The detailed evaluation shows that FDIS interacts positively and at a very significant level to impact the evolution of GDPc during the research period with a coefficient range of 13 to 14 and a “T” value varying from 3.68 to 4.19 over the different stages of estimation. While South-South Trade (TRDS) as expected from the matrix of correlation, entertained a strong significant but marginal negative influence on the dependent variable with a coefficient varying from -1.21 to -1.92 and a “T” value range of -3.02 to -5.25.

At the same time, the domestic investment also plays a role of driver of economic growth of the SSA region during the period. The explanatory variable shares low indexes of correlation, respectively 0.121 and 0.025 at the first and second stage of regression. Nonetheless, despite small coefficients, the high values of “T” (5.57 and 2.69 at the 1st and second stage of estimation) for the domestic investment appears strongly significant to boost the level of per capita GDP growth of the economies, through the level of capital stock.

Other variables, related to the macroeconomic policies, such as the level of government expenditure and the inflation rate appears to be ineffective and statistically insignificant for the economies to alleviate their growth via trade and FDI. Indeed, the inflation rate coefficient (-0.00016) is negative, while despite a positive value (0.0016) of the Government expenditure, but negative at the initial stage (-0.046), both of the variables indicate very small and almost null correlation with the other independent variables and especially with the per capita growth of GDP. Regarding the “T” values, respectively -0.30 and 0.19 for the inflation and the government consumption, it results that

these variables are statistically more expected to impede and highly constraint the development of the region.

The interaction between FDIS and other independent variables, seems to positively affect the economic growth of these countries. Due to the high coefficient of correlation of FDI, the combine policy of Trade and FDI (FDISTRDS) reveals a positive and high correlation with the economic growth, with a strong impact according to the “T” value of 3.81 in the initial stage of estimation. Other combined terms are not consistent with the FDI and reveal a negative effect and insignificant influence for the economic growth.

5.4.2) Assessment per period

The approach per period apply the TSLS approach for the variables in each period, but the variables are not expressed in average value in order to get sufficient observations. We only present the results of the initial stage regression because of the low R squared value of the different stages.

Table 5 : Ordinary Least Squares per period

Variables	1.1	1.2	1.3
	1995-2000	2001-2008	2009-2016
lnGDPc0	-0.891 (-0.97)	1.01*** (2.67)	-0.326 (-1.19)
FDIS	-8.211 (-0.26)	-20.06*** (-2.62)	2.721 (0.32)
TRDS	-0.041 (-0.11)	0.920*** (2.61)	0.218 (0.63)
HC	0.009 (0.22)	-0.027 (-1.60)	0.013 (0.94)
GFCF	0.29*** (5.88)	0.106*** (3.34)	-0.007 (-0.22)
FDISTRDS	2.311	-3.744*	-0.552

	(0.29)	(-1.76)	(-0.29)
FDISHC	0.954 (0.88)	0.217 (1.41)	-0.133 (-0.65)
FDISK	-0.271 (-1.10)	0.478*** (4.50)	0.184 (0.82)
GC	-0.263*** (-2.87)	-0.117** (-2.56)	-0.019 (-0.86)
IRT	0.0002 (0.13)	0.0048 (0.25)	0.063** (2.61)
Constant	6.833 (1.20)	-4.30* (-1.85)	3.28 (1.70)*
<p>(1.1) R²=0.260; (1.2) R²=0.307 ; (1.3) R²=0.039</p> <p>“t” value are in parentheses</p> <p>*Significant at the 10% level of confidence</p> <p>**Significant at the 5% level of confidence</p> <p>***Significant at the 1% level of confidence</p>			

The periodical approach reveals that the estimations are only reliable for the second period from 2001 to 2008. The variables are not consistent with the model for the other periods of analysis. In fact, almost none of the variables are significant for the growth of our sample as revealed by the analysis.

For the second period, all the variables are significant for the growth except the level of Human capital and the inflation rate with share a weak and/or negative correlation with the GDP per capita growth. The South Trade is positively correlated with a small coefficient but it is highly significant. While the FDIS reveals a negative impact and its coefficient is significant at 99% level of confidence. Additionally, the domestic investment (GFCF) is also significant (99% confidence) with a coefficient of 0.106. Then the Government consumption with a T value of -2.76 is significant at 95% confidence

level, but it shares a negative impact on the economic growth. Another remark is that combined terms of FDIS with the domestic investment (GFCF/K) and TRDS are highly significant, although a negative effect generated when combined with trade (FDISTRDS= -3.744) because of the single impact of southern flows of foreign investment.

