The Impact of Chinese Foreign Direct Investment on Angola's Economic Growth

Flavia Darcy Ferreira Cabral, Na Ming, Dibonji Ndjansse S.R, Tchantchou Wague J.L

Abstract— China's economic evolution over the past year, two decades has generated Ripple effects in the world economy particularly in African continent .China-Africa relations are one that have been ongoing for centuries transcending to present day, however their investment and trade have mushroomed over the last 10 years. it's economic impact to the region is both huge and far fetching especially in the sub Saharan Africa with its biggest investments made in Nigeria, South Africa, Sudan and Angola. Chinese investment abroad though Foreign Direct Investment (FDI) and Angola Mode has subsequently increased especially in natural resources to satisfy it's growing demand of industrialization, the trade between China and Africa totaled to more than 50 billion in 2006 with Chinese companies importing oil from Angola and Sudan ,Timber from Central Africa and copper from Zambia, this particular kind of assistance has not been received well by the western politicians as they are worried China is conducting a new form of imperialism in Africa, however Chinese aid bares no political influence or pressure for political change, thus makes more lucrative deal. The growing mutual benefits have prompted the development of a new and stable partnership by offering aid without preconditions. China has therefore presented an attractive alternative to that of conditional western aid. In this context, it is of great importance to explore China's Foreign Direct Investment in Angola with the objective of understanding the barriers, regulation and economic environment of Angola and understand the impact of these historical phenomenon .The study analyzed the impact of Chinese foreign direct investment on Angola economic growth over the period of 2003- 2017. The Ordinary Least Square (OLS) of multiple regression method is the estimation technique that is being employ in this study to determine the relationship between Chinese FDI and Angola's GDP growth, the findings revealed that Angola economic growth is directly related to Chinese foreign direct investment and it is also statistical significant at 99% level which implies that foreign direct investment is an engine of economic growth. The paper recommended that government should liberalize the foreign sector in Angola so that all barriers to trade such as arbitrary tariffs; import and export duties and other levies should be reduced so as to encourage investors.

Index Terms—China; Angola ; Economic growth ; trade relations ; FDI

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Flavia Darcy Ferriera Cabral, Msc in International Trade, School of Economics, Hefei University of Technology, Hefei, China.

 $\mbox{\bf Dr. Na Ming}$, School of Economics , Hefei University of Technology , Hefei , China.

Dibonji Ndjansse Stephane Rodrigue, School of Management, Hefei University of Technology, Hefei, China.

Tchantchou Wague Johan Landry, Msc in international trade, School of Economics, Hefei University of Technology, Hefei, China.

I. INTRODUCTION

Bilateral relations of Angola-China are not limited to commercial practices. The economic cooperation, scientific, technical and cultural progress have come to a mutual trust environment. Enlargement and consolidation are the prospects today, the diplomatic success is unequivocal. The country's new Chinese ambassador Gong Tao in Luanda in 2019 said: "Angola is an important strategic partner for China in Africa in the context of bilateral economic cooperation". He also express himself during a meeting with Angolan journalists, said that relations between Angola and China have grown in recent years with the President João Lourenço taking part in the 2018 beijing summit of the Forum on China-Africa Cooperation . In the same way , Angola signed cooperation agreements with China to be among those countries which can benefit from the Silk Road Funds available to support projects.

In his view, cooperation between the two countries has achieved great success, with Chinese companies recovering and building 2,800 kilometers of railway line , 20,000 kilometers of roads , more than 100,000 houses , 100 schools and 50 hospitals in Angola. Angola is considered as a developing country and has grown sharply in recent years. Despite this growth, its Human development index (HDI) is still the lowest , and almost a third of its population is below the poverty line . It has a productive structure very dependent on the oil sector . A young but poorly qualified population and registers high asymmetries and regional inequalities . It is yet an extremely rich natural resource economy and has a high potential for growth , thereby exerting strong attraction over the FDI.

General objectives of this dissertation are to analyze, observe , survey and verify the impacts of Chinese intervention on the economic development of Angola , bring to the table the performance of Chinese Foreign Direct Investments in Angola's socio-economic and macroeconomic development focused on impacts, and gains from the results of relations and cooperation between the Angolan authorities and the Chinese authorities to date , notably from 2003 to 2017.

