

**UNIVERSITY OF TURKISH AERONAUTICAL ASSOCIATION
INSTITUTE OF SOCIAL SCIENCES**

**AFRICAN TRANSFORMATION INDEX: THE CASE OF
THE REPUBLIC OF CONGO**

MASTER'S THESIS

Paterne Micha MBELANGANI MBAN

Department of Management

Master of Management Program

MAY 2015

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Thesis Supervisor: Assist. Prof. Seyithan Ahmet ATEŞ

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21.05.2015

Paterne Micha MBELANGANI MBAN

A handwritten signature in blue ink, appearing to be 'PATERNE MICHA MBELANGANI MBAN', written in a cursive style.

DEDICATION

I dedicate this work to the most high God for the wisdom and gift of life which has made me realize and see the conclusion of this thesis and to:

My lovely parents Emile MBELANGANI and Charlotte OLOAMONO

Dear parents, no dedication can express my respect, my everlasting love and my respect for the sacrifices you have made for my education and my well being. I thank you for all the support and love you have shown me since my childhood and I hope that your blessing will always be with me. may this modest work be the fulfillment of your wishes and the fruit of your countless sacrifices. May the almighty God grant you health and long life,

My lovely brothers and sisters

Dadhy MBEME; Charlemy, Nuptiah and Flora MBELANGANI, in testimony of my fraternal affection, my deep affection and reconnaissance, I wish you a life full of happiness and success and that God, the Almighty, protect you.

I would also like to say thank you to people who were involved directly or indirectly in my education, thanks to all of you. May the almighty God bless you and fill your hearts with their desires and may you prosper in every field of your lives and never lack something good.

This thesis has been achieved through the contribution of many people to whom I would like to show my sincere gratefulness. I would like to thank and express my acknowledgement to the following;

First of all, I am thankful to the almighty God for the wisdom, strength and sound mind granted me throughout the course of study to transform my dream into reality.

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May 2015

Paterne Micha MBELANGANI MBAN

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ABBREVIATIONS

ACET	: African Center for the Economic Transformation
AEO	: African Economic Outlook
AFDB	: African Development Bank
ATI	: African Transformation Index
BEAC	: Bank of Central Africa States
BTI	: Bertelsmann Transformation Index
CEMAC	: Economic and Monetary Community of Central Africa
CFA	: Central African franc
CNSEE	: Centre National de la Statistique et des Etudes Economiques
DEPTH	: Diversification, Export Competiveness, Productivity, Technology and Human Well-being
ECA	: Economic Commission for Africa
ECCAS	: Economic Community of Central African States
ECOPA	: European Consensus Platform for Alternatives
ENI	: Ente Nazionale Idrocarburi (State Hydracarbons Authority)
ETP	: Economic Transformation Program
FAO	: Food and Agricultural Organization
FDI	: Foreign Direct Investments
GDP	: Gross Domestic Income
ICT	: Information and Communications Technology
IFPRI	: International Food Policy Research Institute
IIAG	: Ibrahim Index of Governance in Africa
ILO	: International Labor Office
IMF	: International Monetary Fund
MDG	: Millennium Development Goals
OEDC	: Orlando Economic Development Commission
OECD	: Organization for Economic Cooperation and Development
PCT	: Parti congolais du travail (Congolese Labor Party)
R & D	: Research and Development
REPOA	: Policy Research for Development
SMEs'	: Small and Medium-Sized Enterprises
SNPC	: Congolese National Oil Company
SSA	: Sub Saharan Africa
TI	: Transparency International
UNCHR	: United Nations High Commissioner for Refugees
UNCTAD	: United Nations Conference on Trade and Development
UNECA	: United Nations Economic Commission for Africa
UNIDO	: United Nations Industrial Development Organization
UNSD	: United Nations Statistics Division
USD	: United States Dollars
WB	: World Bank