Consequently, the findings of our estimation test mainly result of the assessment of the second period, when we observed the most significant increase of flows of Trade in terms of volume but also in terms of growth as explained with the description of the independent variables on the previous point. Either way, this tends to confirm the significant role of south-south trade in contributing the economic growth of our sample; while supporting the boosting effect of foreign investment in increasing the level of domestic capital and alleviating the production capabilities of these economies when combined with trade, especially export from the developing economies.

5.5) Analysis and interpretation of the results

Relying on the above results, we can formulate some conclusions concerning our initial hypotheses. Our hypotheses were presented as following:

- ❖ **Hypothesis 0**: South-South trade and FDI do not have a positive nor significant impact on the SSA economic growth
- ❖ **Hypothesis 1**: South-South trade and FDI have a positive and significant impact on the SSA economic growth.

The results of our investigations, partially validate the Hypothesis 1, about the expected and verified positive and significant impact of the South-South FDI. However, the statistical results invalidate the impact of South-South trade as driver of economic development. Indeed, if there is a strong correlation existing between the two variables, it appears negative, which means that such trade must rather cause a shrink of the GPD per capita than promote its rise. In fact, the investment, whether it is a domestic one or the foreign investment seems to boost significantly the growth of such economies and a main determinant of the economic development, contributing the capital accumulation of the economy based on the growth theories. This, despite the macroeconomic

environment of these economies, talking about the high inflation rates and high level of government consumption which generally increase the debt level of these economies and tend to reduce their savings and investment capabilities.

However, such suggestions must be reinterpreted into a proper context. In fact, considering the background of the African economies, they are mainly affected by an important structural BOP deficit, when it comes to the trade situation. Hence, most of them are experiencing low level of growth and lack of diversification as well. The South*South trade pattern is mainly led by China 's development and import demand growth from African developing countries. Therefore, considering the late slowdown in terms of trade flows with these economies, the decline in trade flows will largely affect the trade openness variable of these countries as observed in the late period either for the GDP per capita growth which turned negative, or the shrink of trade volume after 2014. This, could be the reason of the negative per capita GDP growth in 2015 and 2016. This means that for the South-South trade to be effective, a higher volume would be expected with these countries to consistently affect their economic growth. One of the reasons, is that, despite the growing trend of prospects for South-South trade over the past years, the northern economies are still leading the trade pattern of the developing African economies, in terms of volume. Europe and United states still appear to be on top ahead China, on the top trading partners of the economies. Then, acknowledging the financial crisis in 2007-2008, it has severely affected the trade of developed countries towards developing countries, as well as their investment flows. Moreover, as observed in the figure below, the region is facing a decline in trade volume and comparatively to the others economies it was the largest counter-performance (-20%). As a matter of fact, China was reported to be the second most contributor to the collapse in global volume of trade to the developing economies.²⁶

²⁶ UNCTAD ; *Key Statistics and Trends in International Trade*, 2017 (chart 3, p10); https://unctad.org/en/PublicationsLibrary/ditctab2017d6_en.pdf

Figure 14: trade to developing countries (2015-2016)