II. LITERATURE REVIEW

The existing literature on the impact of foreign direct investment (FDI) on economic growth does not present unanimous results. Some of these studies point to the fact that the FDI generates economic growth from technological progress and capital accumulation, which increases business

productivity and , consequently, growth. However, other studies object that the FDI is not always assumed to be a vector of growth. In fact, the FDI can create barriers and lead to an inadaptation of national enterprises, having a detrimental impact on the whole of the economy (with perverse effects on unemployment , bankruptcy of national companies and loss of sovereignty of the receiving country).

A. Studies that support the positive effect of FDI on economic growth

Wenjie Chen, David Dollar, and Heiwai Tanthe studied on China's outward direct investment in Africa between 1998 and 2012 the studies reveal that China's share of the stock of foreign investment is small, though growing rapidly, suggesting stronger incentives to seek profits in tougher environments. Borensztein, De Gregoria and Lee submit that FDI has been important in explaining china's economic growth. Tee Evans, Larbi Frank, Johnson Rebecca, studied the relationship between FDI and economic growth in Ghana for the period 1980-2012 using time series data, linear regression technique was applied using the yearly data to ascertain the effect of FDI on real GDP It was determined in the research that the FDI inflows to Ghana is a key driver for economic growth and development and that it does not only boost capital formation but also enhances the quality of capital stock in the country, recommending that Ghana should encourage improved domestic investment, re-visit the issue of local content requirement, ensure a stable government and invest in the most critical parts of the economy. That has coherence with work of Theophilus Okonkwo Okegbe, Raymond Asika Ezejiofor, Darlington Ifeanyi Ofurum the study revealed that foreign direct investment on financial sector has positive and significantly affected Gross Domestic Product in Nigeria, therefore conclude that inflow of FDI into the Nigerian economy for the stipulated period was a major contributor to economic growth of the nation Based on the findings, the researcher recommended among other things that Policy makers should devise strategies to increase the FDI on financial sector and offer incentive for long investing and listing on the stock market so that the main objective of the government to stimulate growth will be fulfilled. In case of Angola Kunietama (2014) on his research using econometric study on the relationship between FDI and GDP in Angola, in the period 1980-2012, testing the existence of cointegration between the time series. The estimations carried out revealed that the increase in the stock of FDI in Angola has contributed positively, albeit modestly, for GDP growth. He recommend for streamlining the required capital in foreign companies to invest in Angola, Reinvigoration and modernization of the tax system and Human capital formation in the strategic areas in Angola.

B. Studies that do not support the positive effect of FDI on economic growth

Matthias Busse, Ruhr they investigate the impact of Chinese activities in sub-Saharan African countries with respect to the growth performance of economies in that region and they fund that Chinese foreign investment and aid in Africa do not seem to have an impact on economy growth. Have investigated the presence of technological spillover of

foreign new knowledge through channels such as FDI using OECD country level data De la Porterie Lichtenberg found an insignificant effect from FDI inflows. With objective of contributes to the literature on foreign direct investment (FDI) and economic growth, (Herzer, Dierk 2010) investigated the impact of FDI on economy growth in 44 developing countries from 1970 to 2005, through heterogeneous panel cointegration techniques they find that the growth effect of FDI is negatively correlated with the volatility of FDI and dependence on natural resources.

