

**ISTANBUL COMMERCE UNIVERSITY
GRADUATE SCHOOL OF FOREIGN TRADE
DEPARTMENT OF INTERNATIONAL TRADE
INTERNATIONAL TRADE M.A. PROGRAM**

**THE IMPACT OF TRADE FLOWS ON INCOME
DISTRIBUTION AND POVERTY IN ANGOLA**

M.A. Thesis

Alberto schneider rodriguez da costa CAZEIRO

200010483

Istanbul, 2021

**ISTANBUL COMMERCE UNIVERSITY
GRADUATE SCHOOL OF FOREIGN TRADE
DEPARTMENT OF INTERNATIONAL TRADE
INTERNATIONAL TRADE M.A. PROGRAM**

**THE IMPACT OF TRADE FLOWS ON INCOME
DISTRIBUTION AND POVERTY IN ANGOLA**

M.A. Thesis

Alberto schneider rodriguez da costa CAZEIRO

Advisor: Asst. Prof. Yunus ÖZCAN

Istanbul, 2021



T.C. İSTANBUL TİCARET
ÜNİVERSİTESİ

**T.C.
İSTANBUL TİCARET ÜNİVERSİTESİ
DIŞ TİCARET ENSTİTÜSÜ**

YÜKSEK LİSANS TEZİ ONAY FORMU

Uluslararası Ticaret İngilizce Yüksek Lisans programı öğrencisi Alberto Schneider Rodriguez Da Costa Cazeiro'nun "The Impact of Trade Flows on Income Distribution and Poverty in Angola" başlıklı tez çalışması, Enstitümüz Yönetim Kurulu 22.02.2021 tarih ve 173-3 sayılı kararıyla oluşturulan jüri tarafından oybirliği/oyçokluğu ile Yüksek Lisans Tezi olarak kabul edilmiştir.

	<u>UNVANI, ADI SOYADI</u>	<u>ÜNİVERSİTE</u>
TEZ DANIŞMANI	: Dr. Öğr. Üyesi Yunus ÖZCAN	İstanbul Ticaret Üniversitesi
JÜRİ ÜYESİ	: Doç. Dr. Raif CERĞİBOZAN	Kırklareli Üniversitesi
JÜRİ ÜYESİ	: Dr. Öğr. Üyesi Cihat KÖKSAL	İstanbul Ticaret Üniversitesi

DECLARATION OF ORIGINALITY

I, Alberto Cazeiro, certify that,

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- This thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
- This is a true copy of the thesis approved by my advisor and thesis committee at Istanbul Commerce University, including final revisions required by them.

Alberto Cazeiro

Date: 22 February, 2021

ABSTRACT

For some decades, opening to international trade has been a crucial factor in the development and growth of economies. On the other hand, it is known that its opening brings advantages and disadvantages. Thus, income inequality can be related to many of these disadvantages which have also been increasing and decreasing in certain countries. The aim of this thesis is to find out whether trade flows have an impact on income inequality related to trade opening in Angola. This relationship is studied using the Heckscher-Ohlin $2 \times 2 \times 2$ model of international trade and the expanded interpretation. Some measures of trade flows will be shown based on policies, and measures based on results. With the results obtained it was possible to discover that the opening of trade is related to low inequality from at least 2008 towards 2017. In any case, thus supporting the Heckscher-Ohlin theory that inequality increases in rich countries and decreases in poor countries with increasing trade, and also supporting the theory that inequality increases in countries with full land and capital, while reducing in countries with full work when the opening of trade is inserted. According to this study, it is also possible to notice the opposite theoretically in terms of the Heckscher-Ohlin theory that in countries with full work they have less inequality in comparison with high countries with the trade opening.

Keywords: Trade Flows, Income Inequality, Heckscher-Ohlin Theory, Openness Measures

ÖZET

Geçmiş yıllara bakıldığında, ekonomilerin gelişmesi ve büyümesinde uluslararası ticarete açılmak çok önemli bir faktör olmuştur. Ancak, bu açılma avantaj sağladığı gibi beraberinde dezavantajları da getirmiştir. Dolayısıyla, gelir eşitsizliği, bazı ülkelerde de artan ve azalan bu dezavantajların birçoğu arasında ilişkilendirilebilir. Bu tezin amacı, ticaret akışlarının Angola'daki ticaret açılımıyla ilgili gelir eşitsizliği üzerinde bir etkisinin olup olmadığını ortaya çıkarmaktır. Bu ilişki, Heckscher-Ohlin $2 \times 2 \times 2$ uluslararası ticaret modeli ve genişletilmiş yorum kullanılarak incelenmiştir. Politikalara ve sonuçlara dayalı olarak bazı ticaret akışı ölçümleri gösterilecektir. Elde edilen sonuçlarla ticaretin açılmasının en az 2008'den 2017'ye kadar düşük eşitsizlikle ilişkili olduğu gözlemlenmiştir. Her halükarda, ticaretin artmasıyla zengin ülkelerde eşitsizliğin arttığı ve fakir ülkelerde azaldığı şeklindeki Heckscher-Ohlin teorisini desteklemektedir. Aynı zamanda, ticaretin açılması dahil edildiğinde istihdamı yüksek ülkelerde azalırken, tam arazi ve sermayeye sahip ülkelerde eşitsizliğin arttığı teorisini desteklemek. Bu çalışmaya göre, Heckscher-Ohlin teorisi açısından teorik olarak tersini fark etmek de mümkündür; yüksek istihdam olanaklı ülkelerde açık ticaretin yüksek olduğu ülkelere kıyasla daha az eşitsizliğe sahipler.

Anahtar Kelimeler: Ticaret Akışı, Gelir Eşitsizliği, Heckscher-Ohlin Teorisi, Açıklık Ölçüsü

ACKNOWLEDGE

First and foremost, praise and thank God, the Almighty, for His blessings throughout my research work to achieve the research successfully.

I would like to express my deep and sincere gratitude to my supervisor, Dr. Yunus Özcan Head of Economics department for his endless assistance throughout my studies and on this thesis at the Istanbul Ticaret University. Also, I would like to express my deep and sincere gratitude to the Istanbul Ticaret University and the department of International Trade for providing me the possibility to accomplish this thesis. In addition, I would like to express my gratefulness to all the professors of our department, especially to Dr. Mustafa Emre Civelek, Dr. Sabri Öz, Dr. Vahit Ferhan Benli, and Dr. Nurgül Keleş Tayşir who contributed massively to my academic development through their wise tutorship and empathy.

However, I also would like to express my gratitude throughout my academic development to professors who have contributed on a large scale to my training, to mention: Dr. Michael Wagener, Prof. Burcat Polat, Prof. Isaac Simião, Dr. Veysel Avsar, Dr. Naciye Kınıc Keresteci, Dr. Tarık Oğuzlu, Dr. Büşra Soummakie, and Dr. Murat Kaplan.

By everything that I have archived, I am most indebted to my family for their endless love, support, caring, sacrifices for educating in all my efforts. Finally, much thankfulness goes to my girlfriend, friends, and all the people who have encouraged me to complete the thesis directly or indirectly.

TABLE OF CONTENTS

ABSTRACT.....	IV
ÖZET.....	V
ACKNOWLEDGE.....	VI
TABLE OF CONTENTS.....	VII
LIST OF TABLES.....	X
LIST OF FIGURES.....	XI
LIST OF ABBREVIATION.....	XII
1. INTRODUCTION.....	1
2. LITERATURE REVIEW.....	4
2.1. ENLIGHTENMENTS OF COUNTRY’S INTERNATIONAL TRADE BACKGROUND AND TRADE IMPLICATIONS.....	4
2.1.1. GDP GROWTH.....	7
2.1.1.1. COMPOSITION OF GDP.....	10
2.1.2. UNEMPLOYMENT.....	12
2.1.3. THE INFORMAL ECONOMY.....	14
2.2. INTERNATIONAL TRADE DEVELOPMENTS OF ANGOLA.....	15
2.2.1. TRADE FLOWS OF GOODS.....	16
2.2.1.1. EXPORTS AND IMPORTS.....	16
2.2.1.2. SHARE OF TRADE IN GDP.....	17
2.2.1.3. COMPOSITION OF EXPORTS IN GOODS.....	19

2.2.1.4.	EXPORT OF GOODS BY DESTINATION	21
2.2.1.5.	COMPOSITION OF IMPORTS IN GOODS	22
2.2.1.6.	IMPORT OF GOODS BY DESTINATION	23
2.2.2.	MULTILATERAL TRADE AGREEMENTS	24
2.2.3.	BILATERAL TRADE AGREEMENTS	24
2.2.4.	REGIONAL AGREEMENTS	24
2.2.5.	POLICIES ON TRADE IN GOODS	25
2.2.6.	DUTY AND TARIFF CONCESSION	26
2.2.7.	POLICIES ON TRADE IN SERVICES	26
2.2.8.	THE COMMERCE OF FLOWS IN SERVICES	27
2.3.	INCOME DISTRIBUTION AND POVERTY IN ANGOLA	29
2.3.1.	INCOME DISTRIBUTION IN ANGOLA	29
2.3.2.	POVERTY IN ANGOLA	36
2.4.	SOME FACTORS OF INCOME DISTRIBUTION AND POVERTY IN ANGOLA	37
2.4.1.	HEALTH INSURANCE	37
2.4.2.	EDUCATION	38
2.4.3.	GENDER	39
2.4.4.	CORRUPTION	39
3.	ANALYSES OF TRADE FLOWS AND INCOME DISTRIBUTION IN ANGOLA	
	41	
3.1	EARLY STAGES	41
3.2.	DATA AND METHODOLOGY	42

3.2.1.	SAMPLE.....	42
3.2.2.	DEPENDENT VARIABLE.....	43
3.2.3.	INDEPENDENT VARIABLES.....	43
3.3.	ESTIMATION METHOD.....	45
3.4.	EMPIRICAL RESULTS.....	46
3.4.1.	DESCRIPTIVE STATISTICS.....	46
3.4.2.	CORRELATION COEFFICIENTS.....	47
3.4.3.	STATIONARITY TEST RESULTS.....	48
3.4.4.	MODEL RESULTS.....	50
3.4.4.1.	MODEL 1 RESULTS.....	50
3.4.4.2.	MODEL 2 RESULTS.....	51
3.4.5.	DIAGNOSTIC TESTS.....	53
	CONCLUSION.....	57
	REFERENCES.....	59

LIST OF TABLES

	Page
TABLE 2. 2 EVALUATION OF ECONOMIC INDICATORS.....	18
TABLE 2. 3 SHARE OF EXPORT PRODUCT	20
TABLE 2. 4 SHARE OF IMPORT PRODUCTS	22
Table 3. 1 Variable Information.....	43
TABLE 3. 2 DESCRIPTIVE STATISTICS OF VARIABLES.....	47
TABLE 3. 3 CORRELATION COEFFICIENTS OF VARIABLES	48
TABLE 3. 4 MODEL 1 RESULTS	50
TABLE 3. 5 MODEL 2 RESULTS	52
TABLE 3. 6 DIAGNOSTIC TEST RESULTS.....	55

LIST OF FIGURES

	Page
FIGURE 2. 1 ANNUAL GROWTH RATE OF REAL GDP	9
FIGURE 2. 2 GDP PER CAPITA AT CURRENT PRICES USD AND CURRENT PPP IN USD.....	10
FIGURE 2. 3 COMPOSITION OF BY ECONOMIC ACTIVITIES	11
FIGURE 2. 4 UNEMPLOYMENT RATES	13
FIGURE 2. 5 JOBS RATE BY SECTORS FROM 2000 TO 2020	14
FIGURE 2. 6 TRADE IN GOODS PERFORMANCE, 2000-2018 CURRENT (BILLION IN DOLLARS). 17	17
FIGURE 2. 7 IMPORT AND EXPORT TO GDP RATIOS.....	18
FIGURE 2. 8 EXPORT OF GOODS BY DESTINATION IN MILLION DOLLARS.....	21
FIGURE 2. 9 IMPORT OF GOODS BY DESTINATION IN MILLION DOLLARS	23
FIGURE 2. 10 SHARE OF COMMERCIAL SERVICES CURRENT DOLLARS	27
FIGURE 2. 11 TOTAL EXPORTS BY MAIN SERVICES ITEM IN 2019	28
FIGURE 2. 12 TOTAL IMPORT BY MAIN SERVICES ITEM IN 2019	28
FIGURE 2. 13 LABOUR FORCE PARTICIPATION RATE OF THE TOTAL POPULATION AGES 15-64%	34
FIGURE 2. 14 SALARIED WORKERS, % OF TOTAL EMPLOYMENT	35
FIGURE 3. 1 JARQUE-BERA NORMALITY TEST RESULTS	54
FIGURE 3. 2 CUSUM AND CUSUM SQUARE TEST FOR STRUCTURAL CHANGE.....	56

LIST OF ABBREVIATION

AFDB	Africa Development Bank
AGOA	Africa Growth and Opportunity Act
AU	African Union
BNA	Banco Nacional de Angola
CPI	Consumer Price Index
COMESA	Common Market for Eastern and Sothern African
EPA	Economic Partnership Agreement
ECCAS	Economic Community of Central African States
GATT	General Agreement on Tariffs and Trade
GSP	Generalized System of Preferences
GATS	General Agreement on Trade in Services
IBEP	Integrado sobre o Bem-Estar da população
IBP	Internacional Business Publicatios
IMF	Internacional Monetary Fund
LDC	Less Developed Country
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PND	Plano Nacional de Desenvolvimento
PPP	Purchasing Power Parity
SADC	Southern African Development Community

S&D	Special and Differential Treatment
TIC	Transparency International Corruption Index
UNCTAD	United Nations Conference on Trade and Development
UN	United Nations
WTO	World Trade Organization
WCO	World Customs Organization

1. INTRODUCTION

Our main objective in this thesis is to focus on the relationship and how trade flows are responsible for inequality or unfair distribution of income in Angola. The main concern as examined by many researchers or literature is the fact that most patterns of national openness to the world economy have been increasing onwards with inequality. This is well known for Angola since the natural resources owned such as oil, gas, diamonds, and powerful agricultural land, Angola still be ranked as a poor country.

The country presents unquotable improvements by being the second petroleum and diamond extractors in Sub-Sahara Africa. Besides, with the creation of policies that influenced the construction of frameworks and social institutions, although the country's dependence is on the oil sector, elevated oil prices and increasing the level of oil production allow Angola to have strong economic growth with high levels of inequality.

According to the Transparency International Corruption Index (2019) to make Angola's market economy working still a process and they are factors or constraints playing a role, especially in the private sector, and with Angola occupying the ranking of 165 out of 180 in terms of corruption, thus persisting a problem for Angola's economic development. Even though Angola retains a small economy and being critically dependent on international trade, there are no changes in the cost of production, causing unhealthy consumption and high-cost prices. Developing countries are integrated with 40% of world trade.

Furthermore, most economic models of international trade like Heckscher's model inform in advance that the trade causes change in the income distributed to society. Some commercial economists indicate that a recompense system should be created for those harmed by trade because it encourages aggregate growth. Seyoum (2009) says that due to the desertification of the economy, developing countries tend to be more dependent on international trade than developed countries. Therefore, international trade allows manufacturers or distributors to look for products or services in foreign countries because of the cost advantages or to learn about advanced technical systems to decrease the cost of production.

Alvaredo et al. (2018) state that economic inequality is not precisely written, there is a need to correlate macroeconomic aspects because in terms of microeconomic aspects it is more targeted at individual wages. Additionally, stopping global and national transformations in tax can help decrease social inequality. Torul and Oztunalı (2018) affirm that the distribution of wealth has a very large economic involvement because it covers the infratemporal and temporal decisions of families. He also emphasizes that often what drives developing economies to diverge are their discount rates and the share of capital and technology. For as much as Kayıkçı (2019) argues that the contemporaneous method of studying inequality and poverty may have very lucrative strides for policymakers because it can generate development and stop situations of crime or even social exclusion.

According to the United Nations International Children's Emergency Fund (2019) the distribution of capital must be a much more focused issue than labor participation. They also pointed out that in constituted data the equity and labor holdings in any country's income differ considerably regardless of time. On the other hand, income distribution is a consistent issue for professionals in the field of knowledge all over the world, and that man kinds of literature show great divergences when comparing the growth rates of developing and developed countries. Thus, if economies had an assessment in terms of choice and high technology, it could be said that the economies of developing countries grow faster than the rich ones.