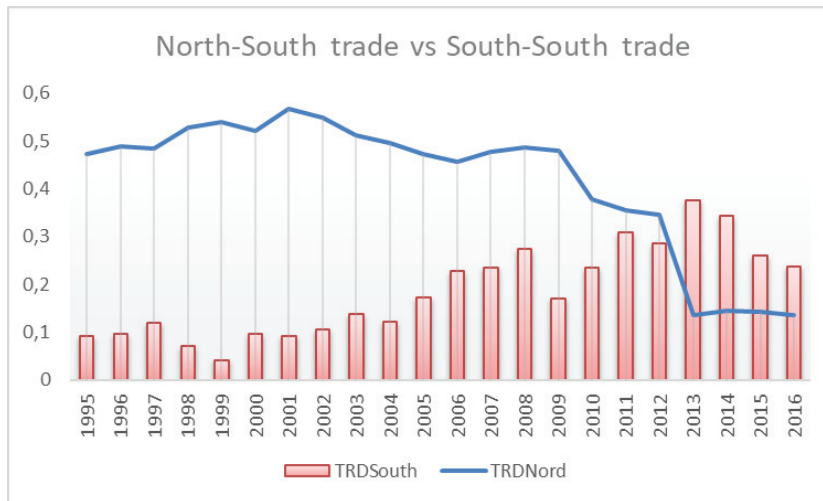


Source: UNCTADstat, 2017

These reasons could explain the negative and unexpected effect of trade towards economic growth, especially in African economies which highly depend on trade. However, due to the important deficit of their BOP, their economies will be affected necessarily by an important volume of trade, as a condition to boost the growth, but due to the current level of South-South trade, we must not always expect that positive impact, considering that the share of South-South trade was only higher than the OECD North-South trade after 2012 till 2016. Some previous researches (Hussain,1999; Perraton, 2003)²⁷ also provided literature and supported the role of the “BOP constraint growth effect” for the development performances of SSA. Thus, despite the 85% export growth with South-South trade after the financial crisis, the important BOP deficit might have only been marginally reduced and not significantly enough to positively support the growth of their economies.

²⁷ Alberto Bagnai, Arsène Rieber and Thi Anh-Dao Tran; “*Sub-Saharan Africa’s growth, South–South trade and the generalised balance-of-payments constraint*”,2015; <https://watermark.silverchair.com/>

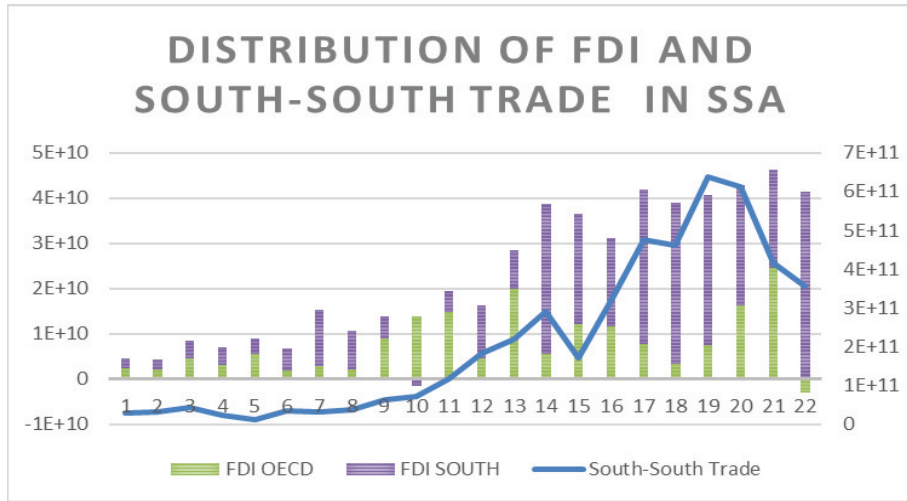
Figure 15: South-South Trade VS North-South trade to SSA (1995-2016)



The figure above also shows an important feature of the South-South trade during the past years, which is not only the positive and fast growth, but the weight of such pattern compared to the traditional North-South pattern, accounts for the smaller share during that period. Which denotes a relatively low significance of the south-south trade, which might consequently affect its implication to the economic development of SSA.

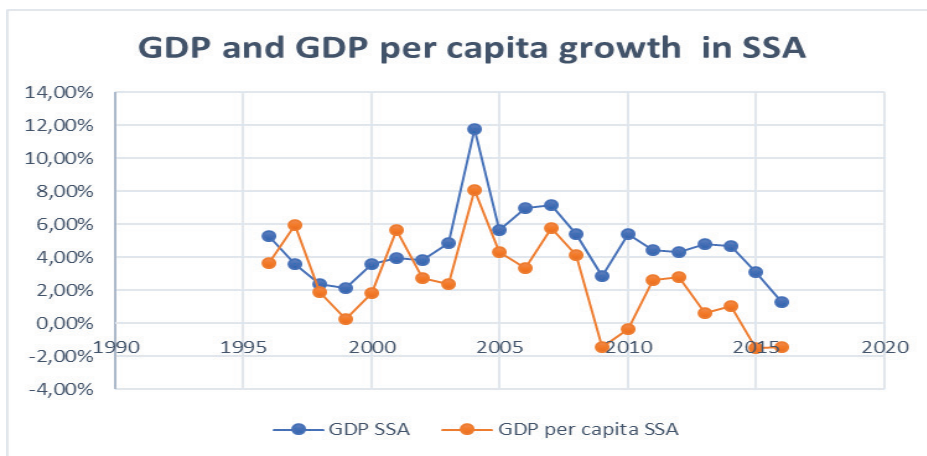
Nonetheless, in addition to this finding, it turns out that the FDI received by those countries from others developing countries was beneficial to enhance further growth. In fact, considering the high correlation of FDI, a combined policy of trade openness with foreign investment increase from southern powers were highly significant in boosting their economic development, to the extent that it might have contributed in balancing the small impact of South-South trade. For reminder, the southern flows observed show a lower growth in the late period of the study, compare to the growth noticed from the early 2000s to 2008. Therefore, the rise of South FDI after 2008 favor an overall “**balance effect**” of the two inputs over the period. Then it suggests that a dual openness of these economies southern FDI and trade flows is favorable to significantly cause their growth. Moreover, the rapid and massive increase of southern FDI flows after the financial crisis contributed to compensate the small investment allocation of OECD donors(cf graph below).