C. Studies that support the conditional positive effect of FDI on economic growth

Blomstrom, Lipsey and Zegan reported that positive effect on economic growth, seems to be a threshold level of income above which FDI has positive effect on economic growth and below which it does not. The explanation was that only those countries that reached a certain income level that can absorb new technologies and benefit from technology diffusion and thus reap the extra advantages that FDI can offer. Previous works suggest human capital as one of the reasons for the differential response to FDI at different levels of income. Focuses on the characterization of the various dimensions of Foreign Direct Investment (FDI) and their impact on the Angolan economy and in Huambo province (Albino 2015) thought a quantitative analysis concluded that the Angolan GDP growth is positively affected by the stock of foreign direct investment made in Angola; that FDI affects negative and undesirably the flow of balance of payments; that FDI negatively affects the human development index (HDI) of Angola; that FDI is positively affected by the system and the country's political structure, indicating and showing the importance of political and social stability in foreign direct investment funding. The analyzes of different impacts of China on Africa, quantifies the advantages and disadvantages, and policy suggestions necessary to maximize the development impact of China. revealing that The correlation between countries' revealed comparative advantage and the intensity of trade with China is positive and fairly One overriding consideration is that reaping the full benefits from Chinese trade and investment will require substantial improvements in governance in African economies (Renard, M.-F. 2011). With goal of to weigh out effects (both negative and positive) of the Chinese investments in Africa Koumou, Manyi they applied countless studies both empirical and theoretical. The conclusion drawn at the end of this investigation was that far from being all negative, Chinese investments are setting the African economy on the road to achieving economy development. And they suggested that the harmonization and the improvement of Chinese investments in Africa should pass by the respect for rules dictated by the governments (institutions) and the respect for the international standards.

In another study Efiong Akwaowo, explores Foreign Direct Investment (FDI) and its effects on the economic growth in Cameroon within the period 2006-2011. On his purpose of understand the reason why increased FDI had not led to more economic growth in Cameroon , he used Aghion's endogeneity growth theory as a guide to data collection and analysis. The responses from the study showed inconsistency with the literature review and the belief that FDI generates

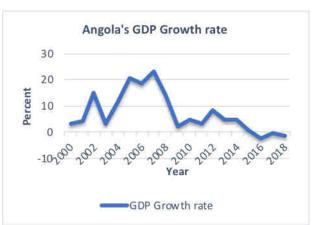
economic growth in the developing countries. The research participants believed that eco-political factors directly affect the economic growth in Cameroon. It was recommended that the country must improve its financial market by removing financial restraints that hinder Cameroon firms from getting into export markets.

III. OVERVIEW OF ECONOMIC GROWTH AND FDI IN ANGOLA

A. Angola economy

After a long period under colonization by Portugal (Ending in 1975), and a civil war (Ending in 2002) that completely destroyed the country, In the last decade Angola has been considered to have one of the fastest growing economies in the world with an average GDP growth of 8.68 % from 2000 until 2017, reaching an all-time high of 22.5% in 2007 and a record low of -2.5% in 2017.

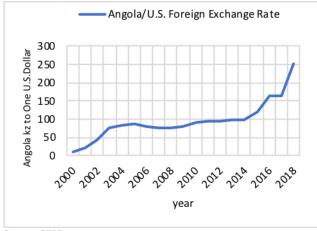
Figure 1 gives one the perspective that Angola began to develop rapidly from 2002 to 2011, a period marked by the Angolan post-Civil War and the Chinese investment in the country's reconstruction .The internal and external climate during this period facilitated economy growth .The slowdown since the second half of 2008 can be explained by the collapse of prices Oil and installation of the global financial crisis. Between 2012 and 2017 we can see that the long-term trend line is around 8.4%.



Source: Trade economics, World Bank

Figure 1: Real GDP Growth, Angola.

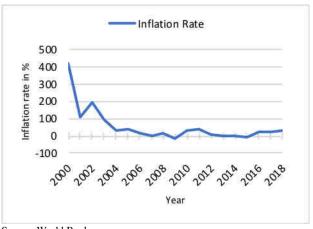
Even though Angola is rich in so many natural resources like fertile soil and a variety of minerals, oil production is the main focus of the economic activities in the country accounting for approximately 47% of total GDP, 75% of government revenues and more than 95% of export earnings. Oil exports are thus the main provider of foreign currency for the country. Angola is currently Africa's second largest oil producer with approximately 1.6 million barrel/day as of December 2017. With the drop of more than a half of the oil price in the international market, 115\$/Barrel in June 2014 to 50\$/Barrel in December 2014, Angola's Economy was rapidly affected with shortage of Foreign currency. The situation just became worst in November 2015 when Bank Of America, followed later by all other Americans and European Banks, stopped direct correspondent relationships and U.S. dollar transaction clearing services with Angolan-based banks due to non-compliance with International regulations .The consequent lack of U.S. Dollars availability in the Angolan Market caused Its National Currency to depreciate from 99.5/USD in October 2014 to 364.4/USD in September 2019, living the country without many chances to import products and make foreign exchange transactions (figure 2).