ÖZET

AFRİKA DÖNÜŞÜM İNDEKSİ: KONGO CUMHURİYETİ DURUMU

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Son yıllarda Afrika'daki ülkelerin genelinde, ekonomik büyüme oranı hem yüksek hem de istikrar olmuştur. Ortalama olarak ekonomik büyüme oranı %5 veya %6 ve bazı ülkelerde %8 veya %9 bile olmuştur. Fakat büyüme oranı yüksek ve istikrarlı olduğu halde Afrika'daki fakirliğin azaltması için etki yapmamıştır. Afrika'da fakirlik ve sosyal eşitsizlik yüksek seviyededir ve ekonomik büyüme fakirlik ve sosyal eşitsizliğin azaltması için önemli bir etken olarak görülmektedir. Bütün ülkelerde olduğu gibi, Afrika'daki ülkelerde, özellikle Kongo Cumhuriyeti'nde, ekonominin çeşitlendirmesi için, ithalatta rekabetçilik için, üretimde verimlilik için, ar-ge için ve insan (veya milli) refahı için ekonomik büyüme önemli rol oynar, fakat büyüme oranı dışında başka faktörlerin de dikkate alınması gerekir.

Bu çalışmanın amacı Afrika'daki ülkelerde, özellikle Kongo Cumhuriyeti'nde (çalışmanın temeli bu ülke'ye dayanmaktadır), kalkınmanın nasıl sağlanabileceği ve doğal kaynaklara bağımlılıktan nasıl kurtulabileceğinin araştırmasıdır.

Bu tezin sonucunda, Kongo Cumhuriyeti'nin ekonomik dönüşümü üzerinde iki önemli faktör saptanmıştır. Bunlar; uzun bir süre içinde ekonomik büyümenin sağlanmaktadır fakat bazı engeller ortaya çıkmaktadır. Bu sorunların çözülmesi için öneriler verilmiştir.

Anahtar Kelimeler: Ekonomik dönüşümü, Kongo Cumhuriyeti

ABSTRACT

AFRICAN TRANSFORMATION INDEX: THE CASE OF THE REPUBLIC OF CONGO

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Africa has experienced in recent years a high growth and relatively sustained of approximately 5 to 6% on average, reaching even 8 to 9% in some countries. However, despite this constant growth, growth in Africa has not been a poverty reduction factor as powerful as it could have been due to the high levels of poverty and inequality. Therefore, African countries in particular the Republic of Congo need more than growth, they need a growth which will result in economic diversification, export competitiveness, increase in productivity, technology upgrade and finally human well-being.

The purpose of this study is to scrutinize how the Republic of Congo, can reach an inclusive development and come out from natural resources reliance as drivers of economic growth.

Qualitative method was conducted by the researcher, using mainly secondary data from publications, books and international institutions.

The study revealed that the Congo's economic transformation is characterized by two major factors. On one side there is a sustained growth and on the other there are obstacles. Due to these reasons, the author provided recommendations and suggestions.

Keywords: Economic transformation, Republic of Congo

INTRODUCTION

Background to the study

The growth study of African countries in the past few years has shown that African countries have experienced relatively high growth rates, which in turn led to improvements in several areas such as increase in tax revenues, trade, infrastructure development and delivery of social and economic services. Indeed, during the last decade, Africa was among the regions of the world which have recorded relatively sustained and dynamic high growth rates reaching even respectively 8% to 9% in some countries such as Angola and the Democratic Republic of Congo. However, despite the progress achieved in the region in the recent years, growth in Africa did not do much for millions of Africans. Poverty remains high; more than half of sub-Saharan Africa's people still live with less than 1.25 US\$ dollar a day (AFDB, 2013: 2) high unemployment rate and rise in social inequalities.

From the United Nations Conference on Trade and Development (UNCTAD, 2012: 2) on “*structural transformation and sustainable development in Africa*”, three main reasons were mentioned to explain this situation. Firstly, African countries rely heavily on natural resources as the engines of economic growth. While, most of these resources are not renewable and are being depleted quickly, which has negative consequences on the growth and sustainability. There are also concerns regarding the dependency on a growth based on non-renewable resources because commodities prices are extremely volatile and are subject to global demand. This price instability has negative effects on investment and makes the macroeconomic planning difficult. Secondly, the agricultural production and productivity per inhabitant are still weak in Sub-Saharan Africa compared to the world's average, which has significant consequences on the food security and social stability. Thirdly, the actual African growth resulted in the deindustrialization of Africa. In fact, according to the same report, the share of manufacturing industries in the Africa's GDP fell from 15% in 1990 to 10% in 2008.