The fundamental approach following the Gini coefficient is that it uses a value of 0 to describe a society where everyone has the same income and does not present the sign of inequality, at the different end of the scale, it utilizes 1 to describe a society where only one person has all the income and which has the maximum inequality. At some point, it can be discussed that extreme revenue is not enough for the economy because it leads to produce fewer incentives to enforce human capital. In this context, income inequalities are examined as the rate of return on investment and its miss control can create social tensions and political insecurity. Nevertheless, some countries demonstrate that the average health of society relies on the distribution of income, implicating that countries with more unequal distributions struggle with lower life expectancy. Despite that, with Angola having a high number of

young unemployed, it makes it difficult for the country to develop taking into account that the progress of improving health care and education still laggard, destabilizing the country by aggrandizing inequality, making poverty more visible in the rural areas, and increasing the mortality level among mothers and children.

As stated by United Nations (2016) the diversification of the economy is a decisive factor for sustainable growth and that can be only achievable if the country brings structure transformation by modernizing and constructing social infrastructure, encompassing transportation, service to telecommunication, and energy and water. Since, to be the subject of analysis considering the definition of inequality, it must certainly be correlated with another measurable factor. These are the common factors which we will measure and try to find any relation with an equal distribution of income; Export, Import, unemployment, and debt as well as other qualitative factors which will be explained in detail, because raising the quality of life for many people by managing the human and natural resources available rationally has been an everyday endeavor of the economic and political system.

2. LITERATURE REVIEW

The thesis will illustrate the theoretical and empirical literature review of the impact of trade flows on income distribution and poverty in Angola. The interrogative emerges about why is trade an indispensable factor for the development of any country. In this segment, some important points about the country's international trade implications and commitment to trade will be examined and several antecedent studies related to openness to trade and income inequality will also be granted.

2.1. Enlightenments of Country's International Trade Background and Trade Implications

Luanda is the considerable capital of Angola, bring to bear an effect of repose in all national territory and despite personifying the inter-ethnic and exclusive cross-cultural culture of the country. The central/eastern region has the producing provinces of diamonds and electricity in the northern region we find the province of Cabinda and Zaire, owning the present largest natural resource of the country and it is occupying by a main ethnic group Bakongo.

The central/west region can be named as the great land reserve and the county's fisheries, it represents a huge potential, especially for agro-industry sector formation to satisfy the needs of the domestic market and export. Still, Reis (2018) declares that the South part of Angola possesses only two provinces with competencies and that Angola shows to be in a transaction to a market-driven economy where the main goal is to achieve macroeconomic stabilization and rebuild the economy.

Tinajero (2010) establishes that due to the incorrect policies, Angola is seriously open to macroeconomic and social problems, and it has been representing a larger barrier in the reorganization of the economy. As a consequence, on the authority of the Instituto Nacional de Estatística (2011) the improvement of the population's well-being, sustainable funding, acquirement of investment, and increasing competition has been a supreme challenge for the country, for this purpose, the implementation of policies and programs in different areas of

national life with an emphasis on agriculture and rural development has been constant to ensure systematic monitoring and evaluation of the effect of the policies and programs on the living conditions of the population.

In this context, the results of the Intergrado sobre o Bem-Estar da População (IBEP) which arrived at an opportune moment for the economic and social enlargement of the country, allowed setting up a baseline for various population well-being indicators, from which it is possible to adjust some ongoing policies and programs. Besides the update of the basket base of the Consumer Price Index (CPI), estimating household consumption for national accounts, and drawing up a profile of poverty in the country, the integrated survey on the welfare of the population demonstrates that Angola has an average monthly expenditure of 6,449 kwanzas a value matching the volume of expenses to meet the needs food and non-food consumption, yet fifty-seven 57% are predetermined to consume food and non-alcoholic drinks and household income expenditures report 10% of total per capita consumption while household utility expenses report 8% percent of consumption and according to the analysis of inequality performed, also 20% of the richest population fixates almost half of the total consumption and the poorest 20% correspond to only 5% of consumption.

Aguemon et al. (2007) claim that as time goes by it becomes obvious that there is a need to improve the economic policies and expand the domestic and international trade prices and above all get conditional fiscal and monetary policies. Although the financial sector of Angola is improving positively, the private sector demonstrates to have issues related to short-term operations in making available credit for international investors and local investors to finance their business. In order to change this situation the country chooses to interfere with subsidized loan programs to encourage economic development, but it is more complicated than it seems because the country is selective in choosing who should benefit from such initiatives thereby making inequality even greater (International Business Publications, 2009).

Currently, the country decided to implement conservative lending practices throughout the financial sector, because most of the corporative had more advantage to loans and concessionary rates compared to other commercial enterprises. Besides, among many

obstacles the foreign exchange restriction opted by the national bank of Angola is the most notable in national financial markets and its scarcity bring serious problems, especially the depreciation of the national currency and the abandonment of two main bank's providers of dollars making it difficult to import products, nevertheless, the preference is based on the creation of an equilibrium to grow economy and protect those Angolan's with a higher level of demand from rather economic shocks. Carvalho (2017) states that the prioritization in spending on services, infrastructure development, and mega projects to private equity and Purchasing Power Parity (PPP) facilitates Angola to hold a lower debt to GDP.

In fact, with such results, Angola could encourage associators such as International Monetary Fund (IMF), that Angola's economy display conditions to grow, plus the election brought relief to many Angolan's because there was an open for foreign exchange restrictions which demonstrate that apart from economic policies, reforms to foment hope from international organizations is also necessary for the country to increase the competitive edge. Whereas Bohoslavsky (2016) argues that severe economic inequality usually influences the comfort of human rights, political rights, social-economic, and culture. He mentions that the higher is the inequality among societies, the higher is the violence and the marginalization of diverse groups and people. He also argues that there is a positive correlation between child mortality and income inequality because countries with high levels of inequality have more dangerous health issues.

In contrast, Cassete (2012) sets out that the link between international trade and inequalities is placed on the trade of manufactured goods between countries. He also mentions that in the Ricardian framework, free trade predicts that the national income increases due to the autarky situation, in this sense, an increase in trade promote economic welfare and harm the lowest layer. He also indicates that the issue of inequalities is predicted by the Heckscher-Ohlin and Stolper-Samuelson theorem which states that if a country exports the good for which it uses the productive factor completely, trade increase the price of this good, thus causing an increase in the relative price of the abundant factor in the production of the traded goods which in contrast decrease the remuneration in the scarce factor and it rises inequalities through skills.

Isagiller (1988) claims that inequality will first increase and later diminish as development takes place. He also claims that the income share of the modern sector increases as development proceeds while the income of the traditional sector remains stable or even falls as population growth demands. He argues that economic growth constantly guides to increase inequality in income concentration and it has well-known roots that go back to classical economists. He also points out that economic growth is not adequate for a more normal distribution of income and that structural determinants and policy attitudes are crucial in the experiences of the countries. Also, Vinokurov (2017) in his work Eurasian Economic Union points out that the immediate future is the progressive combination and removal of non-tariff barriers in mutual trade in goods and services.

In other words, non-tariff barriers set an important duty on mutual flows of goods and services between countries and reducing the overall efficiency of the common market. It is also crucial for countries to proceed with coordinated macroeconomic policies by doing so it will maintain macroeconomic stability, providing that the agreement of policies governing the operation of the economy ensures the economic indicators to promote sustainability. On the contrary, Stewart (2003) found that more unequal income distribution leads to higher growth, via higher savings and possibly incentive effects. He also lays down in his empirical work that equal distribution is always demonstrated with greater growth.

2.1.1. GDP Growth

Ruffin (1990) states that the peace-establishing agreement endorsed in 2002 among the military forces, the country has established conditions to use the different types of resources for declining poverty, following the Ricardian factor of endowment theory. Beyond that from 2004 to 2008 GDP growth had a significant impulse when comparing with the year of 2003 in Figure 2.1 this abysmal progress was due to new fields of oil discovered and better governance by the Angolan government with effective macroeconomic policies to oppose inflation in the country as consequently, there was a historic reduction in the national economy with inflation reducing to 35% and recover the national currency against US dollar.

However, Angola demonstrates to have grand debts due to huge construction projects execute to stimulate economic growth, providing that growth has always been buoyant since Angolan's economy depends totally on oil. Notwithstanding, Zheng et al. (2020) point out that since there is a steady allocation of wage income between families, inflation changes inequality causing also changes in family's assets. While Cysne et al. (2005) argue that the basic intuition of associating the higher rate of inflation with income, brings a more significant lack of stability between rich and poor consumers since the rich have access to superior business skills.

Likewise, Monnin (2014) states that there is no connection between inflation and the distribution of income because inflation does not impact all income sources homogeneously or homogenous, since there are differences in the sources of income for many groups of families. Kuznets (1995) lays down that it is necessary to record income levels not only through an exclusive generation but at least through two. He also points out that the sharing of income conforms to direct taxes and including free government contributions.

On the other hand, Cingano (2014) emphasizes that the imperfection of the financial market has a very large impact on poor individuals because they are unable to manage investments that can be profitable compared to rich individuals. In its turn, Ilda (2006) submits that the International financial crisis in 2009, Figure 2.1 had a crucial impact on the economy estimated at around 0.9% in the development of Angola and with this fast growth allowed a viable betterment of the GDP per capita, which enlarge at an annual average rate of 9.9% from 2000 to 2009. Likewise, Edwards (1998) states that trade openness can affect external debt positively and negatively, in this case, if profits from exports excel import bills after trade liberalization, trade openness affects external debt negatively, while the effect is positive in the opposite situation, however, since the increase in imports is more durable than the increase in exports in emerging countries that support trade liberalization, the coefficient of trade openness is expected to have a positive sign in the empirical analyses.

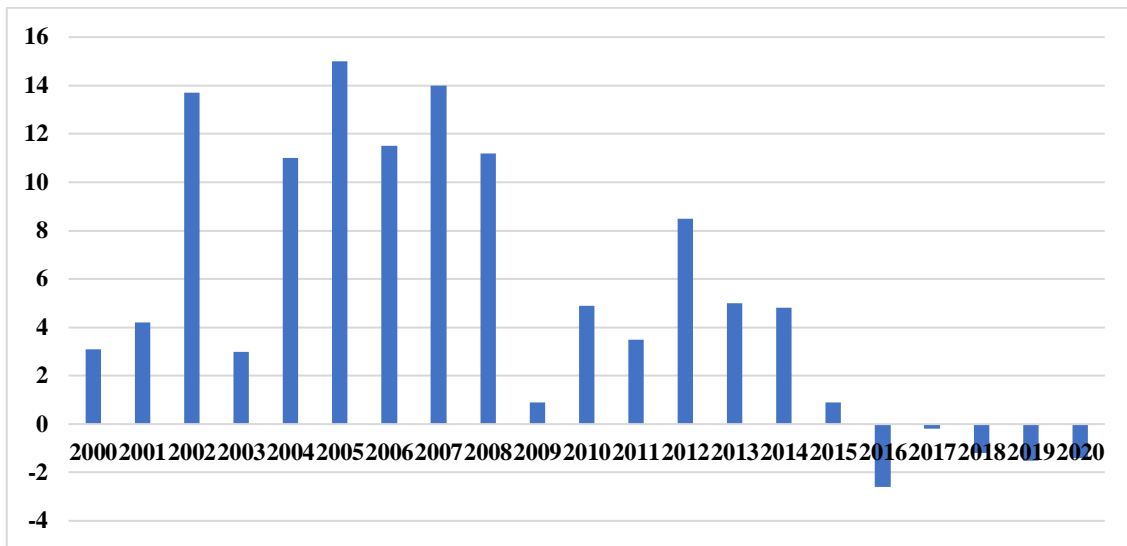


Figure 2. 1 Annual growth rate of real GDP

Source: Africa Development Bank (AFDB)

Nonetheless, according to Figure 2.1, Angola displayed an average annual growth rate of 12% from 2002 to 2008, composing the economies with rapid growth in the world. Also, Figure 2.1 exhibits that GDP growth in 2008 and 2011 hadn't gained plenty from the oil price enlargement, and this shrinkage only happened due to oil production problems that the country displayed. On the report of the United Nations Organization (2016) was found that with the country investing in other sectors of the economy the negative impact was compensated as a result in 2012 and 2013 Angola's GDP growth rates were expected to be 8.5% and 5%. Thus, Roe (2003) states in his empirical work that the results are successful because of the qualified match that policies and institutions influence growth. He also points out that property rights are the necessary mechanism to drive growth and because income inequality has a negative influence on growth advanced democracies suffer from its negative influence also. In contrast, the impulse given was not enough because in the year 2016 towards the year 2020 the GDP attained extremely negative values.

Bearing in mind, that the foreign exchange rate depends on oil export, so was necessary the intervention of the Central Bank for the improvement of a new exchange rate or monetary

policy which once again seems to be unsustainable covered, thus affecting the coming years. Notably, agriculture is among the sectors that helped achieve admirable results in GDP growth rates, although the sectors are getting back from the massive struggles made by the internal conflict in the country. Nonetheless, the rapid progression of GDP growth rate demonstrated to have a sustainable impact on the GDP per capita that flourished with a rate of 9.9% from 2002 to 2020. Specifically, there are disparities during the growth of GDP per capita when making a comparison between the level of GDP per capita and Current purchasing power parity (PPP). It can be observed in Figure 2.2, that from 2002 to 2020 current USD and current PPP USD are in constant fluctuation, with GDP per capita current USD presenting an increase up to 2014 then decreasing until 2020 and GDP PPP presenting a higher increase with a slight decrease until 2020.

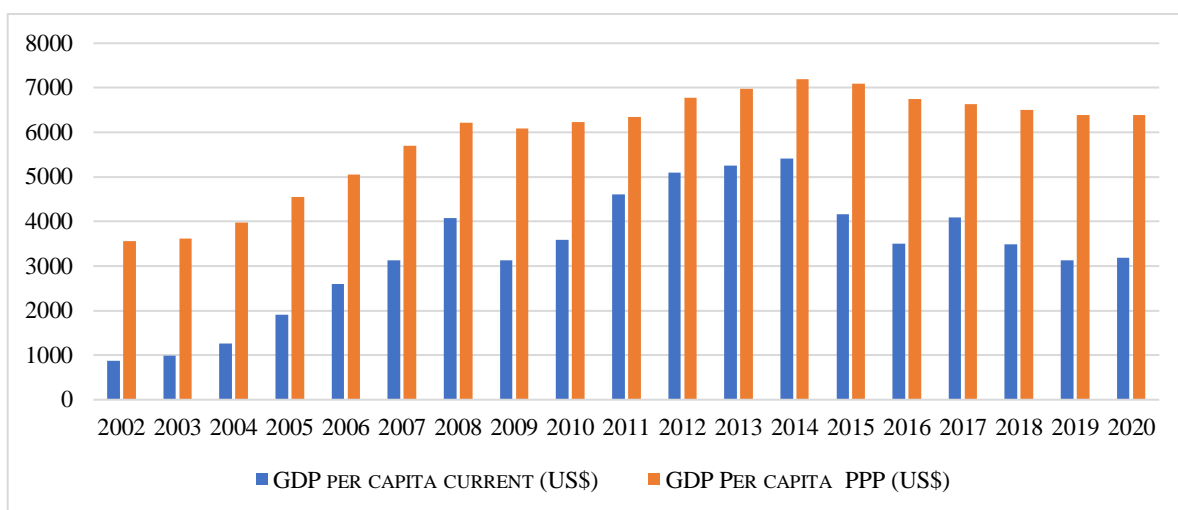


Figure 2. 2 GDP per capita at current prices usd and current ppp in usd

Source: AFDB

2.1.1.1. Composition of GDP

Qabazard et al. (2012) tell that the political and economic advances that the country display is measured on the extraction of oil, positioning the country as a second-largest oil producer in 2001. In contrast, Estevao (2019) describes that the unification with the Organization of

the Petroleum Exporting Countries (OPEC) in 2007, Angola could achieve some improvements.