Source: CEIC

Figure 2: Angola Exchange Rates

The fall of the imports caused the rise on the price of all the goods in the country. Inflation rate reached 34.8 % in December 2018 from 7.3 % in December 2014 (figure 3).



Source: World Bank

Figure 3: Angola Inflation Rate

B. Balance of Payment

Angola is the 3rd largest export economy in Africa and 60th in the world. Due to its comfortable oil revenues , Angola has a large trade surplus. In 2017, merchandise exports reached USD 30.3 billion, while imports amounted to 10.4 billion resulting in a positive trade balance of USD 19.9 billion . In 2017 , the GDP of Angola was USD 122 billion and its GDP per capita was USD 6.64k . Table 1 shows that Angolan exports remain dominated by the extractive sector and are made up of 94% hydrocarbons (Crude oil , Petroleum gas , etc.).Diamond exports constitute the country's second export resource (4.3% of the total) , Angola being the 4th world producer behind Botswana, Russia and Canada . Non-extractive sector exports are very low (1% of the total) . China remains Angola's main customer with 61%

The Impact of Chinese Foreign Direct Investment on Angola's Economic Growth

of exports in 2017, followed by India and the United States with 12% and 7.9% respectively (Figure 4).



Source: OEC

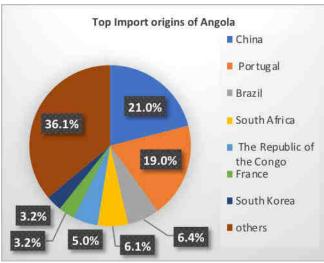
Figure 4: Top five export destinations and sectors in Angola in 2017

Table 1: Angola's Top 5 export products

Sectors	Exportations 2017(%)
Crude Oil	88
Petroleum Gas	4.5
Diamonds	4.3
Refined Petroleum	0.75
Passenger and Cargo Ships	0.59
Others	1.86

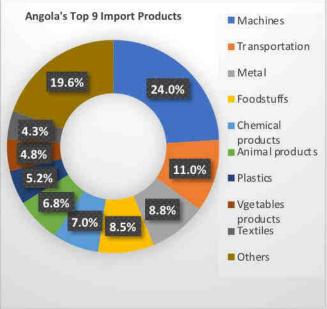
Source: OEC

In 2017, imports reached \$ 10.4 billion, making Angola the 87th largest importer in the world. During the last five years the imports of Angola have decreased at an annualized rate of -11.9%, from USD 19.7 billion in 2012 to USD10.4 billion in 2017. China and Portugal continue to be the country's main suppliers, concentrating respectively 21% and 19% of Angolan imports in 2017 (Figure 5). Imports mainly concern machinery, vehicles, spare parts, medicines, food products, textiles and military articles (Figure 6).



Source: OEC

Figure 5: Top Seven Imports Origins in Angola.



Source: OEC

Figure 6 : Angola's Top 9 Imports Products

C. GDP By Sectors

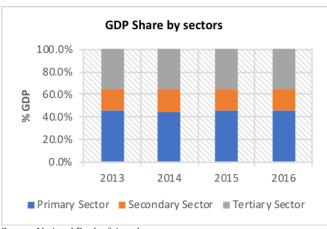
Because of its strong dependency on the oil production, Primary sector takes a very big percentage of Angola's GDP, Averaging 45% from 2013 to 2016. Following is the tertiary sector with merchant services (Table 2 & Figure 7).

Table 2: Percentual GDP Sectors (%)

Tuble 2. Telechical GB1 Sectors (70)					
Percentual	2013	2014	2015	2016	
Structure					
Primary Sector	46.21	44.65	45.36	45.1	
				3	
Agriculture	11.24	11.97	11.71	12.0	
				9	
Derivatives of	0.29	0.33	0.34	0.34	
Fishing					
Diamonds and Gold	2.55	2.46	2.44	2.39	
Petroleum	32.13	29.9	30.87	30.3	
				1	
Secondary Sector	18.94	19.56	19.2	19.5	
Transformation	8.32	8.59	8.17	8.28	
Industry					
Construction	10.43	10.76	10.82	10.9	
				8	
Energy	0.19	0.21	0.21	0.24	
Tertiary Sector	34.86	35.79	35.44	35.3	
				7	
Merchant Services	26.46	27.29	27.9	27.2	
				6	
Others	8.4	8.5	8.35	8.11	