The question of economic transformation becomes, then, a major issue for Africa's development because Africa's high growth rates did not succeed to translate into job creation and the poverty eradication. In addition, with the globalization, the challenge of poverty is getting even more difficult and complex. Since African countries did not manage to take advantage of the many benefits of a global economy increasingly interconnected and interdependent.

Also, to be able to move from undeveloped countries to emerging countries, African countries need a significant transformation of their economies by taking into account the question of process that should guide these structural changes. Furthermore, the insufficient results of growth in Sub Saharan Africa to face the region's challenges and the relatively slow pace of economic and social development results in a lack of an inclusive growth, transformation of the agriculture structure which remains less productive, the management of the immense natural resources available to Africa, the gap between riches and poor and importantly the inadequate diversification of these economies. Even though some of them are more diversified than others, the economic performances of most of the countries in the region are still so much dependent on commodities prices and these economies are generally specialized in sectors with low value-added products.

African countries need economic transformation to, maintain growth for the poor, to deal with the population growth and the urbanization challenge, to become more competitive in the global economy and finally and most importantly create the conditions for better governance.

Prosperous Asian and Latin American countries show two important aspects of successful economic transformation process. Firstly, there are necessary aspects for the structural change models, industrialization and diversification in particular and economic development process in general. Secondly, there is a predominant aspect; the key role plays by the state in leading and promoting effective economic transformation through the attraction of foreign resources, increased productivity and infrastructure development are important elements for successful transformation, solid and functional institutions.

However, many African countries suffer from serious deficiencies in infrastructure, including energy, water and transport. Progress before the crisis that some countries have made by attracting foreign funds were largely achieved through

the accumulation of capital generated by exports of raw materials, development aid and foreign direct investment instead of productivity factor.

With a relatively weak private sector, much more oriented in the export of natural resources rather than in manufacturing, transformation in Africa and growth acceleration must imperatively come through the promotion of private and public investment in the agro-business and manufacturing sectors. This should be accompanied with an investment in basic infrastructures such as hospitals, schools and training centers, railways and roads, electrical and other networks to facilitate the people's lives and to develop communication, transport, health and education.

From African Center for Economic Transformation, (ACET, 2014: 14) report on "Growth with Depth", another important argument was further argued. According to this report, economic growth while necessary is not enough for the sustainable development of African countries. They need more than economic growth. They need a more diversified economy, strong competitiveness, advanced technology, increased production as well as the human well being.

Statement of the problem

Africa's growth of the recent years has not managed, to create jobs for millions of Africans, unemployment remaining higher; to help reduce income inequalities in other words a shared prosperity. Additionally, economic growth in African countries is essentially based on a rise in natural resources exports as mentioned by Lipton (2012); Africa's economic growth is mainly a result of rising commodity prices. However, this situation exposes African countries to high levels of risk if prices were to collapse. Also, most foreign investments in Africa still go to oil or mines sector, rather than factories, services or farming.

Economic transformation is now a major issue for African countries in general and for the Republic of Congo particularly because, for the purpose of having an economic model which is beneficial to everyone, African countries now need, to emphasize on more than economic growth. They must diversify their economies, increase their export competitiveness, need more technology, increase the productivity and lastly ensure the human well-being.

Objectives and Purpose of study

This research work has as objective to investigate:

1. Overall economic transformation of African countries in general and

Republic of Congo in particular

2. Sources of economic transformation
3. The link between economic transformation and development.

The purpose of this research is to understand, economic transformation with the performance of African countries in general with an in-depth focus on the Republic of Congo.

Research questions

This research work seeks to explore the African Economic Transformation and to provide an approach of solutions to the following questions:

1. How can African countries come out from natural resources reliance as drivers of economic growth and reach a sustainable economic transformation?
2. For the Republic of Congo case, which problems hinder its economic transformation?

Significance of the research

This research shall contribute to existing knowledge dealing with the institution and implementation of economic transformation. The study provides an approach of solutions on the issues which inhibit the economic transformation of African countries in general and the Republic of Congo in particular. The research shall also broaden the researchers understanding on the subject of the economic transformation.

It is believed that through this study, the major problems facing the transformation of African countries can be outlined and the necessary steps to ensure economic growth and development identified.

Outline of Study

This study is divided into six chapters. By now, the contents of the first chapters are already presented and familiar to the reader, therefore, only the content of the following chapters will be briefly discussed below.