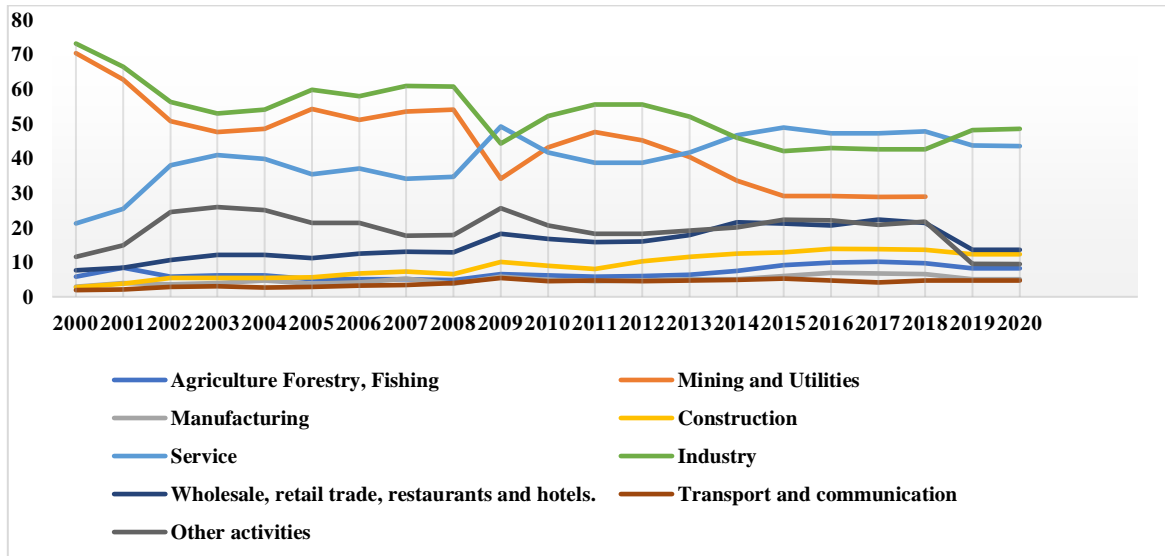


Figure 2. 3 Composition of by economic activities

Source: United Nations Conference on Trade and Development (UNCTAD) and AFDB

Moreover, the diamond sector is controlled and run by public companies after the internal conflict that had a massive impact on Angola’s economy most of these investments were made based on the extraction of minerals. The different sectors in Figure 2.3, represent a discontinuous downturn and upturn to GDP, the main changes can be notable in transport and communication which reflects lower participation to the GDP and others such as Manufacture, Agriculture, and other services that are among extractive activities.

Agriculture as the first means of survival for any country must be seriously invested, however, it should be well-known that Angola’s GDP is massively constituted of natural resources such as oil, gas, and diamond fabrication represented 98% of the commodity by exports. Noticeably, Karl (1997) said that if natural resources are used as a weapon to boost development, then as discussed in many works of literature Angola will have to find ways to

prevent the theory of paradox of plenty. Without delay, as stated by Klynveld Peat Marwick and Goerdeler (2012) with a global recession, the prices of oil and diamonds reduced a little, basically not enough to bring down an economy, but insomuch as Angola's economy is dependent on natural resources, it had a negative impact.

2.1.2. Unemployment

The rapid economic growth that Angola exhibit during some years was not efficient to respond to the changes in unemployment but was possible to improve the living conditions for the Angolans in some sectors, mainly the agricultural and reconstruction sector. In the Angolan territory, unemployment has decreased since 1990, as shown in Figure 2.4 from 2000 to 2009, 42% of the Angola workforce was unemployed not having a significant impact comparing with the years 2010 and 2020 in which unemployment peak an abysmal negative level.

Lopes et al. (2007) emphasize that unemployment is to the greatest extent observed as urban phenomena while compared to rural zones. In Angola, this matrix is well observed with 21.5% in favor of urban areas and 5.9% favoring rural areas, but without leaving aside the elderly people that represent 18.2% with a difference of ages between 50-60 and unlike for youth with a difference of ages between 15-24. However, according to the United Nations (2016) the 2014 census exhibited that people older than 15 years, merely 52.8 engage in the workforce thus increasing the workplace with high levels of informality. It also states that the census exhibits some information on gender in which 61.1% of the men were economically active versus 45.4% of women and the rate was 58.4% for rural areas versus 49.7% in urban areas.

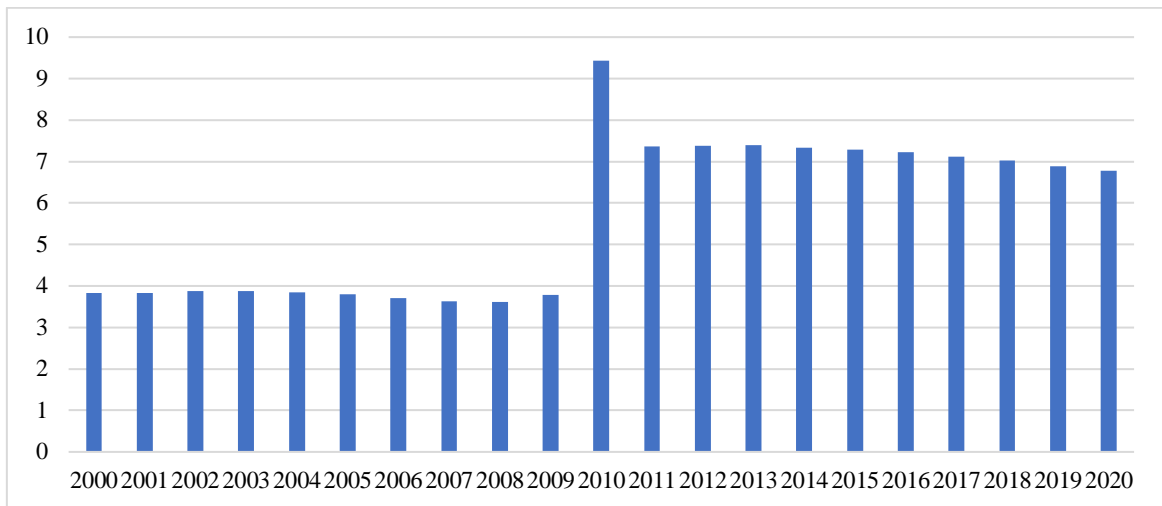


Figure 2. 4 Unemployment rates

Source: World Bank Organization (WBO)

The adjustments taken to employ the nationals were based on companies hiring nationals and successfully 70% of the nationals (World Bank Organization, 2002). In 2014 Figure 2.5 the number of people employed, 44.2% were working in agriculture and fisheries representing a subsistence of the economy, but nothingness compared to Cuanza Sul which is the province with a large agricultural capacity with 70% working in agriculture.

Despite that, the lack of skilled labor impedes the progress of this task, especially in the construction sector which the need for skilled labor is obligatory. Contrarily, the industrial sector that employs 6.1% of the workforce, more frequent in urban areas, there is also the service sector that contributes massively for the country in generating employment which divides into two terms for the economically active population estimated at 26.6% and 23.5% that does not advocate their activity sector. The assessment of what concerns the inequality in Angola has become larger since the agricultural sector is seen as an underproductive sector and it hires more women than a man, 53.5% against 34.6% (World Bank Organization, 2002). On the other hand, Angola should put more emphasis when it comes to social security insurance for unemployment because it creates embarrassment for not only families but also the youth who are mostly married.

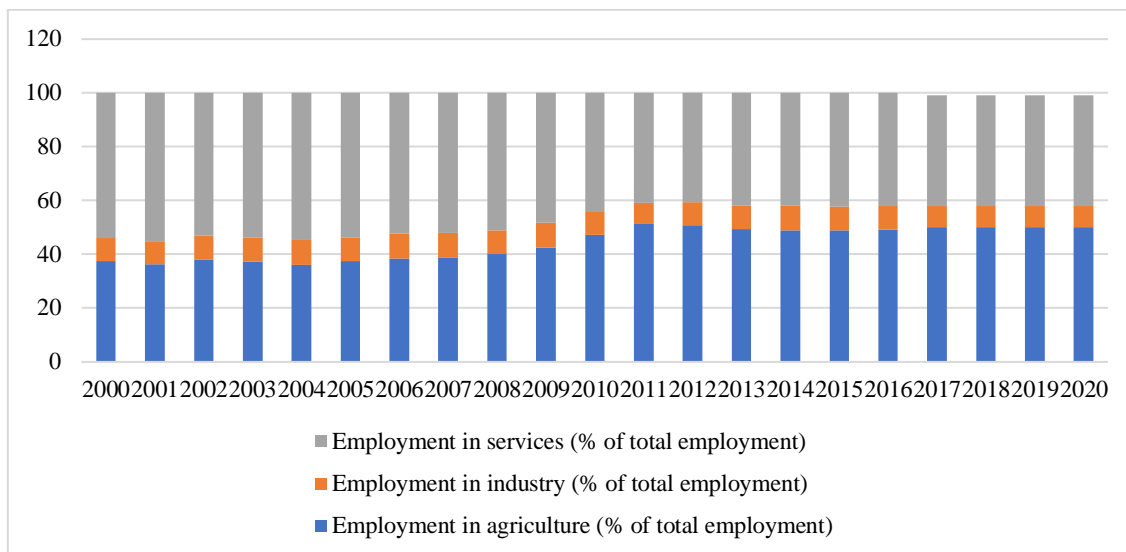


Figure 2. 5 Jobs rate by sectors from 2000 to 2020

Source: WBO and International Labour Organization (ILO)

2.1.3. The Informal Economy

The workforce market of Angola is simply characterized by the large level of the informal sector found in the country. The rise of the informal economy in Angola resides on many factors, for instance, rural livelihood and non-agricultural rural enterprises. However, it is important to say that the rapid pace of urbanization in some way influences the informal economy due to the migration of people from rural zones to urban zones, owing to internal conflicts that abruptly affected the country.

In another way, this in-house migration brought very negative results regarding opportunities for formal jobs in urban areas and encouraged the population to sell regulated products at black market prices to have an additional salary to cover their expenses. Howsoever, there is a fundamental need to supplementary assess the impact of gender on trade policies owing to the participation of 70% of the females in Angola to be part of the informal sector as workers (United Nations Development Programme, 2013).

For the developing countries, especially Angola the informal urban sector is contemplated to be all in all, by giving opportunities to the poor as a way out of unemployment. It also points out that a contemporary assessment of development conducted by the United Nations in Angola in terms of socioeconomic context considered that Angola should focus on fewer or more strategic areas that can add more value to the economy thus rejects the need of investing in non-profit projects and have a broad vision of a program focused on decisive results-oriented that are capable of ensuring the sustainability of contributions to directly influence on the reduction of poverty and promoting human development. Putting an end to the informal sector is not a solution, on the contrary, it is necessary to work together with the sector to promote the empowerment of beneficiaries and ensure the sustainability of initiatives that may eventually be part of the government.

The informal sector in many countries is normally observed as the leftover sector, typically it is nothing more or less than obtaining leftover products from crucial sectors of the economy, like the public sector, domestic transportation, import, and export protection of production and services. Nzatusola (2002) tells in his work, that to comprehend the possible outcome from the informal sector there is a necessity to approve that it includes important components in constant progress along the years.

2.2. International Trade Developments of Angola

In fact, during the last 20 years, Angola has exhibited a huge development in international trade with the export of goods and services reaching 70% of GDP in 2012 and with import obtaining 46%. The oil production for Angola reached 1.505 million barrels per day placing the country in the second position of the organization in terms of oil production. However, crude oil exports monopolize the market mixture of different sectors of exports in Angola, causing a lack of progress to the structure of the economy. Also, due to the international oil price market, Angola had an exceptional productive base but displayed a vulnerable economy with steady high levels of trade surplus. To illustrate this point, the country always seems to support foreign products in comparison with those produced nationally, even in cases in

which the country has a promising comparative advantage in producing them (Organization Petroleum Exporting Countries, 2005). Besides, imports in Angola have suffered a very large reduction in terms of price when compared to exports, and this is largely due to the appreciation of the national currency (Nathan Associates, 2005).

2.2.1. Trade Flows of Goods

2.2.1.1. Exports and Imports

The export sector of Angola has shown fabulous growth for many years, due to at least two important factors, first because of the extractive sector of the country that represents 99% of all the export, and second the diversification of products causing a decrease in the level of mining and utilities in the country. It also states that beyond that, there is a very large mass of Angolans that do not have access or profit from the country's export (International Monetary Fund, 2019).

The revenue required from these transactions goes precisely to the national reserve which under these circumstances, creates enormous inequality and affecting poverty even more. Although there is a government budget that encloses poverty, still there must be a bet on local production. For instance: the food amount consumed by the workforce in the country is imported, the employment generated by the sector is smaller than the level of the population, urban coastal population participation into the economy is less, depending still on the imported products due to poor market conditions and the manufactures that have not recovered yet from the civil war.

Considering the extensive territory of Angola and the non-investment in agriculture, some agricultural producers are in areas of difficult access, providing difficulties for the import and export markets. There have been improvements but the resolution does not seem to be enough because the urban population is increasingly dependent on all food chain imports. The exports depreciated from 72 billion dollars in 2008 to 41 billion dollars in 2009 due to the global economic crisis. Alternatively, with this decline imports also decrease with a

margin of around 10% causing the total trade and trade balance to have large declines but remaining positive. The role of the trade plus is essential to support economic growth and to drive the country towards the diversification of the economy. It also states that the economic crisis of 2008-2009 affects the current account and budget toward deficit, being that the government began taking high measurements to develop and expand some productive areas to increase export (United Nations Conference Trade Development, 2013).

2.2.1.2. Share of Trade in GDP

Figure 2.6 demonstrates the evolution of export, import, and current dollars from 2000 to 2020. After the civil war that covered all the national territory at the end of 2002 and the global crisis from 2008-2009, Angola could achieve positive and negative results, either in export and import or even in the trade balance. With export reaching 71.873 billion USD in 2012 Figure 2.6, was the highest level of export attained due to the fast recovery of the world from the crisis which reduces in mid-2010 due to the focus on the main product demands. Still, the trade balance registered a trade deficit, notwithstanding a decrease of 11.6% from 2012 to 2013 because of the increase in import and reduced export.



Figure 2. 6 Trade in goods performance, 2000-2018 current (billion in dollars)

Source: Banco Nacional de Angola (BNA)

However, from 2014 towards 2020 the level of trade deficit was in continuous decline, due to the economic recession that the country passes through being the fifth recession in 2015 with inflation rising to an average of 20% in 2020 from an average of 17% in 2019 Table 2.2, it influenced the national currency (Kwanza) drastically, because of the annihilation of oil exports in USD availability, Table 2.2 exhibit the fluctuation of the real effective exchange rate over the years.

Table 2. 1 Evaluation of Economic Indicators

	2005	2010	2015	2016	2017	2018	2019	2020
Inflation (%)	23	14.4	9.1	30.6	29.8	19.6	17	20.7
Real Effective Exchange Rate (Annual%)	68	100	124	121	152	117	NA	NA
Fiscal Balance /GDP (%)	24	18	-3	2	-6.3	2.0	1.0	-5.0
External Debt /GDP (%)	29	20	31	44	38	46	57	85

Source: WBO and International Monetary Fund (IMF)

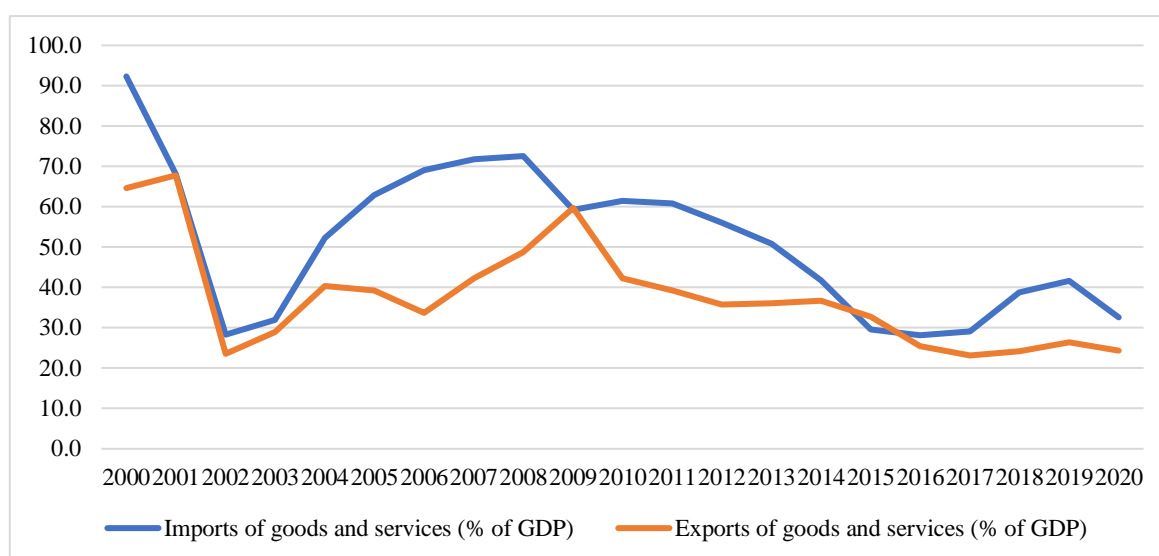


Figure 2. 7 Import and export to GDP ratios

Source: WBO

With the increase in gross external debt to GDP, Angola's external debt increase to 57 million dollars in 2019 from 46 million in 2018. Table 2.2, this was because Angola has a budget dependency on oil revenues, representing 83% of export earnings in 2009 and a very weak distraction of the economy, reflecting today by the fall of oil and the outbreak of the coronavirus in 2020. Angola's trade surplus was 4,933 million USD in the third quarter of 2019, with export decrease 24.6% to 8,140.9 million USD because of lower shipments of oil while the diamond sales rose by 13.3% and imports fell 13.8% to 3,207.9 million USD (United Nations Organization, 2020).