Source: National Bank of Angola

35



Source: National Bank of Angola

Figure 7: GDP by sectors

D. Angola Foreign Direct Investment

a) Policies and regulations

Angola has been one of the most attractive emerging economies in Africa and worldwide over the last decade and has been on the investment radar of all major multinational companies. However, local government restrictions on foreign investment have always caused some concerns and hesitations from foreign investors. Amongst foreign investors wishing to grow their operations to Angola . In August 2015, the government revamped its Private Investment Law which significantly changed how the government treats foreign investors versus domestic investors.

b) Incentives for Investment

Angola's investment law gives equal access to investment incentives for foreign and domestic investors. Investors must enter into an investment contract with APIEX (Angolan Agency for the Promotion of Investments and Exports). The minimum size requirement to qualify for investor status incentives is USD 1 million. High-priority sectors such as agriculture, manufacturing, energy, water, and housing have exemption from industrial and capital gains taxes for up to 10 years and from customs duties for up to 6 years .Foreign companies currently operating in Angola benefit some form of tax or tariff relief. Companies will have to apply for these incentives, and APIEX and other local ministries will analyze the applications on a case-by-case basis. In deciding whether to subvention initiative, the economic and social impact of the investment will be considered in accordance with the economic development strategy formulated by the Angolan administration. The most generous benefits are provided to companies that invest outside the oil sector and in underdeveloped regions . Foreign investors are also required to pay higher taxes on the repatriation of dividends and profits, particularly within the first several years of the initial investment. The tax on dividends will depend on how much and how soon after the initial investment the repatriation takes place to encourage in country reinvestments.

c) Restrictions and Limitation

i. There is a limitation for foreign ownership to 49% in the oil and gas sectors, 50% in insurance, and 10% in the banking sectors. The capital participation can exceed these limits after approval of the Council of Ministers or

the central bank . In the publishing, TV broadcasting, publishing and newspaper media sectors, foreign ownership is limited to 30% . Its also required a minimum of 35% domestic stake in FDI across the following strategic sectors: electricity and water , tourism and hospitality , transportation and logistics , telecommunications and information technology, construction , media .

- ii. Its prohibited private investment in the areas of defense, internal public order, state security, banking activities relating to the operations of the Central Bank and the Ministry of Finance, etc. However, Angolan companies can partially or completely subcontract the entire project to foreign companies. Investment in the petroleum, diamond, and financial sectors is governed by other specific legislations.
- iii. According to Angolan law, the State permit foreign nationals and residents to rent land for a maximum length of 99 years, though this is renewable. However, land ultimately belongs to the state.

d) Foreign Exchange Laws

Local access to foreign exchange and the remittance and transfer of funds have been improved by the economic and financial reform measures in recent years. However, during the 2008 global financial crisis and the current oil crisis, Angola 's oil revenues fell by more than 60%, and the government significantly reduced the amount of dollars provided to the commercial banking system. Transfers above a certain amount require Central Bank (BNA) approval. In addition, the Central Bank can temporarily suspend repatriation of dividends or require that repatriation take place in installments if immediate repatriation would have an adverse effect on the country's balance of payments.

In order to strengthen the capacity of the Angolan financial system, Angolan foreign exchange laws require that all companies operating in Angola are required to make their payment in local currency through banks in Angola.

e) Work force

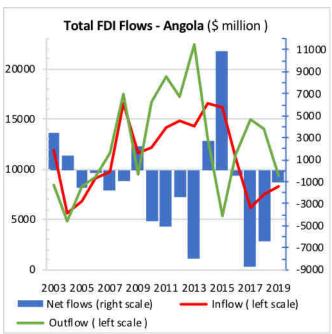
The government encourages national work force and urges use of Angolan suppliers of goods and services. Presidential Decrees 5/95 and 6/01 limit expatriate staffing of local companies set up in Angola by national or foreign investors to 30% of the workforce and require Angolan and expatriate staff with the same jobs and responsibilities to receive the same salaries and social benefits. Enforcement of these laws is inconsistent. Decree 5/95 has been made more strictly in recent years. Expatriate employees cannot renews more than 3, 4 years work visa in Angola (one year work visa each year). The fourth year depending on the identification of the Angolan employee who will replace the expatriate after his departure.

f) Ownership and Establishment

Foreign investors can set up fully owned subsidiaries in most sectors, and they are encouraged, but not required, to take on local partners. Production and Exploration rights for Diamonds and Oil are granted for limited time and only as partnerships between private companies and the resource owners, Endiama and sonangol, respectively.