The third chapter talks about the transformation of African countries and the African Transformation Index from the definition to the function. In chapter four, the Republic of Congo and its economy are presented. In chapter five, an understanding of African Transformation Index through Congo's economic transformation is given. Finally, the chapter six contains the overall conclusions that can be drawn from the

research. Conclusion will be given in relation to the research questions and the chapter ends up with recommendations and suggestions for further studies within the area of economic transformation in Africa with general focus on the Republic of Congo.

CHAPTER ONE

LITERATURE REVIEW AND METHODOLOGY

1.1 Literature Review

In this section the literature review relevant to the research objectives of this thesis is provided. The emphasis is particularly on the works concerned with economic transformation, growth and development. The chapter starts by discussing and giving an overview of the meaning of economic transformation, discusses the sources of economic transformation, the impact of economic transformation over the economic development i.e. the positive and negative impacts of economic transformation and ends by discussing the link between economic transformation and development.

The general purpose of this chapter is to firstly bring to light the significance of the research and secondly seek to know whether a new contribution can be considered or not. The principal in this chapter is about assessing different approaches that have been used in this field in order to set up the appropriate method for investigating the research questions.

1.1.1 Meaning of Economic Transformation

Economic transformation has several definitions provided by different authors. By doing a search whether in a library or on internet, we would get several definitions on the economic transformation.

Grzegorz W. Kolodko (2000: 457) defined economic transformation as “*a process involving a fundamental shift leading from the late socialist centrally planned economy based on the dominance of state ownership towards a free market, with the private sector playing the key role*”.

Breisinger & Diao (2008, 3), argued that, economic transformation is “*a process in which a country’s economy, society and institutions modernize and move to more developed levels.*”

According to Martin Luther Oketch (2013, www.monitor.co.ug), “*economic transformation is the change in the structure of an economy over time from a subsistence economy, through industrialization, to an industrial or even post-industrial society*”.

This definition contrasts with the Wikipedia definition of economic transformation, which considers the economic transformation “*as a long-term change in dominant economic activity in terms of prevailing relative engagement or employment of able individuals.*”

Policy Research for Development (REPOA, 2013: 3) supported the above argument by saying that “*economic transformation is a process entailing the changing of the structure, path and speed of economic growth*”.

The economist Dirk Willem Te Velde (2013: <http://www.odi.org/>) argues that “*economic transformation involves moving from low to higher productive activities.*” According to him, economic transformation requires a shift to higher values activities, for instance, from agriculture to manufacturing and from subsistence farming to high value crops.

The Dr Donald Kaberuka (2012: <http://www.afdb.org/>) describes three main points that characterize economic transformation; “*Firstly, the changing structure of economy that depicts a rise in the share of manufacturing with a decrease in the share of agriculture, secondly the share of agriculture decreases with a rise of labor force in other economic sectors; thirdly the shift of economic activity from rural to urban areas, increasing the degree of urbanization.*” Therefore, economic transformation involves a country’s change through its economy, institutions and society.

Another explanation of economic transformation is given by the Malaysian economic transformation program. According to this program, “*transformational change is achieved by changing how things will be done, which in turn changes how things will be*”. This argument put forward the United Nations Economic Commission for Africa’s (UNECA, 2013: 3) point of view which states that

“transformation is associated with a fundamental change in the structure of the economy and its drivers of growth and development”.

Peter C. Timmer (2008: 7) describes four processes to define transformation especially “*a decline in the agriculture share in GDP and employment, a rural-to-urban migration underpinned by rural and urban development, the rise of a modern industrial and service economy and a demographic transition from high rates of births and deaths*”.

1.1.2 Sources of Economic Transformation

Economic transformation has been studying by economists for decades, and much is known about the necessary conditions for creating economic growth leading to an inclusive development. Many economists dealing with development issues regroup the sources of economic transformation into different groups; however these groups are often or interdependent. Based on literature review of reports, journal, books, observations, and analysis about economic development; below are summarized the traditional building blocks necessary for economic transformations. They are necessary for economic transformation success.