On the other hand, international trade has a significant impact on Angola's economy and Figure 2.7 exhibits the share of imports and exports in GDP for goods in the period 2000 to 2020. The share of import has always been superior in comparison to export in the current account balance of GDP, it was just among the years 2003-2004 and 2016 that export and import seem to attain equivalent values and collectively with current account balance displaying decreases over the years Figure 2.7.

2.2.1.3. Composition of Exports in Goods

The performance of export is not yet properly defined, due to various trade policies or even lack of interest. Eventually, many sectors engage in the export sector directly and others indirectly. Table 2.3 demonstrates the share of export products in 2019. The share of the products is shown based on their higher base percentage due to challenges in finding data for recent years. However, the share of products that embody the largest export product in table 2.3 has been a fact throughout the year, although it can sometimes increase or decrease independently of political-economic changes.

Table 2. 2 Share of Export Product

Crude Petroleum	93.3%
Passenger and Cargo Ships	58.2%
Diamonds	100%
Spark-Ignition Engines	42.9%
Wheat Flours	72.6%
Beer	32.6%
Others Iron Bars	50.5%
Surveying Equipment	31.6%
Crustaceans	37.7%
Sanitary towels and tampons, napkins	67.2%
Rubber Footwear	51.3%
Twine and Rope	34.6%
Densified Wood	50.1%
Beauty products and perfumes	20.4%
Plastic Housewares	62.4%
Toilet Paper	91.2%
Commodities not elsewhere specified	100%
Soybean Oil	56.9%
Ceramic Tableware	48.3%
Equine and Bovine Hides	60.7%
Paintings	94.4%

Source: Organisation for Economic Co-operation and Development (OECD)

The Angola budget revised in 2020, crude oil accounted for 9,3% of Gross Domestic Product and 7,3% of the non-oil sector (Orçamento Geral do Estudo, 2020). Besides, this oil-conditioned value was due to the closing of borders and social isolation caused by Covid-19, with aim of reducing global production by 10% according to the limits of production lessening agreement between OPEC member countries and its associates. Despite this, the non-oil sector is in the current situation due to the lack of structural productive conditions that could very essentially contribute to the growth of the country and the increase in production.

2.2.1.4. Export of Goods by Destination

With the diversification of the export market, Angola is no longer dependent upon developed countries. Figure 2.8 exhibits 12 countries that proffer up the Angolan export sector. As mentioned above, diversification is an important component to improve the economy, but regrettably, with so many exporting countries, there is no variety of products, thus causing the country to be longer and more dependent on oil exports.

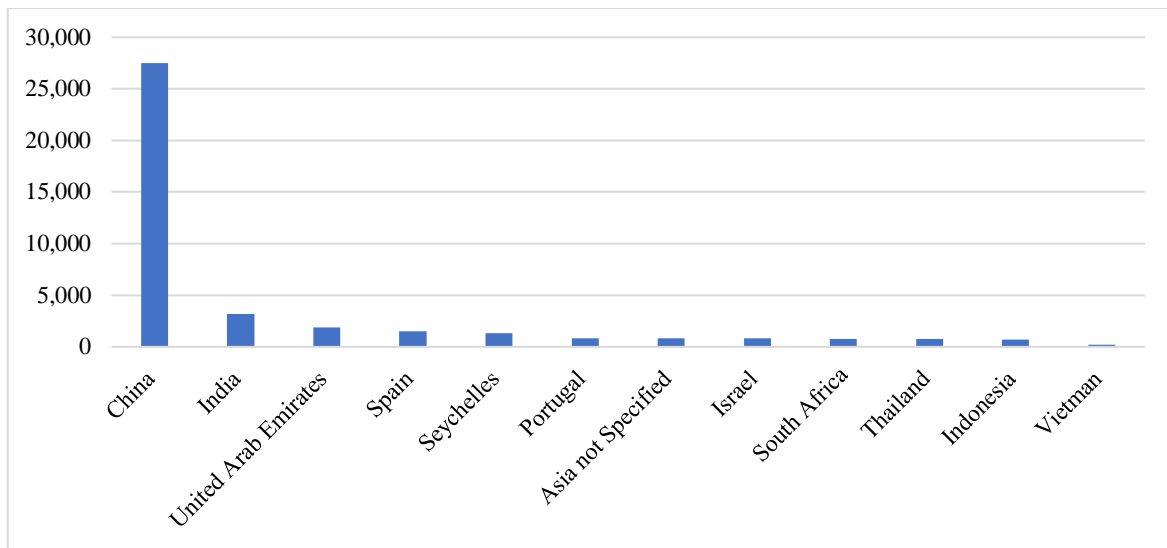


Figure 2. 8 Export of goods by destination in million dollars

Source: IMF

Angola's main export markets are China that displays 27,487 million dollars of the export products being the largest following by India with export surrounding 3,185 million dollars, United Arab Emirates with export surrounding 1,906 million dollars, and Spain, Seychelles, and Portugal with 1,489 million dollars, 1,317 million dollars and 821 million dollars.

2.2.1.5. Composition of Imports in Goods

The performance of Angola's imports seems to be quite more diversified compared to the export of products. Table 2.4 among all products, commodities not elsewhere mentioned with 100%, paintings with 97%, refined petroleum 97.3%, trunks and cases 77.4%, and postages stamps with 66.3% are the import products with a higher percentage.

Table 2. 3 Share of Import Products

Machinery Having Individual Functions	8.97%
Refined Petroleum	97.3%
Packaged Medicaments	22.6%
Cars	43%
Iron pipes and Iron fasteners	25.5%
Rice and wheat	48.6%
Raw Sugar and Pasta	29.3%
Rubber Tires	20.2%
Poultry Meat	48.8%
Postage Stamps	66.3%
Palm Oil	51.5%
Used clothing	21.8%
Medical Instruments, Gas and Liquid flow measuring instruments	34.5%
Other Furniture	36%
Unglazed Ceramics	20.4%
Rubber Footwear	32.1%
Wood Carpentry	36.1%
Trunks and Cases	77.4%
Imitation Jewellery	51.2%
Paintings	97%
Commodities not elsewhere specified	100%
Bladed weapons and accessories	51.9%

Source: OECD

However, it appears that most of the products consumed by the Angolan people are imported, and it is a tragic reality considering the production sector that is so vast with ambiguous possibilities to take care of the basic needs do not go further. Intermediate goods are

equivalent to 15.41% of total imports while capital goods exhibit 32.38% of import because of the extractive sector and the construction material that is an important segment of import trade.

2.2.1.6. Import of Goods by Destination

Figure 2.9 exhibits 12 countries that proffer up the Angola import sector. China occupies the first line with a value surrounding 2,050 million dollars, following by Portugal with a value surrounding 2,015 million dollars, and the Republic of Korea with a value surrounding 851 million dollars. The import of Angola hasn't changed much compared to the previous years, only some changes happened with China increasing its import products variations.

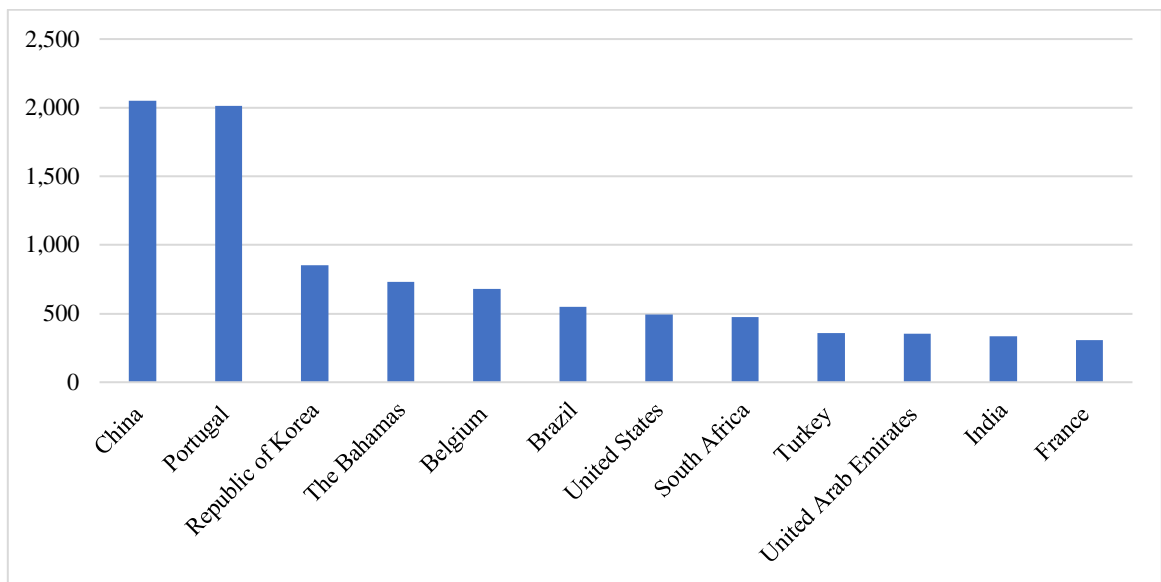


Figure 2. 9 Import of goods by destination in million dollars

Source: IMF

2.2.2. Multilateral Trade Agreements

Since 23 of November of 1996 Angola is a member of the World Trade Organization (WTO) and a member of the General Agreement on Tariffs and Trade (GATT) since 8 of April 1994. It also states that as a Less Developed Country (LDC), Angola appreciates a Special and Differential Treatment (S&D) by following the WTO agreement and commitment (World Trade Organization, 1995). In addition to this, Angola is guaranteed to have access to three main structures, such as market-entry, export subsidies, and domestic support. The conceptual framework based on the market access side, the Uruguay round with obligations on tariff binding, to stimulate investment, production, and trade in agriculture, made Angola bound its tariff at comparatively high levels and there is no anticipation for rescuing MFN tariffs in agriculture. Nevertheless, O'Connor (2003) affirms that developmental proposals in developing countries under article 6.2 are based on agriculture. While Hemming et al. (2018) state that trade-distorting support measures are given access to determine minimal levels.

2.2.3. Bilateral Trade Agreements

As maintained by Africa Growth and Opportunity Act (2000) Angola is a member of the Generalized System of Preferences (GSP) and the Africa Growth and Opportunity Act (AGOA). It also states that Angola is a member of the Southern African Development Community (SADC) and Economic Partnership Agreement (EPA) with the aim of not dropping trade in agriculture and fisheries and to embrocate sustainable economic growth for the Sub-Sahara region with other international organizations.

2.2.4. Regional Agreements

At the territorial level and not ignoring the points made above, Angola is a joint founder of the SADC, African Union (AU), Economic Community of Central African States (ECCAS), and Common Market for Eastern and Sothern African (COMESA). Angola adhered to the SADC, Free Trade Agreement (FTA) in 2003 which had an expectancy to be functional by

2008 since the imports and export from the SADC are predominantly tariff-free, Angola and other countries that are part of SADC are still out of the contract Angola trade flow occurs on the extra-regional marketplace.

2.2.5. Policies on Trade in Goods

Trade reforms in Angola were only accomplished in the 1990s, it also states that only after Angola began to have a more elaborate trade with import duties varying from 0 to more than 100% (United Nations Conference on Trade Development, 2013). Sandrey (2013) lays down that there were factors that greatly influenced this change, such as; the change of a custom system enterally profligate with unlimited exceptions and the state itself with a monopoly on international trade through SOEs.

With Angola presenting unregulated domestic markets, it was necessary to carry out a trade reform for the Harmonized System in which the duty rate was drastically reduced from 135% to 35%. He also states that after a few years in 2005 under Decree-Law No. 2/05 was implemented the Harmonized system of 2002 a new tariff with a maximum rate of 30% for import and export. It also states that the goal of the Harmonized System of 2002 was to; a) Review of responsibilities based on the protection of national goods and provide goods at competitive prices; b) The adjustment of the tariff structure, according to the requirements of the WTO and the World Customs Organization (WCO); c) Ensuring tariff advantages for the productive sectors of the economy and create financing equality, especially for those demanding; d) Creation of dumping practices protection to support the comparative advantage of some products, thus reducing the unnecessary import practice and increasing the export of products from the non-oil sectors (Nathan Associates, 2006).

Therefore, the composition of tariffs impedes the diversification of the economic activities stage without counting already tax diminutions that make it more prominent for the protection of the firms that they benefit from. Even more, the high protection given to some products makes it difficult to compete against international markets and lack export accomplishment.

In addition to this, the government created the tariff structure to help attain a few goals: a) To support and protect national production; b) To attract financing and to improve the employment for the Angolan people. Baldwin and Evenett (2008) declare that protectionist pressure tends to increase when the feeling of the disorder increases among the population to succeed in a commercial crisis. He also declares that to manage open economies policies must prove that they have enough means to hold their growth at a consistent rate and especially when the emerging economies present to have such problems there are protection nets ready for a quick reply.

2.2.6. Duty and Tariff Concession

About import duty concessions Angola is far-reaching, giving more value to the investors in precedence regions and those interested in investing in oil, diamonds, and mining factories. Besides, Angola's investment policy and import duty facilitate investors who shall import necessary goods for production and capital equipment, as well as some products for end-use, duty-free (Nathan Associates, 2006). Tariff allowances for import, export, and taxes represent a percentage of 24% to 40% of annual customs revenue, even though imports have more special customs duty because of the oil and gas industries.

2.2.7. Policies on Trade in Services

To have more commercial openness Angola pledge the openness of trade in services under the General Agreement on Trade in Services (GATS). Its designation was to cover a large scale of the sectors, such as tourism, banking, restaurant services, sports services, and culture. Angola is a wide country open to a commercial presence of foreign service providers such as small retailing activities and other services that can practically develop the economy. Conversely, there are some negative particularities regarding a commercial presence in Angola. For instance, access to land by foreigners, the recruitment of nationals, and the limitation of foreigners in the workplace. None the less, due to the level of openness that

Angola exhibit about importing services, there are a large number of foreign professionals who provide services, especially in more productive sectors of the economy, also is important to take into account that the trade made in services in Angola takes place through e-commerce platforms which is valuable for the country because it avoids limitations. The trade openness to services tends to be more beneficial to a country rather than trade in goods.

2.2.8. The Commerce of Flows in Services

Figure 2.10 shows that commerce in services declining drastically along some ages, Figure 2.10 exhibits a very high annual average growth rate in terms of import and terms of export a very unsatisfactory growth. From 2000 to 2014 Angola experienced the largest import of commercial services, reaching 242 billion dollars in 2014, therefore, services are worth up to 37% for all the imports from Angola, compared to the average of the LDC 25.13%. Correlated to exports, there was also a slight growth from 2000 to 2014, with export reaching 242 billion dollars in 2014 the highest growth present in Figure 2.10.