E. FDI Financial Account

Since the end of the war, net FDI flows have remained almost solidly negative, with the level of Outward FDI growing at a much faster rate than the level of Inward FDI. Inward FDI averaged 7201.57 USD Million from 1990 until 2016, reaching an all-time high of 16581 USD Million in 2008 and a record low of 105 USD Million in 1997. Output fell from 18874.6 USD Million in 2014 to 7940.9 USD Million in 2015, especially due to the Oil crisis in the international market.



Source: National Bank of Angola

Figure 8: Total FDI Flows – Angola 2003-2019 (USD Million)

The majority of FDI in Angola comes from China, the United States, France and the Netherlands and is mostly concentrated in the capital, Luanda. Angola was the second largest receiver of Export-Import Bank of China (Exim) loans with a total of USD 6.9 billion, according to John Hopkins University's China-Africa Research Initiative.

According to the 2015 Africa Investment Report over the year of 2015, \$16.5 billion was injected into the Angolan economy, that's 19% of the \$87 billion invested in the continent in the same year. This boosted the country's FDI ranking against its African counterparts by 18 spots, from 20th to second place. This big amount of FDI Input has to do with speculation about the global price of oil. This big amount of FDI Input comes from the \$16 billion investment by France's Total oil company, to develop an offshore oil field with Angola's state-run oil company, Sonangol . Other investors include China, Brazil and the U.S. Between 2003 and 2015 most of the Inward FDI was observed in the extractive sector (87.27%). The Financial Services Sector received the largest share of FDI projects (54.4%).

Table 3: Top 10 Angolan Sectors Receiving FDI, by CAPEX Flow, January 2003- May 2015.

Industry Sector	Capex* (\$ million)	Share	Industry Sector	Capex* (\$ million)
Coal Oil &	65575.8	87.27	32	13.5

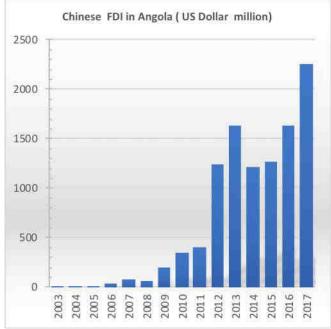
4137.72	5.51	2	0.8
1241.9	1.65	129	54.4
1197	1.59	11	4.6
841.2	1.12	20	8.4
559.01	0.74	13	5.5
220.4	0.29	4	1.7
487.77	0.65	8	3.4
477.2	0.64	6	2.5
401.3	0.53	12	5.1
	1241.9 1197 841.2 559.01 220.4 487.77 477.2	1241.9 1.65 1197 1.59 841.2 1.12 559.01 0.74 220.4 0.29 487.77 0.65 477.2 0.64	1241.9 1.65 129 1197 1.59 11 841.2 1.12 20 559.01 0.74 13 220.4 0.29 4 487.77 0.65 8 477.2 0.64 6

Notes: Capex* -Capital Expenditure

Source: Bezuidenhout H, FDI intelligence, Financial Times, 2015

F. China's direct investment in Angola

In 2017, China's FDI flows to Angola totaled us \$2.98 billion, accounting for 2 percent of China's outbound FDI flows that year. Benguela and Luanda were the destinations for Chinese direct investment in Angola. These accounted for 72% of China's direct investment flows to Africa that year. At the end of 2017, China's investment stock in Angola was us \$2260.16 million.