1.1.2.1 Investment and capital accumulation

Generally speaking, every economist recognizes the virtues of investment; for growth, wealth and employment in the modernization of structures because investment leads to capital accumulation and the new capital brings technical progress. Also generally, either in the short or long term, a certain correlation between economic growth and investment can be observed.

Many economists believe that, high capital accumulation leads to rapid economic growth. Additionally, “*several empirical studies have put forward the significant role of capital accumulation in rapid growth, highlighting how the share of investment in GDP increases significantly during the transformation process*” Simon Kuznets (C. Breisinger and X. Diao, 2008 : 6).

According to Fedderke et al. (2006), the solid empirical data indicate that infrastructure investments not only are positively correlated with economic growth, but are also an engine of growth.

Turnovsky (2011: 1) argues that “in economic literature on growth and development, accumulation of capital is seen as a key determinant of an economy's long term growth”. This strategic role that investment in the development process has been confirmed by recent studies based on empirical data on African countries. For example, based on national comparative data; Mijiyawa (UNCTAD, 2013: 6) observed that investment, credit to the private sector, effectiveness of public administrations, exports and the share of agricultural value added in GDP are important determinants of growth in Africa because they are job creation factor and well-being. Ghazanchyan and Stotsky (UNCTAD, 2013: 6) also supported this argument by discussing how investment boosts growth in Africa. International comparative data on the major contribution of investment for long-term growth was evidenced and confirmed by analyzes carried out at national level indicating a positive correlation between investment and growth in African countries. In the South Africa's case; for instance, Eyraud (2009: 5) explains the relationship between investment and growth, by showing how investment can stimulate growth.

Hirschman (C. Breisinger and X. Diao, 2008 : 7) was one of the first theorists of development to emphasize the backward and forward linkages created by capital investments in the industrial sector. Johnston and Mellor (1961: 566-593) went on beyond the industrial sectors and explicitly focusing on the interactions between both agricultural and non-agricultural sectors. From this point of view, agriculture is not considered as a source of surplus to support industrialization, but as a dynamic source of employment, more equal income distribution and growth.

1.1.2.2 The necessity of technological change to productivity growth

Currently there is a fairly rich literature which explains the relations among growth, economic development and technology transfer. Technology or technical progress is a key factor in a country's production system. As demonstrated by theories of growth, the technology is also the result of many efforts in R & D.

As mentioned by Lewis (IFPRI Discussion Paper 00797, 2008: 4) in his dual economy theory, “*economic transformation is the result of the technology-led productivity growth in the industrial sector*”. According to Lewis, technology-led productivity leads to the diffusion of technology because this allows to have highly technical intermediate goods for production, finished goods in order to study the

technical specification and encourages communication from person to person. This technology transfer form is particularly captured as externality of technological evolution from trading partners in the recipient country.

Rezgui (2004: 129-144), in his work on “*Geographical location, international trade and diffusion of technological knowledge*”, uses Grossman and Helpman's simplified model of knowledge diffusion, where the increase in the production of a country depends on the improvement of the quality of the inputs; the improvement being captured by technology index aggregate which represents the country's productivity. Schultz (IFPRI Discussion Paper 00797, 2008: 4) brought to light the technology-led productivity growth's relevance in the transformation of traditional agriculture into a modern agriculture, and also how agriculture can help accelerate the economy-wide transformation process.”

For illustrative purposes, it is also proved that the Asian and Latin American countries' agricultural transformation in 1960s and 1970s was the result of the use of modern agricultural technologies such as irrigation, high yield crop, fertilizer and so on.

1.1.2.3 Labor market change and governments in transformation

Better jobs are today increasingly based on knowledge and skills. Payment for unqualified labor is decreasing. Therefore, the biggest challenge facing by most countries is about preparing the manpower for a relatively competitive labor market that necessitates qualified employees.

Most of economic studies show a strong positive correlation between the quality and performance of institutions, and the results in terms of development. One of the main causes of good policies is the quality of political and economic institutions. Through quality institutions, economists agree that these institutions enable a significant segment of population to exercise property rights and thus investing in economic activity, unlike extracting institutions, where the majority of population is subject to the risk of expropriation by the government, the ruling class or others. The durability of these property rights required further political stability and effective stress on policymakers and political elites to limit any arbitrary behavior or potential extractive.