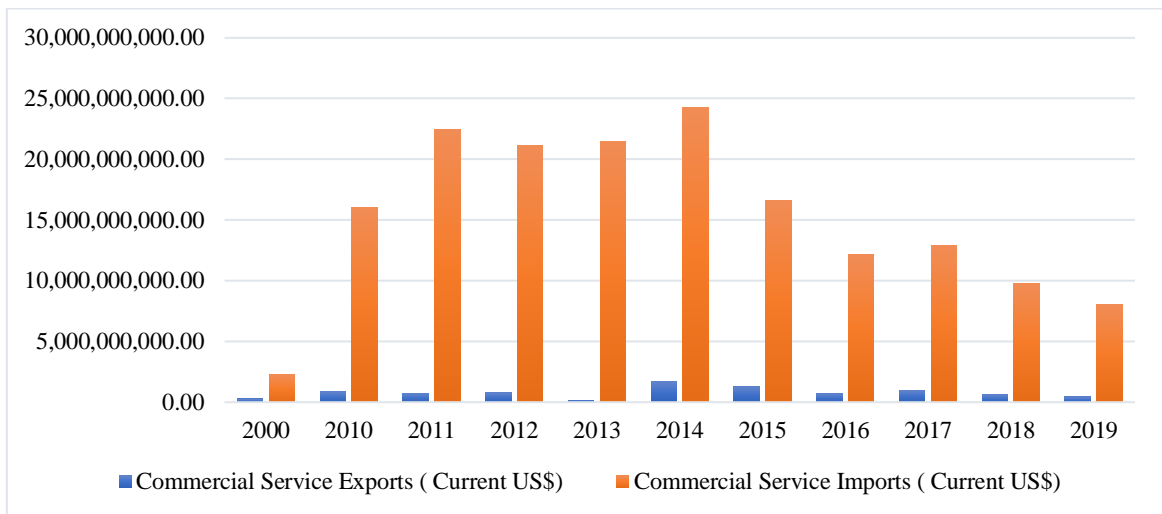


Figure 2. 10 Share of commercial services current dollars

Source: WBO

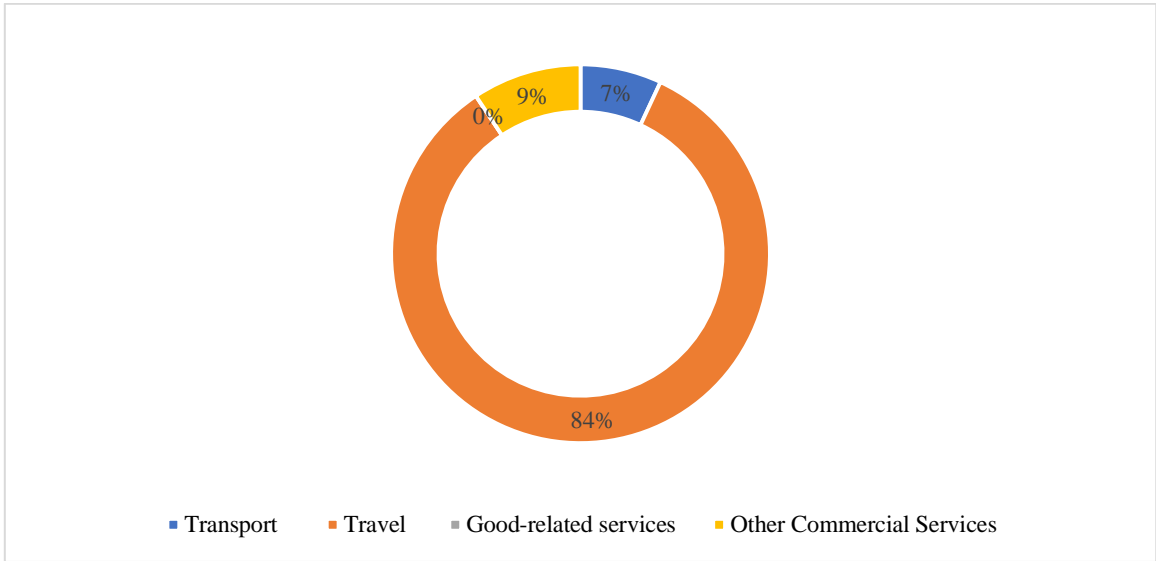


Figure 2. 11 Total exports by main services item in 2019

Source: WBO

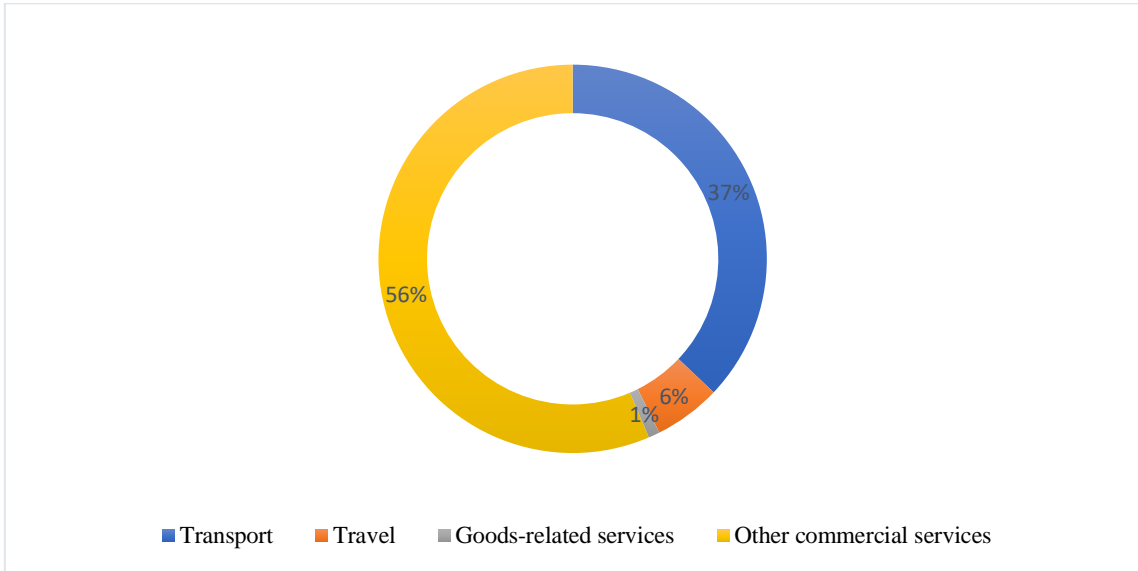


Figure 2. 12 Total import by main services item in 2019

Source: WBO

Figures 2.11 and Figure 2.12 show the total exports and imports of the main items. In Figure 2.11, the travel sector demonstrates to be dominant with a percentage of 84% followed by other commercial services with a percentage of 9%, transportation with 7% and finally services related to goods equivalent to 0%. In this domain, only travel has grown significantly due to the revival of tourism for commercial purposes. The other sectors seem to show less progress because of the diversification that seems an element of little importance.

On the other hand, Figure 2.12 exhibits that other commercial services represent the majority, equivalent 56%, following by transport that represents 34%, merely, because of poor road infrastructure and inland freight transport which is complex merely, owing to the bad the transportation of goods because of the conditions of the roads which is complex due to the war that affected the country as a whole, large investment are being made for the improvement of infrastructure to improve the country's development, and travel with 6% merely because of the tourism and commercial purposes and last the good-related services with 1%.

2.3. Income Distribution and Poverty in Angola

This chapter discusses the concepts of inequalities and poverty in Angola. In the concept of inequalities, tried to find pros and cons of inequalities and in the concept of poverty, tried to understand the various strategies to eradicate poverty based on the socio-economic structure of the country, for a short and long period.

2.3.1. Income Distribution in Angola

Tvedten and Lázaro (2011) said that the crisis affecting the country brings many problems, such as social and economic due to the fall in oil revenues and poor governance. However, it is important to recognize that Angola has the most unequal income distribution. Over the years, Angola has waged a great fight against poverty that aims to improve the socio-economic conditions of the people in Angola.

Stiglitz (2015) claims that by understanding the root of inequality there will be no difficulty in understanding its outcome. He points out two crucial factors for straightening inequality, the market as a factor that helps to shape the level of inequality and applied policies, which in turn shape these market forces. The second factor explained by the author exhibits foremost the creation of policies which is the most reliable method to level inequality within a society. Still, the same author affirms that it is up to the state to determine and implement actions to stimulate fair competition based on transparency either of distribution income or resources and creating central taxation and social contribution policies within the bases of the daily reality.

By way of contrast, where there is no government support the poor generally have huge difficulties in restoring the socio-economic concerns, for instance, modest home to live in, basic food, health, and education. The state intervention and adequately-structured policies based on fair laws are key factors in reducing inequality and may help children to have access to education who after succeeding can help the state and bring benefits to families, in other words, increase human capital which in turn will produce financial capital.

Modern societies have attained prosperity in several sectors with an emphasis on technological and scientific sectors. Yet, there are problems far from being solved, especially in social inequalities, because there are two ways to become rich, the first being 'wealth and the second withdrawal of wealth from others. In the primary case, there are advantages for society, since this creation of wealth is equal, in the second case, creates problems for society since it excludes wealth that could be redistributed equitably, thus inequality is created from this type of enrichment.

However, Milanovic (2012) sets out that the world is a very unequal place and much of its inequality comes from a large difference among social average earnings. The author also points out that inequality is a 'relational phenomena' because all human beings are associated, there are only indifferences when a distinct group shares certain qualities such as forms of governance, religious belief, historical sources, and language. He also sets out that Angola attained effective peace about 18 years ago, over this time there has been a growth in the Gross Domestic Product (GDP), as well as the interest in approaching the obvious

losses in the social area. Moreover, with the global financial crisis that happened over the years and the impact of the Coronavirus (Covid-19) after a new presidential choice, the thoughts are inclined to diversify Angolan's economy, giving more emphasis to agriculture and industry.

The Plano Nacional de Desenvolvimento (PND) was formed with the aim of sustainability, development, and modernization of the country. The PND has a short-term duration, is from 2013 to 2017, and the most recent from 2018 to 2022 which aim to promote socio-economic and territorial development of Angola and focus on improving the well-being and quality of life of families in reducing inequalities and poverty. Although, Angola is a developing country, there are more possibilities to become more and more connected with the international financial markets through many mechanisms.

For many countries, globalization can stimulate economic development through global economic integration, but because of the high level of growth rates and poor commercial performance, the population of Angola is living in poverty. In any case, total trade liberalization may harm Angola in terms of unemployment and production, above all, there are developing countries that have already experienced these similarities where inequality has seriously increased due to trade and financial policies, the increase in income inequality is correlated with a frequent increase in financial crises worldwide. Still, a high level of inequality makes economic growth less able to reduce poverty regardless of the rate of economic growth. However, this relationship is observed in developing countries where all income from unproductive families goes to consumption. In the short-run household income will be affected if the dependence relies on specific factors of production. For instance, a home that earns all of the income from a family-run farm will be dependent on the prices of agriculture, if there is a price decrease, they shall eventually be capable to find other employment, but it might be difficult in the short run.

Angola has a poorly diversified economic structure concentrated in oil activities, low competitiveness concerning imports, and an export structure highly concentrated in oil products. A comprehensive growth strategy should be based on activities provided towards the production of goods that satisfy the basic needs of the population, labor-intensive and

job-creating, enhance the use of endogenous natural resources and streamline the national supply chain, it should also be emphasized that the informal economy still has a very relevant weight in economic activity and a significant share of employment is concentrated in activities with low productivity and, therefore, low compensating wages.

For these reasons, promoting the competitiveness of companies in the domestic market and exports is an essential precondition for ensuring the diversification of the economic structure, reducing the trade balance deficit, widening the tax base, facilitating integration in the markets to regional scale. In the meantime, the continuous increase in the level of learning of society throughout life is a central goal for the economic and social development of Angola. Eventually, an equitable education system based on the principles of equal opportunities and promotion of the exercise of active citizenship is very focused on offering qualifications and skills that stimulate innovation and knowledge.

In addition to it, the dimension of poverty and inequality has some links with the culture and social structure of each sector Plano de Desenvolvimento Nacional (2017). On the other hand, to solve the problem of poverty and inequality there is a need to focus on general social transformation, because if economic growth is the right key to reduce poverty, there may be a great possibility that growth will delay inequality. After all, high inequality could be detrimental to growth by affecting education. Costa (2012) declares in both works that social inequalities interconnect with each other in variable ways, as they interconnect with many social phenomena of different types. It can be observed in different manners, for instance, the low investment in education will result in a low rate of human development, as a result, all societies that invest in education will grow in all fields, whether economic, social, and political because it will have resources capable of developing and contributing to produce wealth and in turn will create advancements for the necessary conditions of society, such as food, education, health, employment, social infrastructure, electricity.

Stiglitz (2015) introduces a modern approach highlighting three factors that shape inequality, globalization, technologies, and outsourcing. He also emphasizes that globalization tends to make the relations among states trustworthy due to the ease of information as well as the commercialization of products growing, in most of the cases those that have their primary

conditions structured making other countries dependent on the strongest. He also points out that with the new technologies there is a great change in what we consider to be traditional work, often tending to a decrease in personnel rather than machines. He finally states that this method is beneficial when done under rules and creates other forms of human work while outsourcing encourages businesses to decentralize management, it tends to promote, in most cases, precariousness in the work world.

The factors classified as critical to the productivity of Angolan companies incorporate human capital, quality of institutions, financial institutions, infrastructures, the functioning of markets, and public policies. In addition to this, the territory of Angola has large capacities in the context of growing integration of the territory and the development of a large national market which assumes enough conditions for the circulation of populations, goods, and services produced.

In particular, the youth human resources that establishes one of the main strategic assets in which Angola can support an accelerated and sustainable development process is given the qualification of human capital (training and higher education), the development of agriculture and industrial location infrastructures indicate the concern and commitment to decentralized development of the productive potential of the economy. Stiglitz (2013) argues that exploitation implies that those at the top are more likely to earn more by taking from those at the bottom. He also mentions that with the theory of marginal productivity things should be easier for developing countries because the theory sees that those who have large amounts of money must share with society in ways to develop and grow.

Nevertheless, as stated by United Nations Conference on Trade and Development (2014) inequality in developing countries depends on the inequality between the countries and the level of growth rates as well as the economic and political events happening that affect inequality. Angola's fast-growing income performance cannot occult the wealth among Angolans, with income inequality at 0.586 Angola was the top 10 countries in the world with higher income distribution. The slack in the labor market caused by the crisis has brought serious problems to Angola and this can be seen in Figure 2.13, the higher the unemployment the younger people with low qualifications will continue to express a high index of laziness.

The crisis has also had a very strong influence on low-quality jobs and employment contacts. Figure 2.13 exhibits the labor force participation rate, between the years 2000 to 2019. In other words, Figure 2.13 represents successive declines, due to tragic historical events, financial crises, and oil dependence export forgetting to diversify the economy.

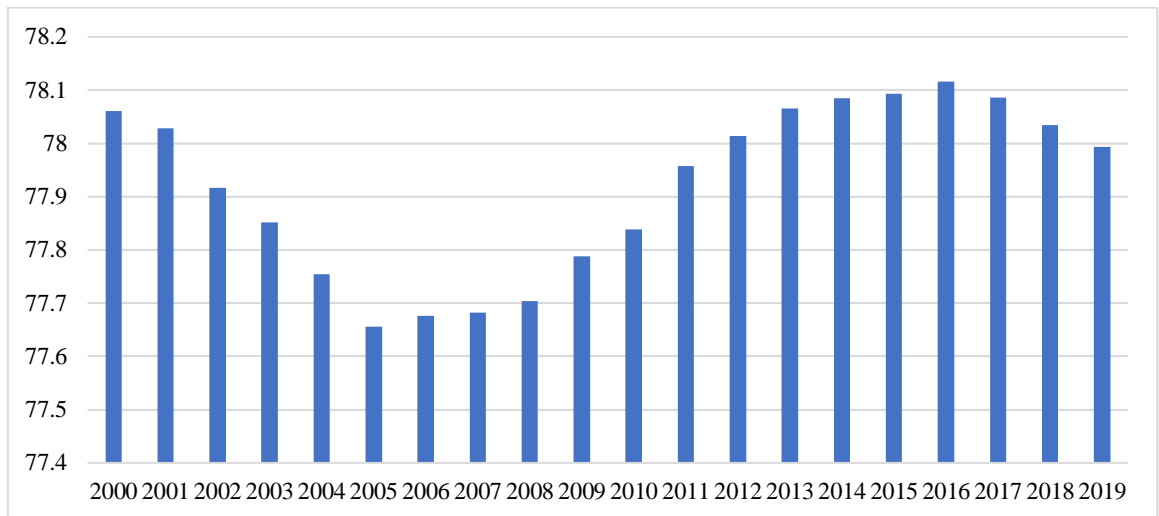


Figure 2. 13 Labour force participation rate of the total population ages 15-64%

Source: WBO

As displayed in Figure 2.13 and Figure 2.14 unemployment rate has decreased significantly started from 2001 due to many reasons above mentioned, and the Figure 2.14 pattern began in 2004 since the labor force participation of the population economically active has also decreased. From 2000 to 2008 a period after the Civil War which brought a significant negative impact to the country’s economy, Angola had and has been working to improve the living conditions of the people, better institutions, infrastructures, health, education, and above all policies that favor the people of the country. These changes are exhibited in Figure 2.13 and Figure 2.14, from 2009 to 2019 period that both economic patterns began to increase.

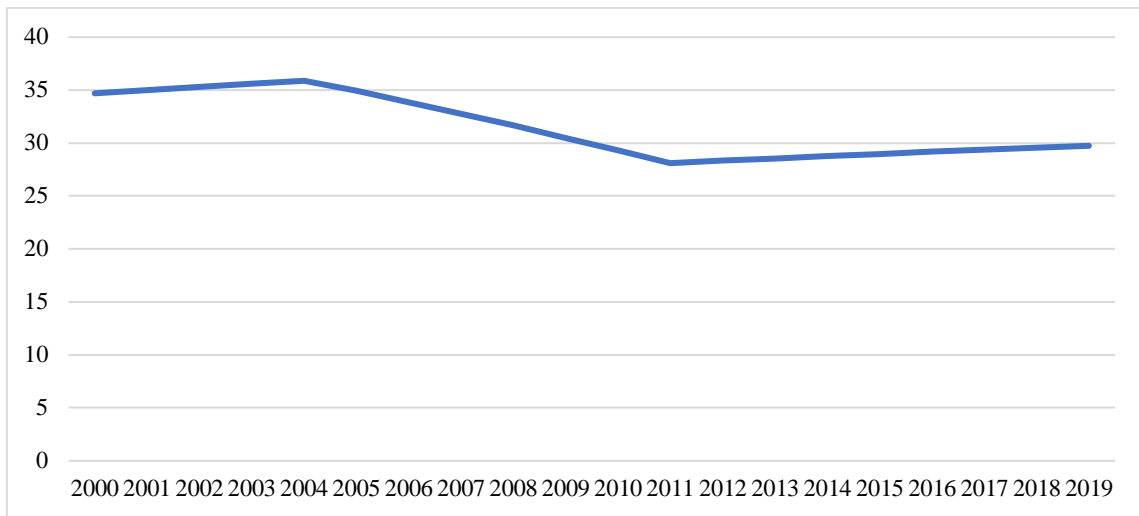


Figure 2. 14 Salaried workers, % of total employment

Source: WBO

Figure 2.14 displayed the level of remuneration of those who have paid jobs in the country also corresponding to the changes in Figure 2.13 since these factors are positively correlated. Notwithstanding, the fluctuations in Figure 2.13 and Figure 2.14 explain that the majority of workers end up gaining more than the minority of workers, thus causing an uneven impact in the economy of the country that over time causes a huge shock for households and if not controlled turns to poverty.