Source: Johns Hopkins University SAIS China-Africa Research Initiative Figure 9: China's Direct Investment in Angola

IV. METHODOLOGY AND DATA

A. Methodology and Model Specification

Based on traditional economic growth models and taking into account that the central objective of this research is to analyze, observe, survey and verify the impacts of Chinese foreign direct investment on Angola's economy growth using statistical software stata14 we applied The Ordinary Least Square (OLS) of multiple regression econometric model and to ensure that the regression is not spurious we used time

series analysis techniques namely ,Unit root test and Cointegration test so the model is specify as :

$$\begin{split} Ln(GDP) &= \beta_0 + \beta_1 Ln(FDI_t) + \beta_2 Ln(EXP_t) + \beta_3 Ln(IMP_t) \\ &+ \mu_t \end{split}$$

Where β_1 , β_2 , ..., β_3 are coefficients of elasticities; Ln represents the natural logarithm of variables; and μ is the error term,

GDP = Angola Gross Domestic Product

FDI = Chinese Foreign Direct Investment stock in Angola

EXP = Angola Exports to China **IMP** = Angola Imports from China

B. Data

This study is based on the annual time series dataset in Angola ranging from 2003 to 2017. The data were obtained and calculated from John Hopkins University's China-Africa Research Initiative, World Bank and Observatory of Economic complexity (OEC).

C. Empirical results

a) Unit root test

First we perform the stationary test of each variables in level and in first difference applying Augmented Dickey-Fuller (ADF) unit root test, on the table 5 we can see that the test results indicate for non-rejection of the null hypothesis of unit root presence at 1% and 5% probability for imports(IMP), exports(EXP), foreign the direct investment(FDI) and gross domestic product (GDP) series which determine them as not stationary at level, thus becoming stationary after the first difference, characterizing them as I (1), that is, they need a differentiation to become stationary we conclude that it is necessary to establish a long-run relationship among the variables.

Table 4:Augmented Dickey-Fuller (ADF) unit root test Results

variables	T statistic	Order of	Level of
	value	integration	significance
LnGDP	-1.693	I(1)	10%
LnFDI	-3.247	I(1)	1,%, 5% and 10%
LnIMP	-1.836	I(1)	10%
LnEXP	-1.836	I(1)	10%

b) Cointegration test

Since the series are stationary of order I(1), we can perform the Johansen cointegration test to examine the long-run relationship among the variables. The table above shows that trace test and maximum eigenvalue test indicate the existence of 2 cointegrating vectors at 5% level of significance.

Table 5: Johansen cointegration Test Results

Hypothesized Number of cointegrated equation(s)	Eigenvalue	Trace statistics	5% Critical value
none	• • • • •	147.2589	47.21
1	0.99785	67.4387	29.68
2	0.98278	14.6373	15.41
3	0.66165	0.5497	3.76
4	0.04140		

given of what we have from the trace statistics we reject the null-hypothesis of no cointegration equation in this model we can observe that trace and max statistics agree in this regard so we conclude that there is cointegration or long-run relation among GDP,FDI,EXP and IMP in Angola.

c) Regression test

Table 6: Regression test Results

Variable	Coefficient	Std.Error	t-statistics	P> (t)
LnFDI	.1324235	.024506	5.40	0.000
LnEXP	.2810497	.1806019	1.56	0.148
LnIMP	.1268045	.1790184	0.71	0.493
_cons	7.165191	.7314418	9.80	0.000

Table 6 show the results of the long-term relationship among the variables and the results yield that the variables FDI,EXP and IMP are generally positively related with strong significance of 99%,but individually FDI from China has, in Angolan case, a positive structural effect on the country's production and the result is 99% significant, when the weight of FDI stock in GDP increases by 1%, output grows by 0.13%. The key issue raised in this research confirms the importance of Chinese FDI entry for the economic growth of the Angolan economy by providing the country with resources that can trigger economic development. Research as (Kunietama Albino 2014), (Almeida 2017) and (Raimundo 2017) also find results that indicate FDI as one of the factor of economy growth.