Figure 16: Distribution of FDI from OECD and SOUTH to SSA (1995-2016)



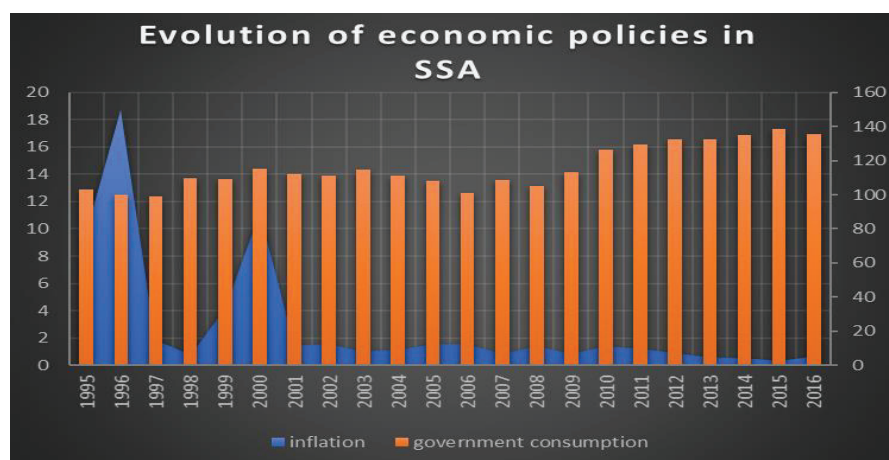
On the other hand, we observed a decline of the GDP per capita growth for the region over the past decade. Thus, the negative coefficient of the South-South trade does not suggest automatically the weakness of the South-south trade potential effect but rather, taking into account its high significance, the influence of other internal factors and domestic economic conditions, either than only the volume of trade generated. We could refer to the macroeconomic conditions, such as inflation rate, tax policies and heavy domestic indebtment.

Figure 17: GDP per capita and GDP growth, Sub-Saharan Africa (1995-2016)



The above graph shows a decline of the GDP per capita growth since 2004, with a downturn during the last years 2015 and 2016 after a severe drop from 2008 post financial crisis. At the same time our suggestions are consistent with the overall high level of inflation rate of the economies in average, especially during the early period from 1995 to 2001, when we could observe a regulation of their rates, yet still fluctuating under 13% average share of the countries but more likely less than 5% in the recent years after 2012. Such level of inflation is significant enough to diminish the level of individual revenue as the per capita GDP. Meanwhile, as shown in the graph below, the level of government consumption remains high in general with a range of 12% to 18% share over the period, which is important enough to generate public indebtment and reduce the domestic savings which will be allocated for public purpose and not necessary to be invested for their economic development.