As claimed by the Organization for Economic Cooperation and Development (2016) some countries such as Chile, Hungary, and Turkey that exhibit rapid growth of labor income of 6% per annum and this increase reflects the increase in employment in these countries, although rates are below the OECD average. To overcome inequality and increase opportunities, it is necessary to identify and eliminate the barriers, to access to primary social services, such as education, and health care that are indispensable for human development is obstructed by the lack of educational infrastructures and difficulties in supplying medicines. Rural areas are very poorly served by government services, even if the population could afford to pay for such services, the service would reduce the chances of good treatment. Economic development and income creation are required for the poorest poor.

Among many barriers, the culture of corruption is the most effective among the country, especially in the government, thus there is a need to approach this situation urgently in public policies.

Another point is the supply of scholarships, and work nationally sponsored politically for most needy sectors of the country since human rights include good governance access to education, care health, and assuring that every person has the choice to improve their potential. In addition to this, if Angola improves in this direction, it will not only reduce inequality but also poverty with equitable growth improving living standards for all, especially the poorest.

2.3.2. Poverty in Angola

Poverty is related to the insufficiency of having money, which in turn has a very large impact on basic needs. Although it has great elements such as economics, politicians, and societies playing a very important role in its spread, many international organizations explain it as the lack of health, education, security, freshwater, and hygiene. More importantly, these factors have their interference in poverty in terms of advantages and disadvantages, so whatever there is talking about the people's income there is also talking about the economic well-being of the same people.

The advantages of these factors are the quick recovery of the data, the easy measurement of the same, and the normality of improvement of the same. In addition to this, indicators such as education, health, and nutrition are a measure of non-economic well-being and are used in long terms trends. Moreover, absolute poverty is where a household's income is insufficient to afford the primary needs of life while extreme poverty sees the household receiving or holding 50% less income comparing to the average median income. On the report of the World Bank Organization (2020) on the progress of Angola and improvement in terms of social conditions after the civil war, the country still bears notable difficulties that impede its attempts to reduce poverty and inequalities.

However, on the authority of Instituto Nacional de Estatística (2011) Angola is ranked 149 out of 187 countries, with peace and high rates of economic growth.

The perspective of schooling is in any way related to the hope of being born. Bearing in mind that Angola presents a great growth in the years of schooling that allows forming families to be able to meet their basic needs. In other words, individuals with more education can have a higher family income and a better quality of life. Figure 2.2 shows an increase in GDP per capita PPP which simply reflected the restricted growth of the poor with the consumption level below the poverty line of 21 dollars in 2020. Jover et al. (2012) affirm that in all families managed by women, 60% of the 20% live in extreme poverty. In addition to general income inequality, inequality was very visible in rural areas at 0.39 but increased from 0.40 to 0.44 for urban areas. Although, Angola demonstrates to have a significant urban-rural separation.

The current developments in urban inequality almost compensated for the poverty reduction attained through rapid growth but in return, this growth did not favor the poor in rural areas only those who are not poor. Brannen (2019), affirms that comparing per capita household consumption against the international poverty line which is also represented in per capita terms, this method presumes that resources are shared equally and that deficiency are the same across all the members of a household, this assumption is lacking for a clear understanding of the distinction within households and, biases country poverty rates and the demographic profile of poverty if there are regular variations by sex and age in the household.

2.4. Some Factors of Income Distribution and Poverty in Angola

2.4.1. Health Insurance

During a long time of internal fights, it was difficult to accurately assess the health situation of the population. The fall in mortality rates over the years compared to the maternal mortality rate represents the low percentage of births accompanied by qualified personnel. As stated by United Nations Organization (2016) according to WTO data, the illness weight of the HIV/AIDS was between the adult population 15-49 years old, which when compared

to the countries in the subregion is relatively low. The predominance of tuberculosis rate was also low and another illness that affects the country is malaria.

2.4.2. Education

Unquestionably, education is a process of facilitating learning and acquisition of knowledge, skills, beliefs, and values. Rijckeghem et al. (2001) declare that as part of the third parameter of the human development index, there is much need for developing countries comparing to developed ones in paying more attention to education, because of the increased earnings, improve lifestyle, and the quality of jobs. However, some influential factors need to be mention because of the increasing level of poverty in poor countries; a) Lack of training; b) Lack of productive knowledge; c) Lack of skills.

In the report of Unicef (2018) without education, the width of understanding between people would stop the democratic process and would not causeway for sustainable human development making a quick social process and wider social equity. It also mentions that education is the most important tool in terms of growth while identifying the significance of economics in other words, education can increase income, decreasing hunger, and decrease unemployment. It also mentions that the level of education significantly influences the welfare of the country then indirectly does not play a significant role in the influence on social change and economic production.

Fiess (2018) affirms that the literacy rate of adults aged 15 and over was 66%, although neighboring countries also have the same statistics, in Angola, it takes a child 13 years to complete school. Plus, the higher cost is required to meet education requirements, but only if the education structure is well planned, especially at the municipal level because school holds money and the low quality is an important concern for education, although the new developments demonstrated to have a lack of effectiveness in recovering the condition of adult people that haven't years of schooling.

2.4.3. Gender

Women who work on their own are reported to be at 82.24% in 2019 higher compared to that for men 58.17% in 2019. In terms of labor force participation rate for women is reported 75.4% in 2018 is lower than that for men 80.1% in 2018 according to United Nations Development Programme. In the educational sector according to the latest data provided by the World Bank, the literacy rate between the ages of 15 and above was 53.41% in 2014 against 79% for men.

2.4.4. Corruption

The harmful effects of corruption are visible most of the times by large NGO's, especially organizations like the World Bank and these effects are characterized as a) Holding back growth; b) Reduce the level of investment and revenue; c) Misdirects public resources; d) Fading public service delivery; e) Threat the public trust; f) Weakens the government or state trustworthiness. Some economist defends that these factors mentioned are more likely to appear in developing countries due to monopolist control over everything by the government, on the other hand, the broad mechanisms that were supported to be used against such forms of corruption are weak, shifting down the private investment by making the society less capable of moneymaking. He also mentions that although there is a positive correlation between economic growth and poverty, the welfare of any country will always tend to decrease. Menoca (2015) points out that corruption is positively correlated with economic income, it is also described by a variety of economic, political, administrative, social, and cultural factors which can be observed nationally or internationally.

The approaches to corruption from a collective action perspective is related to the way bureaucrats, rulers, and citizens work to maximize their profits which is highly dependent on given expectations about the behavior of others, yet the corruption in the public sector concentrates on the compensation and wage levels that everyone gets and the outcomes of such behavior. In the report of the World Bank Organization (2015) the increase of government activity and size affected the developing countries massively because it did not

have long traditions of good governance and strong institutions, leading to a proliferation of opportunities for bribes and mischief. It also declares that the two other factors that the author mentioned which have contributed also to the increase of corruption in developing countries are the rapid growth of international trade in the post-war period and the privatization process that is very common in transition economies.

Besides the decentralized system is much better than a centralized one because it makes the economy capable of competing against external shocks. In Angola, the new government's anti-corruption and economic liberalization policy has demonstrated to be positive to change the conditions of the country towards corruption. There were many initiatives created by the government and among these the financial sector transparency through SOEs, the liberalization of the foreign exchange rate, and a more business-friendly way. In case, of the implementation of new reforms, there will be more space to attract investment for the country and more effective growth.

The report of the World Bank Organization (2014) claims that even if corruption will in most cases decrease as the government rules change, they are circumstances where those affected will find it more trustworthy to perpetrate other forms of corruption. Besides, this corruption isn't committed individually it requires a group that can share mutual trust once these conditions are in place. The theory of individual maximization proposes quite simply that an individual will be involved in corruption if the advantages correlated with the act are expected to exceed the costs. Chêne (2014) affirms that corruption in the value of 0 (highly corrupt) to 10 (highly clean) does not allow the desired level of productivity and reduces the annual net inflows. He also mentioned that corruption can achieve a loss of tax revenue because it will have budgetary consequences, affecting other sectors of the economy.

3. ANALYSES OF TRADE FLOWS AND INCOME DISTRIBUTION IN ANGOLA

International trade is the transaction of goods and services crosswise, seen with the intent of embodying the world. In the same way that international trade is important for the world, it can also be important for Angola, particularly in terms of economic and social development.

3.1 Early Stages

There have been too many studies done before to assess the connection between understanding trade and income inequality. Although some are based on collective extension with many similarities. Besides, knowing that many agents can cause equity, often the choice of variables depends on research with a diverse range of results. Naguib (2017) sets out that economic growth is positively correlated with unequal distribution because it sensitizes more effort on the part of any individual. He also argues that if the perception of the distribution of resources is perceived as unfair, there may be political disorders. As consequently Urata and Narjoko (2017) found in their study that the world irregularity rose from 1820 to 1980, and the further they analyzed the global Gini coefficient after a decade there were estimated mixed results towards many changes in the coefficient.

Milanovic (2005) claims that in relation to the 19th century, there was a great divergence of incomes between the countries of the world and that this divergence was due to globalization. While Bourguignon et al. (2007) state that the world inequality shortened after 2000 and his notes show that it also became worse at the age 19th. Nevertheless, Barro (2000) affirms that the experience of the countries that are already well-established differs but not in the style of the HO doctrine. In turn, the country's exogenous geographical characteristics must be thoroughly analyzed because in terms of trade it reveals that it is a component of bilateral trade (International Monetary Fund, 2017).

Demir et al. (2012) point out that examining the patterns of sectoral concentration within and between countries found that even at a minimum income level economic development is

distinguished by diversification of production as is the case with exporters of manufactured products rather than specialization as in exporters of primary products. Smith and Taylor (2007) point out that structural reform is a mechanism that promotes trade and that more investment made in it may impact inequality. Daumal (2013) shows that the impact of trade liberalization on the development of spatial inequalities depends on the specific internal geography of the country. Because while one region of the country has better access at low cost to foreign markets, the other is left out. While Shahabadi et al. (2017) state that education is a mechanism of a favorable economic environment. He also mentioned that during the examination it was possible to find that education reduced income inequality.

3.2. Data and Methology

This part will demonstrate some opinions regarding the variables that will be examined. Next, there will provide more detailed coverage about the reason for each variable in the regression and its data source.

3.2.1. Sample

The thesis analyses the impact of trade flows on income distribution in Angola. Therefore, Time-series data will be utilized. The thesis selected as the period of 2001 during a moment that income inequality in Angola initiated to demonstrate some pattern of fluctuation with trade. Because of certain difficulties in gathering data for some variables, the model preferred to use the years 2001 and 2017, and the reason why different data sources were chosen was based on the difficulty in finding data for certain variables. Variable information is given in Table 3.1.

Table 3. 1 Variable Information

Variable Name	Code	Source	Explanation
GINI Coefficient	GINI	World Inequality Database	Income Inequality Indicator
Export	EXP	BNA	Export of Goods and Services
Import	IMP	BNA	Import of Goods and Services
Unemployment	UNM	IMF	Yearly Unemployment Rate
Debt Stock	DEBT	World Bank WDI	Short Term Debt Stock of GDP

Source: Author's own calculation based on data

3.2.2. Dependent Variable

As we use the Gini coefficient to measure income inequality, it will be used as the dependent variable. Liberati (2015) sets out that the Lorenz curve is extremely used to examine income size remittances and inequality measures and the most used when addressing the end of inequality is the Gini Coefficient. It is well known that the Gini is used to compare income inequality between countries. Differential numbers such as 1 to 0 or even 0 to 100 are normally used. The smallest number in this case 0 means a perfect leveling and the largest number in this case 1 means a greater leveling. Anyway, in regression, the data will be determined as Gini_H and derived from the World Inequality Database (World Inequality Database, 2021).

3.2.3. Independent Variables

Export and Import have been used in many studies to measure trade and to examine the impact of trade on income inequality. Li and Rafael (2003) argued that trade is an easy mechanism for companies in the least developed countries and that unauthorized labor from cheap imports undermines the power of the business to reduce wages. In turn, trade increases economic competition and shortens the prices of basic consumer goods while the competition also lessens the upper-class monopoly and also reduces income inequality.

The total values of exports and imports in proportion to GDP are collected from the Banco Nacional de Angola (BNA). The model will be utilizing 3 controlling variables.

The reason why these variables were chosen is based on past investigations, following by various interpretations about these variables on income inequality. The unemployment used in this analysis is measured as the share of the workforce. The data for unemployment is acquired from the IMF. Menendez and Alicia (2000) discussed the formal and informal characteristics of employees and the wage leakage in Argentina. She also found that there remains a positive and negative rate between lack of work and inequality. Ryscavage (2015) mentions that the family income of a family depends not only on the economic situations of the current day but also on previous situations such as education and decisions regarding the perception of the role to play in society.

Nevertheless, a common drop in demand for jobs means that the unskilled do not suffer from wages and the skilled become cheap to employ. The short-term debt, analyzed and seen as current liabilities, is a financial obligation of the company that has to be paid within one year. For instance, bank loans, accounts payable, wages, lease payments, and income taxes payable. The data was acquired from World Bank Development Indicators (WDI). Kumar and Woo (2010) submit that in their article Public, Debt and Growth, he tried to identify that the distribution of income within a country creates a heterogeneous relationship between government debt and economic growth between countries. He also highlights in his analysis that when interacting or divide with income inequality, the coefficient is negative, but not significant.

Rohrs and Winter (2017) submit that the short-term transition effects of public debt have very high implications for the well-being of the population because reducing debt means saying that taxes on both labor income and capital income must be increased, thereby affecting so the rich-poor. Sahay and Martin (2020) submit that inequality has momentarily decreased during the crisis and is beginning to rise after the crisis. He also states that the greater the debt, the greater the economic activity and its medium-term costs for macroeconomic and financial stability. However, the most important determinant of debt sustainability, as well as poverty reduction, is economic growth. Whichever is the definition

of sustainability the growth in the GDP growth rate rewards a higher level of debt? The assumption of perfect capital flexibility is illogical, and when dropped, lower debts are associated with higher growth although the debt has a significant association with government policies that lead to poor macro policies.

3.3. Estimation Method

The Ordinary Least Squares (OLS) method is used in this study in order to show the relationship between dependent and independent variables by using two models. To have convenient and robust model results, all variables are used in their logarithmic form. Since the dependent variable is not stationary in level, in the model a differentiated form of the GINI is used (DLGINI). However, for each of the two models, equations using the data averages from 2000 to 2017 are considered based on the similar studies Winter and Sigrid (2017), Mendenez and González (2000), Zheng et al. (2020), Li and Rafael (2003), Barusman and Yusuf (2017).

In order to show the impact of international trade on income inequality in Angola, we employ two models. In the first model, we analyze the relationship between the Gini with export and import values of Angola. In the second model, we use other macroeconomic variables such as unemployment and total debt service along with export and import. We imply the second model to assure the relationship between Gini and foreign trade variables. The model's specifications are given as follow:

Model 1

$$DLGINI = \beta_0 + \beta_1 LEXP_t + \beta_2 LIMP_t + \epsilon_t$$

Model 2

$$DLGINI = \beta_0 + \beta_1 LEXP_t + \beta_2 LIMP_t + \beta_3 LUNM_t + \beta_4 LDEBT_t + \epsilon_t$$

where β_0 is the constant value, from β_1 to β_4 they represent the coefficient of each variable, and ϵ_t stands for the error term of the model.

There are 3 fundamental assumptions that will be used for the estimation to be examined positively. The first fundamental assumption indicates that the restricted mean concerning the fault term should be zero: $E(\epsilon|X) = 0$. This means that any different variable that is not implicated in the model and influences income difference shouldn't be associated with the independent variables. Second, the sample summit must be distributed without assistance and identify all values. Third, large outliers should be impossible. As the final objective is to perform a regression analysis with the data in natural logarithms so that there may be a better adjustment in the linear regression, was decided to work with the log of the variables.