Exports also has a positive impact on Angolan economic growth, with an estimated coefficient of 0.2810497 (a 1% increase in Exports generates a 0.28% increase in GDP but the results are not significant .It should also be noted that the variable Imports is not significant in determining GDP, although Imports and GDP are positively related, that is, 1% increase of Imports will have an impact on GDP growth by 0.12%. After the years of the oil boom, Angola is slowly recovering from a severe macroeconomic crisis caused by the sharp and prolonged fall in oil prices since mid-2014. Gross domestic product (GDP) growth has entered collapse in 2015 and contracted over the last two years to stand at -0.1 percent in 2017. The oil price crisis has also led to double deficits in current and fiscal accounts from 2014 onwards. Government debt has doubled over the past four years, while inflation has soared to over 40 percent in December 2016, exposing significant macro-financial risks, further stressed the need to diversify the economy and dissociate public finances from the oil sector. The Macroeconomic Stabilization Program of the Government introduced measures to strengthen fiscal stability, reduce inflation, increase exchange rate flexibility and gradually lower debt levels.

d) Diagnostic test

Table 7: Diagnostic Test Results

Test	F-Statistics	P-Value	
Jacque-Berra normality test	1.135	0.5671	
Breusch-Godfrey LM test	0.074	0.7859	
ARCH test	0.13	0.7198	

The results on table show that the model generally passes the Breusch-Godfrey LM test, Jacque-Berra normality test, auto-regressive conditional heteroskedasticity (ARCH) test. All calculated statistics are not significant, indicating that there are no problems such as serial correlation, heteroscedasticity, and non-normality in the model.

V. CONCLUSION

- 1)-Relations between Angola and China are not recent as seen throughout the dissertation. In addition to the political and ideological ties stemming from the decolonization movements and later in the Cold War period, China has developed over the past decades a "South-South" cooperation that translates into its most visible face in the granting of scholarships, studies and the construction and reconstruction of various public buildings, the construction of roads, the construction of the new Luanda airport in Bom Jesus, the new TPA facilities, the new centralities in all cities of Angola.
- 2)-There is no consensus, either in theoretical or empirical literature, about the effects of FDI on the economic growth of recipient countries. FDI usually has positive effects on economic growth, but it can also have adverse effects.

Most empirical studies find evidence that FDI stimulates economic growth. However, there are other studies that find no evidence of any effect of FDI on economic growth or evidence of a negative effect.

3)-The objective we set with this dissertation was to evaluate whether or not Chinese FDI carried out in Angola has contributed positively to its economic growth. To this end, an econometric study was carried out on the relationship between Chinese FDI and GDP in Angola, testing the existence of long-run relationship between time series over the period of 2003-2017.

Indeed, Angola attracted high FDI inflows and substantially increased its FDI stock between the mid-1990s and the mid-2000s. Some of those years were also years where Angola recorded its highest economic growth rates. The econometric study based on traditional economic growth models for 2003-2017 and data provided by National Bureau of statistics of China reveal that Chinese FDI had a statistically significant impact on Angolan GDP growth. The Estimate shown that Chinese FDI, Exports and Imports have positive impact on Angola's economic growth.

Given the results of the evaluation of these estimates, we consider that some recommendations may be mentioned, so that FDI can continue to be a fundamental vector in Angola's economic growth, namely:

- Sino-Angolan relations can pose risks to Angola, but also opportunities, in the context of its development cooperation and expansion of economic ties. As such it would be beneficial to establish rules that would improve cooperation between both countries and respect the local population. Rules involving compliance with labor and environmental laws, quality standards, training of local staff, introducing measures to reduce the social impacts of investments and the creation of policies that promote cooperation between investors from each country.
- The lack of transparency, good governance, social responsibility, working conditions and respect for 30% of local hires are factors to be improved by the Chinese.
- Streamlining or easing the capital required by foreign companies to invest in Angola, specifically in priority areas such as agriculture and fisheries that do not require large investments but have a multiplier effect on the economy.
- Revamping and modernization of the Angolan tax system to combat tax evasion and avoidance.
- Initial negotiation with MNEs to enhance the subcontracting of national SMEs for their integration into the global economy.
- Cultivate the notion of global and general interest and strengthen the judiciary to sanction corruption.
- Strengthen the democratization of the institutions by increasingly giving them concerted decision-making power.
- Given China's economic strength ,Angola may be affected by a possible dependence on one country against another, always favoring the country with the highest power. Structural changes such as diversification, import substitution, opening to new markets leading to reduce the dependence are suggested

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