Figure 18: evolution of Inflation and Government Consumption in SSA (1995-2016)



From a periodical perspective, the results of estimation appear consistent only for the second period of 2001 to 2008. Indeed, the most important growth was observed during that period especially for trade and the domestic capital stock combined with the external foreign capital flows although negatively correlated, because of the low volume of southern FDI and the government consumption were favorable to the growth. The inflation rate and the human capital remain without significance for their development. However, we can notice a positive impact of the FDI in boosting the domestic capital stock and the trade volume to promote the growth of the economies during the period. Such

results support a potential balance effect of the combination of South-South trade and South-South FDI in promoting the growth of those economies.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

The recent global economic development has emphasized the South-South cooperation as a new trend of development, especially for the weak economies. Indeed, the promotion of South-South cooperation has lately been one of the most important debate concerning the future perspectives of development, as a favored approach to achieve more sustainable economic growth for the developing world. In fact, along with the new development goals (SDG's), the south-south cooperation appears as of the most favored strategy to target the needs of Sub-Saharan and African economies in general. Then, the recent trends of the southern countries from ASIA, Latin and South America and South Africa on the African, with the BRICs countries, leading the global change of trade and investment trend, while outstanding the North-South traditional pattern toward other developing economies, conducted to the promotion of the global South as major driver of the economic growth for the third World. As a matter of fact, the south-south strategy has been supported by the African Union on its Agenda 2063²⁸, in order to promote strategic partnerships with southern emerging aid providers for an Africa more prosper development.

Our research aims to evaluate or assess the potential impact of the south-south cooperation approach on the economic development of the African economies, especially of the Sub-Saharan African region. This research is our contribution to the current debate opposing the North to the South in terms of best development provider. To go into details, the south cooperation involves different fields mainly approximated through the South-South trade and investments which has been the main flows recorded among developing countries. Then, this study particularly assessed the South-South cooperation impact through the South-South Trade and South-South foreign investment effect on the economic growth of Sub-Saharan African economies. We focus on the period of 1995 to 2016, based

²⁸ UNOSSC; "South-South Cooperation in the Context of Agenda 2063 and the 2030 Agenda: an African Dialogue on the APRM Experience", 2018; <https://www.unsouthsouth.org/2018/05/15/south-south-cooperation-in-the-context-of-agenda-2063-and-the-2030-agenda-an-african-dialogue-on-the-aprm-experience/>

on the availability of the data and the recent developments of the South-South cooperation, regarding African economies. Particularly, this study sought to respond the following questions:

- Is the South-South approach a better strategy to promote the development of African economies?
- How does the South-South cooperation strategy can promote a more sustainable economic development of the SSA countries?
- How and to what extend does the south-south trade and investment could affect the economic growth of SSA?

In this chapter we will synthetize the main findings of the study, then based on our analysis, we will suggest some propositions in order to contribute further to the improvement of the research field.

6.1) Summary of Empirical Findings

The main findings of this research have been discussed across the previous chapter with the analysis of the statistical results. In this section we will answer the research questions based on the empirical results and findings.

The results of the econometric analysis on the impact of South-South trade and investment reveals mitigated conclusions, concerning the nature of the effect generated on the economic development of our sample. In fact, the results approved the significant and positive correlation and impact of the foreign direct investment provided by southern economies to the region. However, concerning the South-South trade, it turned out that its effect has not been positively correlated to the evolution of the economic growth of the SSA economies, especially the per capita GDP growth. Although we found a strong correlation between the two variables and significant results, the relation was negative.

Nonetheless, despite the negative coefficient and considering the economic background of African economies, these findings must be mitigated for the purpose of the interpretation. As a matter of fact, since 2005, the GDP per capita growth has been declining and has lately faced negative growth

performances. Therefore, a negative correlation combined with a strong significance would rather suggest the non-implication of the South-South trade in this decline rather than have contributed to such trend. We must then consider the strong significance of the two variables and the importance of this correlation could suggest under different conditions, a better implication of the Southern flows to the developing economies. Moreover, knowing the difficulties experienced by SSA economies during the financial crisis related to their ties with the northern developed powers and looking at the stagnation of low growth recorder for the GDP per capita, and hence the GDP itself over the last decade; it's important to emphasize the fact that such high significance for the FDI and Trade, would be interpreted as the importance of the support delivered by the global south to African economies to face the consequence of the financial crisis of 2007, when the North-South flows were tremendously diminishing, in terms of investment as well as trade flows. Such observations are supported by the balancing effect of FDI combined with trade, suggested by our findings. Else, the recent negative growth coincides with the slowdown in aid provided by China and exports volume of the region, the main southern partner.

To conclude about the importance of the impact of South-South cooperation through the quantitative assessment of South-South trade and south-South FDI, both variables share a high significance to the GDP per capita growth of the Sub-Saharan African countries, positively for the FDI and negative in the case of this period for the trade. We, then conclude based on the above analysis about the high contribution of the global South to the economic development promotion of African economies, especially in their ability to support and maintain the developing world during the post-financial crisis period, by providing increasing investment flows and trade opportunities for export growth to release the BOP of the region.