3.4. Empirical Results

In this part, estimation is conducted on examining 2 models based on the dependent variable. The first outcome will focus on analyse the Descriptive Statistics and the second will be based on Kwiatkowski-Philips-Shmidt-Shin test statistic to accept the stationarity of a given series around a deterministic trend. The third will focus on analyzing the consequences of regressions relating to Gini as the dependent variable.

3.4.1. Descriptive Statistics

Before started to analyze the econometric evaluation, let's start by taking a look at the descriptive statistics of the variables under consideration. This will be very important to do because the statistics are significantly linked to the statistical properties of the model series so that explanations about the behaviour of the series can be provide quickly Table 3.2.

Table 3. 2 Descriptive Statistics of Variables

	GINI	EXP	IMP	UNM	DEBT
Mean	0.612488	39231.08	29169.67	5.558353	8.485227
Median	0.595711	35598.04	28256.54	3.875000	7.794657
Maximum	0.667016	71873.28	53537.92	9.430000	30.35991
Minimum	0.595711	6736.384	6696.817	3.612000	2.179528
Std. Dev.	0.024674	22392.96	16016.89	2.015594	6.145263
Skewness	1.106696	0.022564	-0.088752	0.344105	2.762098
Kurtosis	2.727909	1.730027	1.579176	1.540275	10.79085
Jarque-Bera					
	3.522639	1.143865	1.452260	1.844803	64.60997
Probability	0.171818	0.564434	0.483778	0.397563	0.000000
Sum					
	10.41229	666928.3	495884.3	94.49200	144.2489
Sum Sq. Dev.	0.009741	8.02E+09	4.10E+09	65.00191	604.2282
Observations					
	17	17	17	17	17

Source: Author's own calculation based on data

3.4.2. Correlation Coefficients

Using convenience decomposition, the chance to obtain different statistics often is associated with group correlations and series. Because correlation can have the power to determinate the direction of a linear relationship based on the trend and how both variables change together if both variables tend to increase or decrease together the coefficient will always be positive and if one variable tends to increase while the other decrease it will present a negative coefficient, in other words, the dependency of one variable on the another does not exist.

In Table 3.3, the correlation coefficients are demonstrated. The elements outside the diagonal have the covariance of each pair of variables and in turn, the diagonal elements have the

variances of each variable. However, the analysis will only focus on the relation of the variables of interest in the table.

Table 3. 3 Correlation Coefficients of Variables

Correlation	GINI	EXP	IMP	UNM	DEBT
GINI	1.000000				
EXP	-0.820508	1.000000			
IMP	-0.864278	0.925780	1.000000		
UNM	-0.619035	0.548221	0.611522	1.000000	
DEBT	0.720124	-0.650607	-0.616373	-0.337911	1.000000

Source: Author's own calculation based on data

Table 3.3 shows that the correlation between Export of goods and services and Gini is approximately -0.83 demonstrating a negative relationship. Furthermore, the correlation between Import of goods and services and Gini is approximately -0.87 demonstrating a negative slope. The correlation between Unemployment and Gini is approximately -0.62 demonstrating a negative slope. However, the correlation between Total Debt Service and Gini is approximately 0.73 indicating the only positive relationship towards Gini.

3.4.3. Stationarity Test Results

In the OLS method, in order to estimate a model all variables should be stationary. To define the variables' stationarity Kwiatkowski-Philips-Shmidt-Shin (KPSS) test statistics are employed. KPSS test represents a Lagrange-Multiplier (LM) test to pass the hypothesis without any effect, that an examined series is stationary around a constant or linear. Considering another alternative that says that if the null hypothesis of stationarity is rejected it is certain that the series has a unit root. Therefore, there is a must to first determine whether the variables are stationary or not, in order to find any level of causality in the relationship between trade flows (Export and Import) to income inequality (GINI).

KPSS normally ponder that a verified series $y(t)$, $t = 1, T$ can be decomposed in the sum of a deterministic term λt , a random walk $r(t)$ and a stationary error $\mathcal{E}(t)$:

$$Y(t) = \lambda t + r(t) + \mathcal{E}(t)$$

$$r(t) = r(t-1) + u(t)$$

For this regression, an LM test is used for testing the null hypothesis that the random walk has zero variance $\sigma^2 u = 0$, against the alternative that the series is difference stationary. Since the error $\mathcal{E}(t)$ is stationary, the observed series will be stationary around a determinist linear trend under the null hypothesis. If, in addition, the deterministic term $\lambda = 0$, then under the null hypothesis $y(t)$ is stationary around a constant (the initial value $r(0)$ rather than around a trend. The test statistic used for testing $\sigma^2 u = 0$ is a one-sided right-tailed LM statistic. This statistic tests the null hypothesis of constant regression coefficient against the alternative of random walk coefficients. The residuals $e(t)$, $t = 1$ from the regression of y on a constant or a linear trend are therefore of interest if the level or trend stationary is tested individually.

The LM test statistic is determined:

$$LM = \sum_{t=1}^T S(t)^2 (T^2(f_0))$$

Where f_0 , is an estimator of the residual spectrum at frequency zero and where $S(t)$ is a cumulative residual function:

$$S(t) = \sum_{r=0}^t u_r$$

The KPSS test originates from one-sided LM statistics for the test, in other words, if the LM statistics are higher than the critical value in 1%, 5%, 10% then the null hypothesis is rejected causing the series not to be stationary.

The calculated LM statistic at level is 0.484 and asymptotic critical values are computed for 1% level, 5% level and 10% level respectively; 0.739, 0.463, 0.347. Based on the KPSS test results, GINI is found not to be stationary at level, for this reason, the first difference of the variable is taken to make this time series stationary. After taking the first difference, the LM

statistic at difference becomes 0.087, staying under the critical values which are calculated 0.216, 0.146, and 0.119 respectively for 1% level, 5% level, and 10% level. It causes the variable name to change from LGINI to DLGINI in the model. Export, import, and unemployment variables are stationary at their level but the debt variable is differentiated in order to make this series stationary, changing the name from LDEBT to DLDEBT in the model.

3.4.4. Model Results

3.4.4.1. Model 1 Results

The results of the Model 1 is given in Table 3.4.

Table 3. 4 Model 1 Results

Dependent Variable: DLGINI				
Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.04076	0.007654	-5.32515	0.0001
LEXP	-0.01489	0.005708	-2.6083	0.0206
LIMP	0.023852	0.006175	3.862954	0.0017
R²	0.682091	-	-	-
F-statistic	15.01888			0.000328

Source: Author's own calculation based on data

Table 3.4 shows a negative relationship between LEXP and Income inequality (GINI), in other words when the LEXP increases by 1% then the DLGINI coefficient will decrease by 0.01489% demonstrating that there is a negative significant influence of LEXP on DLGINI.

At any rate, the finding can help the country understand and implement more dynamism into exports since it decreases the level of inequality in the country. Yasushi (2017) argues that with his hypothesis the increase in the share of exports in GDP can minimize income inequality in low-income developing countries rather than in high-income countries. Yet, he

also argues that an increase in mineral exports could possibly further increase inequality because it could concentrate export earnings within a capital-intensive industry instead of producing jobs for unskilled workers.

Table 3.4 demonstrates that LIMP is affecting positively DLGINI meaning that if LIMP increases by 1% then the DLGINI will increase by 0.023852%. However, the finding can help the country understand and implementing less performance into importing since it does increase income inequality which is the unfair distribution of income throughout the population. Duran and Erdem (2017) say in their findings that the collision of the impetus persuaded by imports can be very controversial. So that it can be negligible in the growth rate of the regions. However, Ciani (2021) mentions in its empirical evidence that some product factors that may tend to vary over time show that the income inequality of the country that matters is negatively affected by the free unit value on board (FOB) and by the quality of imported manufactured products. That is why the importance of distinguishing unit value from product quality arises.

3.4.4.2. Model 2 Results

In this part, the evaluation of the second model using the controlling variables Unemployment and Debt will be analyzed. The main idea behind the insertion of the variables will be based on previous studies and contributions of the variables on the level of income inequality. The results of Model 2 are provided in Table 3.5.

Table 3.5 mentions that the t-statistics of the LIMP, LEXP, LUNM, and DLDEBT in the model are greater than or absolute 1, meaning that all the variables present to be significant to the model. The planned test is based on a 5% significance, in this case, if P is less than 0.05 it is necessary to reject the null hypothesis of a zero coefficient, the table shows that LIMP, LEXP, LUNM, and DLDEBT are significant to the regression model since the P values are not higher than 5%, besides LUNM demonstrates to be statistically significant. Besides, if the F-statistic merit P is less than a significant level of 0.05, in which the table

shows 0.00000, the rejection of the presumption is without validity making all the model significant.

Table 3. 5 Model 2 Results

Dependent Variable: DLGINI				
Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.028755	0.003754	-7.660494	0.0000
LEXP	-0.007642	0.002762	-2.767151	0.0171
LIMP	0.01137	0.003224	3.526689	0.0042
LUNM	0.006136	0.000876	7.005665	0.0000
DLDEBT	0.001617	0.000486	3.327421	0.0060
R²	0.945968	-	-	-
F-statistic	52.52266			0.0000

Source: Author's own calculation based on data

However, table 3.5 does not display many differences from table 3.4 when the control variables are included in the model, because LIMP and LEXP still demonstrating the same level of correlation towards DLGINI. Since the outcome seems to be the same, the focus will rely on the explanation of the controlling variables and the other elements included in table 3.5.

Table 3.5 shows a positive relation between LUNM and Income inequality (GINI), in other words when the LUNM increases by 1% then the DLGINI coefficient will increase by 0.006136% demonstrating that there is a significant influence of LUNM on DLGINI. Saunders (2002) finds that the unemployed and those outside the labor force are in the bottom two deciles of income circulation among the working-age population and that those who are jobless united are situated at the remaining eight deciles.

On the other hand, the relationship between unemployment and inequality cannot in any circumstance be assumed automatic. Table 3.6 also demonstrates that DLDEBT is affecting positively DLGINI meaning that if DLDEBT increases by 1% then the DLGINI will increase 0.001617%. Arslan (2019) argues that government policies provide income positively or

negatively to achieve income distribution, although their creation does not point to income inequality. The role of the public sector in the economy has a distributive success, just as the tax policy and the remittance of expenses to society produce distributive impacts. Anyway, the relationship between public debt and income inequality is usually difficult to find, so it must be said that it can affect the country's income distribution.

3.4.5. Diagnostic Tests

The Jarque-Bera test is treated as a normality test. Normality is one of the assumptions for many statistical tests, such as the t-test or the F test, normally the Jarque-Bera test is analyzed before one of the tests mentioned above verifies normality. The Jarque-Bera test also has a special feature, which is the use of large data sets because some tests are not reliable when n is large. Especially, the test resembles the skewness and kurtosis of data to see if it matches a normal distribution, the statistic is computed as:

$$\text{Jarque-Bera} = \frac{N}{\hat{\sigma}} \left(S^2 + \frac{(K-3)^2}{4} \right)$$

Where S is the Skewness, and K is the Kurtosis.

However, skewness is a technique that allows having more information about the data mean, mode, median, and standard deviation. A normal distribution has a skewness of zero and the figure demonstrates to have a positive result of 0.860823 meaning that the data is positively skewed. Different from a Kurtosis that a positive value has heavy-tails, and a negative value means to have light-tails, besides the normal distribution has a kurtosis of 3, so the figure displays nearly normal tails because the result is 2.746522 close to 3. Also, during the null hypothesis of a normal distribution, the Jarque-Bera statistic is allocated as with 2 degrees of freedom. The probability reports that the Jarque-Bera statistic must exceed the absolute value.

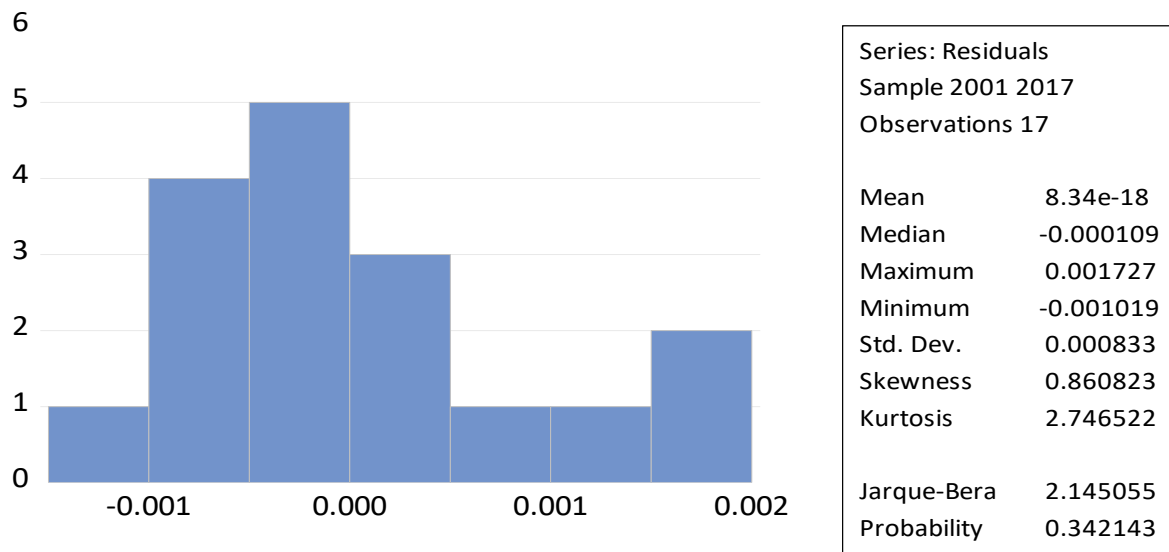


Figure 3. 1 Jarque-Bera normality test results

Source: Author’s own calculation based on data

Observed under the null hypothesis and that a small probability value leads to the rejection of the null hypothesis from a normal distribution. In figure 3.2 we reject the normal distribution hypothesis at the 5% level, but not at the 1% significance level, in this case, the histogram is normally allocated, and the residuals are also normally distributed. Assuming that Table 3.5 shows in r-squared that 94% of a distinction in the dependent variable DLGINI are described as the independent variables and the remaining 6% is described by independent variables that are not included in the model.

Table 3.6 shows the Breush-Godfrey Lagrange Multiplier (LM) test which will help to find a serial correlation response, although it also gives probability responses to Arma errors. Bearing in mind that the analyses were performed in Eviews and in turn, two test statistics of this regression were disclosed. The first, which is the Obs*R-squared in this case explained as (Coefficient) in table 3.6 which is estimated based on the number of observations, times the R-squared of the test regression and is usually calculated as $X^2(P)$.

The results presented by the coefficient demonstrate a positive relationship among the variables included in table 3.6, while the probability presents a values of 0.7375, thus making

easier the admission of the null hypothesis that there is no autocorrelation in the residuals generated from the regression model. In other words, there is a need to understand that the model is not deceived by serial correlation throughout the sequence of the analysis. On the other hand, table 3.6 introduces the Breush-Pagan-Godfrey Heterokedasticity test which is the test used to expose errors in the regression. In other words, the test tends to assume that the error variances are interconnected with a linear function. However, if the test has a probability less than 0.05 then the null hypothesis of homoscedasticity is refused and heteroskedasticity adopted. But in table 3.7 prob. chi-squares displays a value of 0.2373 which is greater than 0.05 which means that homoscedasticity is accepted.

Table 3. 6 Diagnostic Test Results

	Coefficient	Prob.
Breush-Godfrey	0.60905	0.7375
Serial Correlation LM Test		
Breusch-Pagan-Godfrey	5.52801	0.2373
Heteroskedasticity Test		
Ramsey Reset Test	0.11171	0.7445

Source: Author's own calculation based on data

Table 3.6 shows the Ramey Reset test which is the regression specification errors test for the normal linear regression which is:

$$Y = X\beta + \epsilon$$

Where the freedom of the alteration vector ϵ is taken to obey the normal multivariate distribution $N(0, \sigma^2 I)$. Although it is a test for the linear regression model, it also tests

whether non-linear match the fitted values. However, table 3.6 demonstrates that the null hypothesis $T= 0.111714$, so means that the powers of the fitted values have no relationship which serves to explain the dependent variable (y), meaning that the model has no omitted variables. Also, there are not significant in the sense that the p-values are given are very large numbers compared to our alpha level of 0.05, so it means that the symmetry model is free from specification errors or non-linearity and mastication.

The Cusum chart is used for second-hand monitoring of a process of samples taken at a precise moment. (Ncss Statistical Software, 1961) mention that with subgroups constituted during measurements, the Cusum chart does not analyze them, instead it shows the accumulation of information from current and previous samples. On the other hand, checking the tranquillity of the parameters is mandatory to ascertain the robustness of any statistical analysis. However, the Cusum test is established on the cumulative sum of the recursive residuals and with the option of plots the cumulative sum together with the 5% critical lines the test finds parameter instability if the cumulative sum goes outside the area between the two critical lines, but the inverse can be observed in figure 3.3 which detect a parameter of stability because the cumulative sum does not go out of the area between the two critical lines. Plus, the cumulative sum of squares is generally within the 5% significance lines, suggesting that the residual variance is somewhat stable.