From, “*the economics of institutions and the sources of growth*”, Matthews (1986: 903) supported the above argument by discussing on how the choice of technique or institution can affect both change of institution and the development of market, although in opposite directions.

According to Rodrik (2004: 18), “many economists agree that the quality of institutions can explain the differences in growth and transformation process by shaping incentives to develop new technologies and innovation. Additionally, by taking into account experiences from researches in several countries, Rodrik (2003: 297-333) discovered that transformation process does not necessitate extensive reform of institutions in order to start but institutional reform must be considered as an endogenous part of the transformation process.

1.1.3 Impact of Economic Transformation over the Economic Development

According to Dudley Seers (1969: 2-5), development in the sense of economy involves activities that will result in a change which is good or positive, a change which is seen in people’s increased ability to get control upon intellectual resources, obtain physical necessities of life, (especially food, shelter and clothing), ideology, gender equality, sustainable development and peace, participation in government, material assets, employment.

Economic transformation is therefore considered to be one of the key instruments for economic development, since it leads to new economic sectors. Economic transformation has been regarded as the main vector for the African development as it enhances the human well-being, impacts upon economic growth as a result of economic development; it has a positive impact on production and gross income, foreign exchange earnings, and job creation.

1.1.4 Positive Impact on Economic Growth

The relationship between economic transformation and economic growth has received a great deal of attention during the recent decades. Economic transformation is considered as one of the principal factors leading to economic

growth worldwide. It contributes extensive economic benefits on economic growth as well as impact on the gross domestic product of a country.

Economic transformation and economic growth share a symbiotic relationship. An efficient transformation system facilitates a development and economic growth. Thus, transformation involves the modernization of a country's economy, society and institutions. Supporting this argument, Kuznets (1973: 247-258) "*calls for the need of adjustments in both institutions and society during transformation...*" Kuznets showed that changing the structure of production will result in changes in educational needs, motivation structures, and the improvement of people's position in society. Urbanization contributes to shifts in gender relation and personal status and family formation. Changes in communication and transport services open up less favored areas and connect factor and commodity markets. Managing those basic changes involves institutional and legal innovations, in which the state and other institutions play key roles.

Economic transformation has fundamental impacts on human life, and sociologists in that sense, emphasize on the important role of changing values, norms, beliefs and customs in the transformation from a traditional to a modern society.

Economic transformation has a greater contribution for economic growth of countries. In developing countries, especially African countries which are characterized by low income, uneven distribution of income and wealth, high level of unemployment and under employment, low level of industrial development that are held back by the small size of domestic market and a heavy dependence on agricultural products for export earnings, economic transformation is perceived as an essential instrument which is expected to enhance economic growth and human well-being.

The above argument is supported by the United Nations for Economic Commission in Africa (UNECA, 2013: 4) in its 2013 meeting. According to this meeting, "*Africa must transform its economies in order to create wealth, reduce poverty, minimize inequality, strengthen its production capacity, improve people's social conditions and achieve sustainable development*". By reaching economic transformation, Africa will be able to optimize the use of its natural resources that are called to finish and even non-renewable for some. In addition, to the extent that

the structural transformation promotes industrial development, it increases the range of growth engines and develops resilience to shocks on commodity price. Here the researcher wants to review literature which shows how economic transformation contributes significantly to poverty reduction, increase in production and economic development in most developing countries.

Also, economic transformation has a more significant effect on economic growth and poverty reduction by which, through inflow of currency, many infrastructures and human resources can be generated. Economic transformation, not only leads to growth but also to changes in agricultural and industrial structure, sector of service that result in long term employment that are well remunerated and accessible to all, without taking into account people's class or status, gender, location or ethnicity; transformation at the social level, that is achieved through services and social protection built in people's rights, democracy, political transformation which provides civic rights, people's needs.

“For Kuznets and more generally in economic history and development, growth and structural change are strongly interrelated. Economic development occurs where there is sustainable quantitative and qualitative improvement in all or almost all the sectors of an economy” (The American Economic Review, 1973: 247-258). We say that an economy is developed if it is dependable, mature and well diversified. A further support for the link between economic transformation and economic growth is derived from Dr. Jean de la Croix Nkurayija (2011: 11) who argued that:

An economic structure reflects the relative contribution of the different sectors of the economy in terms of production and factor use. Thus, structural transformation can be looked at as the change in the sectorial composition of output, and that of the sectorial pattern of the employment of labor, as the economy develops (that is, a real per capita GDP increases).