6.2) Implications of Empirical Findings

The findings above recalled in the previous section, pointed out some challenges and considerations regarding the development of African economies and the prospects of the South-South Cooperation strategy for the developing countries. As pointed out by the results, trade and investment flows between developing countries hold a high and significant potential in impacting the economic

development of the economies in the SSA region. The investment has been positively approved as a key driver of growth for the developing SSA region, with the foreign investment enhancing and multiplying the effect of domestic investment as well as its ability to boost the domestic investment to support the capital accumulation led growth of those countries. A particular point has been raised in our analysis about the low level or volume of South-South trade, and similar observations are made concerning the importance of investment received by the region from other developing countries. Then, one evidence here emphasized by our study is the weak share of the South-South trade and South-South FDI to SSA in terms of volume and even within the developing South as observed on the analysis in the previous point, which might not be high enough to really manage to contribute significantly to the economic growth of the related countries. Then, one fear, is that the prospects are still very low for the African continent, according to the following projections.

Table 6: FDI inflows, projections by group of economies and region (2015-2018)

Table I.4. FDI inflows, projections, by group of economies and region, 2015–2017, and projections, 2018 (Billions of dollars and per cent)				
Group of economies/region	2015	2016	2017	Projections
				2018
World	1 921	1 868	1 430	1 450 to 1 570
Developed economies	1 141	1 133	712	740 to 800
Europe	595	565	334	-380
North America	511	494	300	-320
Developing economies	744	670	671	640 to 690
Africa	57	53	42	-50
Asia	516	475	476	-470
Latin America and the Caribbean	169	140	151	-140
Transition economies	36	64	47	50 to 60
<i>Memorandum: annual growth rate (per cent)</i>				
World	44	-3	-23	(1 to 10)
Developed economies	91	-1	-37	(5 to 10)
Europe	117	-5	-41	-15
North America	96	-3	-39	-5
Developing economies	9	-10	0	(-5 to 5)
Africa	8	-6	-21	-20
Asia	12	-8	0	-0
Latin America and the Caribbean	-1	-17	8	-5
Transition economies	-36	78	-27	(-20)

The African continent is suggesting to an important lack of investment and a structural deficit of the balance of the payments which constitute important constraints to their economic performance. The trade relying on the imports of primary commodities and raw materials, and fuels, the periodic crisis of commodities prices in early 2010s and oil crisis mostly affected negatively their economic growth. Such factors have affected the trade performances of the economies during the past years, even from the developing countries, especially led by China which trade share with Africa economies

is mostly primary commodities and fuels oriented. Then the recent drop of price commodities and oil crisis, reduced the terms of trade for African economies, which in such case led gains from South-South trade lower for SSA economies; In such case the export growth may not lead to a necessary increase in gains and then economic growth.

6.3) Recommendations

The evidences emphasized by the finding are addressing the general research question about the significance of South-South cooperation strategy in addressing the development needs of Africa and promoting a more sustainable economic growth.

The findings of this study suggest a significant impact of such approach to tackle the economic development issue of SSA, through FDI and Trade channels among developing countries, by encouraging further interactions within the third world. However, the large share of China in this trend seems to mitigate the actual outcome of such partnerships for those economies, considering the growth perspectives of China, currently slowing down and their dependence on primary sector-oriented trade. In such case, their terms of trade will remain affected by each price crisis of commodities or oil and else, the export growth driven by china's markets demand will be affected with negative returns to the SSA economic export-led growth. Thirdly, considering their structural deficit of BOP, the decrease in export will consequently generate more deficit, again constraining the growth performances. Regarding such issue, a **diversification of the partnerships** is encouraged to reduce the backside effect of the negative returns from a potential China's economic slowdown.

To prevent the low, even though significant effect of the trade and investment provided by the southern economies, the developing countries must face the issue of low volume of South-South trade and FDI. The recent economic forecasts for African economies, suggest new development strategy, the so-called **Triangular cooperation**. The Triangular cooperation framework is proposed as an alternative of the limits of South-South cooperation in term of quantitative significance and the North-South tradition model limited by the gap of development between the countries. This new framework suggests, to tackle the financial issue from the South-South cooperation and the structural divergences between the North and South, a collaboration between a northern developed country provider of the

cooperation , especially in terms of financial aspect, with the recipient country of the aid, which is generally the developing country; and a third party, the pivotal country from the emerging south to easily link with the southern developing country whom he share economic and financial environment similarities with and provide the technical assistance and knowledge development(multilateral Know-how) in regard to the enhancement of Human capital to sustain the effect of FDI received for better returns. The developing economies must look forward to increase the triangular cooperation trend to achieve more sustainable development.