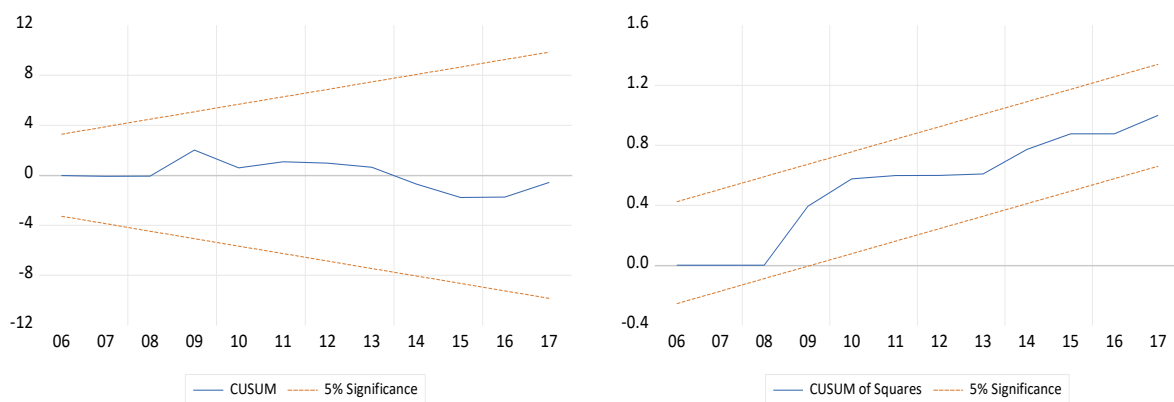


Figure 3. 2 Cusum and Cusum square test for structural change

CONCLUSION

The aim of this thesis was to carefully examine the effectiveness of trade flows on income inequality. In this sense, using the least squares (OLS) regression to analyze the time-series data of the relationships between capital flows and income inequality in Angola was verified. The results obtained from the data model using Gini as an index for a measure of income distribution reveal that some variables have a negative effect and some have a positive effect.

The highest result is reflected in the Export variable because among all variables it is the only variable that has a negative impact on Gini. In fact, the Heckscher-Ohlin $2 \times 2 \times 2$ model of international trade stresses that the export of goods requires factors of production, which only encourages people and companies to have more markets for their consumer goods. Yet, it is also a component of job creation and decreases income inequality.

The second result is the imported variable which reflects a positive result towards Gini which is also emphasized by Heckscher-Ohlin that a nation cannot manufacture in such an efficient way and defends that the visionary thing to do is to export materials and resources that they produce in abundance, while on the import side they do it proportionally based on what they need. However, theoretically, was decided to talk about some factors related to trade liberalization and the reduction of tariff aid for products and services, because of the unskilled labor, which will cause their wages to be reduced in relation to the wages of qualified workers and, as a result, income inequality increases.

On the other hand, what was said just reflects on the variable Unemployment which is another variable that affects income inequality positively. In this thesis, a number of scientific articles were used as an index to mark this variable. The coefficient for these variables was positive and significant. In fact, although Angola has experienced rapid economic growth for some years and the economy is based on natural resources, it is necessary to say that for some years it had a negative observation and in others a positive one in terms of unemployment. Lopes et al. (2007) state that unemployment is to the greatest extent observed as urban phenomena while compared to rural zones. Debt is also another variable that affects income inequality positively, in this thesis it is explained as total debt service as a financial obligation that has

to be paid within one year. Nevertheless, just as unemployment a number of articles were used to interpret this variable. Winter and Sigrid (2017) state that the short-term transition effects of public debt have very high implications for the well-being of the population because reducing debt means saying that taxes on both labor income and capital income must be increased, thereby affecting so the rich-poor. Through the OECD and WBO reports, it was possible to improve that the frequency of income inequality is related to the lack of economic development in general. In addition to it, just like anywhere in the world, inequality, and poverty in Angola can be generated by a miscellaneous source such as inadequate high-quality education, accountable institutions, lack of political equalities and government rules, health insurance, gender, corruption, and payment systems for wages and income that have no effect in the country and that are related to economic indices based on knowledge.

Thus, if Angola wants to resolve its barrier to development and end successfully, it will have to comply with coordinated policies on the demand side with those on the supply side, in order to attract an economic order based on understanding. In any case, these decisions will have a positive impact on employment for low-income economic agents today. In this regard and due to the fact that in Angola the supply side of knowledge factors is active, therefore greater attention should be paid to the demand for knowledge factors in order to avoid the loss of resources and this is exactly the point that is missing. Human capital is necessary for a knowledge-based economy, so it is necessary to generate infrastructure and conditions to prevent brain drain, for this reason, it is necessary to adopt coordinated demand and supply-side economic policies in order to control the information of the knowledge-based development model so that those who are low-income producers can seek better opportunities to acquire money.

REFERENCES

- Africa growth and opportunity act. (2000). *African growth and opportunity act (AGOA)*, 45-60.
- Aguemon, H., Mireles, I., & Ogilvie, S. (2007). Angola financial systems. Africanbondmarkets.org.
- Alvaredo, F., Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2018). *World inequality report*. The Source for Global Inequality Data.
- Arslan, F. P. (2019). Public debt and income inequality in Turkey. *Journal of Research in Economics*, 91-109.
- Baldwin, R., & Evenett, S. J. (2008). *What world the spread of do to halt leaders should protectionism*. A voxeu.org publication.
- Barro, R. J. (2000). Inequality and growth in a panel of countries. *Journal of Economic Growth*, 5-32.
- Barusman, A. B., & Yusuf. (2017). The impact of international trade on income inequality in the United States since 1970. *European Research Studies*, 35-50.
- Bohoslavsky, J. (2016). Economic inequality, debt crises and human rights. *Yale Journal of International Law*, 177-200.
- Bourguignon, F., Ferreira, F. H., & Walton, M. (2007). Equity, efficiency and inequality traps: A research agenda. *Journal of Economic Inequality*, 235-256.
- Brannen, J. (2019). Inside the household. Social Research Matters Press.
- Carvalho, A. (2017, January 17). Retrieved from The world finance: The voice of the market: <https://www.worldfinance.com/banking/reforming-angolas-financial-sector>
- Cassete, F. (2012). Income inequalities and international trade in goods and services: Short- and long-run evidence. *International Trade Journal*, 223-254.

- Chêne, M. (2014). The impact of corruption on growth and inequality. *Transparency International*, 1-11.
- Ciani, A. (2021). Income inequality and the quality of imports. *Income Inequality and the Quality of Imports*, 1-52.
- Cingano, F. (2014). Trends in income inequality and its impact on economic growth. *OECD social, employment, and migration working papers*, 59-65.
- Costa, A. (2012). *Desigualdades sociais contemporâneas*. Lisboa: Mundos Sociais Press.
- Cysne, R. P., Maldonado, W. L., & Monteiro, P. K. (2005). Inflation and income inequality: A shopping-time approach. *Journal of Development Economics*, 516-528.
- Daumal, M. (2013). The impact of trade openness on regional inequality: The cases of India and Brazil. *International Trade Journal*, 243-280.
- Demir, F., Ju, J., & Zhou, Y. (2012). Income inequality and structures of international trade. *Asia-Pacific Journal of Accounting and Economics*, 167-180.
- Duran, & Erdem. (2017). Regional inequality and international trade in turkey: A dynamic spatial panel approach. *A/Z ITU Journal of the Faculty of Architecture*, 25-39.
- Edwards, S. (1998). Openness, productivity and growth: What do we really know? *The Economic Journal*, 383-398.
- Estevao, N. D. (2019). *Organisation of the petroleum exporting countries Angola*. Retrieved from https://www.opec.org/opec_web/en/about_us/147.htm
- Fiess, N. (2018). *Angola: Country economic memorandum towards economic diversification*. Ideas Database Press.
- Hemming, D. J., Chirwa, E. W., Ruffhead, H. J., Hill, R., Osborn, J., Langer, L., . . . Phillips, D. (2018). Agricultural input subsidies for improving productivity, farm

- income, consumer welfare and wider growth in low and lower middle income countries. *Campbell Systematic Reviews*, 1-153.
- Ilda, A. (2006). Economic reforms in Angola. *Organisation for economic co-operation and development journal on budgeting*, 1-12.
- Instituto Nacional de Estatística. (2011). *Inquérito integrado sobre o bem-estar da população*. Luanda: E.A.L. - Edições de Angola Lda.
- International Business Publications. (2009). *Angola country: Strategic information and developments*. International Business Publications.
- International Monetary Fund. (2017). *The effect of trade on income and inequality: A cross-sectional approach*. International Monetary Fund.
- International Monetary Fund. (2019). *Angola first review of the extended arrangement*. Washington, D.C: International Monetary Fund Publication Services.
- Isagiller, A. (1988). Income distribution and economic growth. *The State of Development Economics*, 459-485.
- Jover, E., Pinto, A. L., & Marchand, A. (2012). *Perfil do sector privado do País, Angola*. Imara Press.
- Karl, T. L. (1997). *The paradox of plenty: Oil booms and petro-states*. California: Foreign Affairs Publication.
- Kayıkçı, F. (2019). Course of income inequality in Turkey. *Theoretical Economics Letters*, 2085-2092.
- Klynveld Peat Marwick and Goerdeler. (2012). *Angola - country profile*.
- Kumar, M. S., & Woo, J. (2010). Public debt and growth. *International Monetary Fund*.
- Kuznets, S. (1995). Economic growth and income inequality . *Quarterly Journal of Economics*, 353-377.

- Li, R. R., & Quan. (2003). Economic openness, democracy, and income Inequality an empirical analysis. *Comparative Political Studies*, 575-601.
- Liberati, P. (2015). The world distribution of income and its inequality, 1970-2009. *Review of Income and Wealth*, 248-273.
- Lopes, C., Rodrigues, C., & Simas, G. (2007). *A caminho da cidade: Migração interna, urbanização e saúde em Angola*. Porto: Veritas (Porto Alegre).
- Menendez, A. G., & Martín. (2000). The effect of unemployment on labor earnings inequality: Argentina in the nineties.
- Menoca, A. R. (2015). Why corruption matters: Understanding causes, effects and how to address them. *UK Department for International Development*, 54-112.
- Milanovic, B. (2005). The two faces of globalization: Against globalization as we know It. *SSRN Electronic Journal*, 1-30.
- Milanovic, B. (2012). *Global income inequality by the numbers: In history and now*.
- Monnin, P. (2014). Inflation and income inequality in developed economies. *SSRN Electronic Journal*, 1689-1699.
- Naguib, C. (2017). The relationship between inequality and growth: Evidence from new data. *Swiss Journal of Economics and Statistics*, 183-225.
- Nathan Associates. (2005). Angola diagnostic trade integration. *Enhanced Integrated Framework*, 1-21.
- Nathan Associates. (2006). *Angola: diagnostic trade integration study*. World Bank USAID.
- Ncss Statistical Software. (1961). Cumulative sum charts. *Technometrics Journal*, 1-9.

- Nzatuzola, J. B. (2002). Employment and unemployment in Angola : Implications with informal sector, poverty and intern conflict. *Employment Relations in a Changing World: The African Renaissance*, 5-11.
- O'Connor, B. (2003). World trade organization agriculture. *United nations conference on trade and development*, 31-87.
- Orçamento Geral do Estudo. (2020). *Relatório de fundamentação*. Luanda: Government.
- Organisation for Economic Co-operation and Development . (2016). Income inequality remains high in the face of weak recovery. *Income Inequality Update*, 1-6.
- Organization Petroleum Exporting Countries. (2005). *Opec montly oil market report*. Applied Spectroscopy.
- Plano de Desenvolvimento Nacional. (2017). Plano de desenvolvimento nacional. *Ministério da economia e planeamento*, 115-308.
- Qabazard, H. M., Zayer, F. A., Irawan, P., Janan, R., Windholz, H., Christodoulides, P., . . . Arifin, Z. (2012). *Annual statistical bulletin*. OPEC Press.
- Reis, C. (2018). Growth and debt in Angola at provincial level.
- Rijckeghem, V., Caroline, W., & Beatrice. (2001). Bureaucratic corruption and the rate of temptation: Do wages in the civil service affect corruption, and by how much? *Journal of Development Economics*, 307-331.
- Roe, T. (2003). Determinants of economic growth: A cross-country empirical study. *American Journal of Agricultural Economics*, 1087-1088.
- Rohrs, S., & Winter, C. (2017). Reducing government debt in the presence of inequality. *Economic Dynamics and Control*, 1-34.
- Ruffin, R. (1990). The Ricardian factor endowment theory of international trade. *International Economic Journal*, 1–19.

- Ryscavage, P. (2015). *Income inequality in America: An analysis of trends*. Routledge.
- Sahay, M. C., & Ratna. (2020). Finance and inequality. *IMF Staff Papers*, 20-50.
- Sandrey, R. (2013). An analysis of the southern african development community free trade area . *Tralac Trade Law Centre*, 10-19.
- Saunders, P. (2002). The direct and indirect effects of unemployment on poverty and inequality. *SPRC Discussion paper No. 118*, 1-31.
- Seyoum, B. (2009). *Export- Import theory practices and procedures*. Ottawa: The Haworth Press.
- Shahabadi, A., Nemati, M., & Hosseinidoust, S. E. (2017). The effect of knowledge economy factors on income inequality in the selected islamic countries. *Journal of the Knowledge Economy*, 1174-1188.
- Smith, I. T., & Karen. (2007). Trade policies and their impact on inequalities. *United Nations Conference on Trade and Development*, 1-131.
- Stewart, F. (2003). Income distribution and development. *Trade and Development: Directions for the 21st Century*. QEH Working Paper Series.
- Stiglitz, J. (2013). Inequality and economic growth. *Edward Elgar Publishing Ltd*, 1-18.
- Stiglitz, J. E. (2015). The price of inequality: How today's divided society endangers our future. *Pontifical Academy of Social Sciences*, 475-479.
- Tinajero, S. (2010). Angola: A study of the impact of remittances from Portugal and South Africa. *International Organization for Migration*, 1-168.
- Torul, O., & Oztunali, O. (2018). On income and wealth inequality in Turkey. *Central Bank Review*, 95-106.
- Transparency International Corruption Index. (2019). *Transparency international corruption index*. Retrieved from <https://www.transparency.org/en/countries/angola>

- Tvedten, I., & Lázaro, G. (2011). Urban poverty and inequality in Luanda. *CMI*, 10-13.
- Unicef. (2018). *Orçamento geral do estado*. Unicef Press Center.
- United Nations. (2016). *Country profile 2016 - Angola*. ECA Publications.
- United Nations Conference on Trade and Development. (2014). Vulnerability profile of Angola. *Committee for Development Policy of the United Nations list of Least Developed Countries*, 14-24.
- United Nations Conference on Trade Development. (2013). Who is benefiting from trade liberalization in Angola? A gender perspective. *United Nations*, 48-83.
- United Nations Conference Trade Development. (2013). Trade policy network Angola. *United Nations Conference on Trade and Development*, 70-92.
- United Nations Development Programme. (2013). *Assessment of development results: Angola*. UNDP Evaluation Source Center Press.
- United Nations International Children's Emergency Fund. (2019). Income inequality. *Economic and Political Weekly*, 30-56.
- United Nations Organization. (2020). *Macro economic overview of RBJ countries*. Johannesburg: United Nations World Food Programme Press.
- Urata, S., & Narjoko, D. A. (2017, February). International trade and inequality. ADBI Working Paper Series.
- Vinokurov, E. (2017). Eurasian economic union: Current state and preliminary results. *Russian Journal of Economics*, 54-70.
- World Bank Organization. (2002). *Angola systematic country diagnostic*. World Bank Organization.
- World Bank Organization. (2014). *Drivers of corruption*. World Bank Group Press.

World Bank Organization. (2015). Removing impediments to sustainable economic development: The case of corruption. *Journal of International Commerce, Economics and Policy*, 20-49.

World Bank Organization. (2020). *Angola poverty assessment*. Angola Poverty Assessment Press.

World Inequality Database. (2021, 1 5). Retrieved from wid.world/country/angola

World Trade Organization. (1995). *World Trade Organization*.

Yasushi, H. (2017). The impact of exports on income inequality in developing countries. *IDE Discussion Paper*, 1-31.

Zheng, Z., Mishra, T., & Yang, Y. (2020). Inflation and income inequality in a variety-expansion growth model with menu costs. *Economics Letters*, 2-5.