Economic transformation fosters economic growth which in turn results in standards of living improvement which means an increase in real GDP per capita and employment. Fiscal dividend i.e. sustained GDP growth boosts tax revenues and

enables the government to invest in public sector such as healthcare, transportations, and education.

Another view of the economic transformation's impact on economic growth is provided by ACET (ACET 2014: 26) *“which declares that “economic transformation leads to growth plus DEPTH which means “economic diversification, export competitiveness, increase in productivity, technology upgrade and human well-being”.*

Likewise economic transformation is believed to be a job creation factor and foreign direct investments driver. This argument explains how FDI through technology transfer, competitiveness in export markets, management, techniques, increased wages and improved working conditions contributes to economic development.

1.1.5 Negative Impact of Economic Transformation on Economic Growth

The literature review presents to this point highlights the rationale for economic transformation and reforms which aim at an improved economic growth. However, it is important to note that there are criticisms leveled at the acts of economic transformation. Though much literature has been written to show the significance of economic transformation as instrument of development and economic growth, little is known about how an economic transformation with social exclusion, high inequality, unequal access to resources, insecurity, environmental degradation, resource depletion, unemployment, among others can negatively affect the development of countries particularly developing countries.

A first point of criticism lies in the observation that economic transformation can increase economic inequality and may not provide the expected benefits. Kuznets. S (Kuznets, 1955: 1-28) developed the most famous hypothesis of the relationship between inequality and economic growth. Simon Kuznets affirms that while a country develops, income inequality initially increases, and it declines after some time”.

Richard Wilkinson (2011, www.ted.com/talks) makes the same observation but extends the explanation by arguing that, bigger income gaps lead to deterioration in social relations, health (infant mortality and life expectancy) and human capital

(social mobility, high schools drop outs, child wellbeing). Here Richard Wilkinson charts the hard data on economic inequality, and highlights what happens when inequality between rich and poor increasingly rise by showing real impacts on health, lifespan, and even such basic values as trust.

Although, shared growth is one of the most important objectives of economic development, however only a few number of countries succeeded in reducing income inequality during transformation. Instead, in most developing countries, the process of transformation includes unequal growth, increase in income inequality across individuals. Kuznets (1955, 1-28) argued that inequality in income can be compared with an inverse U-shaped during the process of development. The Kuznets' curve outline the fact that industrialization starts by an initial decrease in equality, followed by a rise in equality after some time as the process goes on.

A second criticism of economic transformation is shown by the reliance of developing countries on international aid. Indeed, international aid is perceived as a means through which many developing countries finance their development projects especially construction of basic infrastructures (roads, schools, hospitals) as well as their budget deficits. Therefore, economic transformation might create an illusion to the aid provider to limit and cut their financial aid.

In his stages approach, Rostow (1960, 4-16) raised criticism on economic growth which according to him is varied. Seeking to understand the historical development of the modern nations with regard to economic growth, Rostow sees the growth process not to be continually homogenous but a discontinuous course which implies qualitative changes. This historical continuity process of break is therefore widened in a sequence of stage. Hence, he defines the stages as a concept indicating the discontinuous aspect of growth and the sequence as indicating its continuous aspect.

The above argument is supported in the literature by Martin Wolf, (2014, www.ft.com) who declares that, it is increasingly accepted that inequality at a certain level will result in economic problems. From this argument, Martin Wolf shows how negatively economic growth will impact on economies if a relatively small number of people continue to benefit from economic development. This is well proved by Margaret McMillan and Dani Rodrik (IFPRI, 2012: 28) for whom, it is clear that the role of economic transformation cannot have been a direct, straightforward one.

Except the fact that some Asian countries have continued to experience rapid, productivity enhancing structural change, other countries and particularly African and Latin America have begun to experience productivity reducing structural change.

Additionally negative environmental impacts of economic transformation would be the creation of pollution through the industrialization of countries. Industrialization might lead to different kind of pollution including water pollution, radioactive, health problems. Likewise, in order to exploit new technologies and protect scarce resources, companies have manifested great ingenuity. In fact, the necessary factors which contribute to change either in production techniques or composition may be relatively significant that the adverse effects due to high economic activity on the environment can be enormous.