6.4) Conclusion

The issue of economic development remains an important issue for the African economies, especially the Sub-Saharan Africa, often recorded with lowest world growth performances. The current development goals emphasizing the need of more prosperity, significant reduction of poverty, in addition to the sustainability, it is needed for those economies to properly address their challenges. In fact, from high level of indebtment, to high inflation, aggressive tax policies, governance management with important level of corruption or weak business environment... African economies must look forward not only for a better prospect of development, addressing its challenges at the first place from the recipient side to improve its economic environment to allow more positive prospects for their growth. From the donor side, economic growth is meant to be boosted by international trade and foreign investment. However, addressing this issue only from the south-south cooperation perspective has been revealed incomplete, though significant to influence the actual growth, returns from south-south cooperation seems too fragile and unstable to achieve sustainable returns. Then, we recommend from our observations, to strengthen the effect generated by the growing performances of the south, by combining their forces with the Northern traditional donors, under the Triangular Cooperation framework to compensate the lack of finance from the south while strengthening the knowledge sharing and spillover effects provided and facilitated by the similarities shared among developing countries.

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국문초록

본 논문은 소위 사하라 이남 아프리카 경제 개발에 대한 남남 협력의 효과를 조사한다. 이 지역에 세계에서 가장 가난한 국가들이 위치해 개발 도상국 간의 협력 증진이 대륙의 핵심 개발 전략 중 하나로서 전통적인 남북 개발 틀과 관련된 약점을 균형 잡기 위해 언급되어 왔다. 과거의 연구들은 무역과 외국인 투자가 경제 성장에 미치는 주요 역할을 강조했기 때문에 개발 도상국 간의 무역과 외국인 투자가 해당 지역의 경제에 미치는 긍정적인 효과를 평가하고자 한다. 투자, 물가 상승률, 정부 소비 및 인적 자본의 국내 수준을 고려하여 그 효과를 증대시킨다. 1인당 GDP 증가율은 1995년부터 2016년까지 22년간 사하라 이남 아프리카에 위치해 있는 22개 국가의 경제 성장을 연구에서 검토하였다.

본 연구를 통한 분석 및 평과 결과, 연구의 가설에 제시된 바와 같이 남남 무역과 직접투자가 경제 성장 또는 우리의 표본에 미치는 중대한 영향에 일관성이 있었다. 결과는 또한 다른 개발 도상국들이 제공한 직접투자와는 달리 무역의 부정적 역할을 보여줬다. 이러한 결과는 사하라 이남 아프리카 국가들의 고유한 취약성, 특히 정부 지출의 심각한 수준으로 인해 물가 상승률이 높고 부채 규모가 상당하여 경제 관리가 취약하다는 점이 해당 국가들에서 동일하게 보여진다. 반면에 대부분의 저개발국가들은 수십 년 동안 저축 적자 구조에 의해 제약을 받고 있다. 따라서 주로 개발 도상국 간의 무역량은 해당 국가들의 경제에 제한적인 영향을 미친다. 수출 증가의 결과로 무역 적자의 일부만 줄이는 정도의 기여만 하고 있다. 반면에 직접투자는 경제 성장뿐만 아니라 다른 경제 변수의 영향을 뒷받침하는 것으로 보이는데, 이는 낙수효과를 통한 무역 이익 외에 국내 자본의 축적을 증가시킴으로써 나타난다. 그러나 남반구 협력 체제 하에서 이 지역의 남남협력의 전망은 다른 지역에 비해 규모가 작은 경향이 있어 지역의 추가 성장에 대한 기대를 제한적이라 할 수 있다. 본 연구는 결론적으로 개발 도상국을 특징 짓는 재정 부족에 대처하면서 지속 가능한 발전을 보장하기 위해 남남 협력과 남북 협력의 약점을 대체 할 삼각형 협력을 제시한다.

실마리어: 남남협력, 개발, 저개발 국가, 사하라 이남 아프리카, 외국인 직접투자