The analysis of empirical relationship between national income and measures of environmental quality began with the works of Grossman (1993: 75-86) on the environmental impacts of a North American Free Trade Agreement. From these works, Grossman and Krugman “*established reduced-form regression models relating three indicators of urban air pollution to characteristics of the site and city where pollution was being monitored and to the national income of the country which the city was found*”.

1.2 Methodology

This section describes and explains the methodology deployed in this study. The previous parts introduced the subject of this study, i.e. to investigate on the nature and impact of the economic Transformation upon the transformation of African economies. A conceptualized frame of reference was developed to guide in the collection of data and to also help in gaining a better understanding of economic transformation.

1.2.1 Research Focus

The focus is particularly on the significant factors that influence and facilitate the economic growth through economic transformation. Additionally, this thesis is interested in discovering what are the main barriers which prevent African

economies from reaching a sustainable development and shows how the economic transformation allows the development of African economies, creation of wealth, reduction of poverty, minimization of inequalities, strengthening of productive capacities, enhancing of social conditions of the populations of African countries and achieving sustainable development.

Likewise, this is the reason why African countries and particularly the Republic of Congo need to emphasize on structural change; from low to high productivity activities and that the industrial sector is a key engine of growth in the development process and economic transformation.

This study identifies the key factors leading to economic transformation, explains why it is crucial to Africa's development to set the development as an agenda.

1.2.2 Research Methodology

This chapter outlines the research design used and the sample selection criteria, data sources, instruments used for data collection, data processing and analysis. The chapter concludes with an examination of limitations encountered throughout the study.

1.2.3 Research Design

This study is an explanatory and cross-sectional design. It enumerated elements of economic transformation and examined how it affects development. Research investigated and compared the relationship between economic transformation and economic development vector of development in both African countries generally and the Republic of Congo particularly. It is a combination of transversal and analytical study based essentially on secondary data, but also achieved using primary data collected from in-depth observations, experiments and in-depth survey.

1.2.4 Secondary Data

Secondary Sources of data came from publications, annual reports, brochures, journals; books, websites and different development programs at the countries and international level.

Extensive research was conducted in the libraries for valuable data from various texts, individual works, newspapers and journal articles.

Secondary data are also useful in the conception of subsequent primary research and as well, can provide a basis for comparing the results of the primary data collection. Therefore, it is always wise to start any research activity with a review of secondary data.

1.2.5 Scope and Limitation of the Study

This investigation was conducted to determine the impact of economic transformation in sub-Saharan African countries in general with a significant focus on the Republic of Congo particularly. Certain Limitations were encountered throughout this study. The key challenge was unavailability of Data. The major problem the researcher encountered in this study relates to access and collection data due to the lack of data. The delimitation is of geographical coverage, concentrating the research on one representative region which is Sub-Saharan Africa economic community instead of analyzing the entire Africa region.

CHAPTER TWO

TRANSFORMATION OF AFRICAN ECONOMY AND THE AFRICAN TRANSFORMATION INDEX

2.1 Transformation of African Economy

This chapter presents the African economy and examines the recent economic transformation in Africa. It is based on detailed analyses and researches. It starts by giving an overview of the presentation of Africa and describes the structure of African economy. It ends up by discussing the economic transformation of Africa and the factors which have fostered this transformation.

The aim of this part is to provide necessary information about African economy from all its aspects including Africa's drivers of growth.

2.1 African Economy

2.1.1 Presentation of Africa

Africa is a huge and diverse continent. It is the world's second largest continent and it has the second largest population over 1.033 billion people (worldpopulationreview.com, 2014) and growing after Asia and the most populated country being Nigeria with more than 150 million inhabitants.

“The Africa covers a territory of about 30 million square km that is equivalent to almost 20.4% of the total land area. Africa is surrounded by Suez Canal and the Red Sea, Indian Ocean, Mediterranean Sea, Atlantic Ocean and Sinai Peninsula.

Africa comprises 54 states including Madagascar and different island groups such as Mauritius and Cape Verde (www.economywatch.com, 2010)”.

There are five Regional classifications: East which includes 17 countries, West 17 countries, Central 9 countries, North 7 countries and South 6 countries. Over 1000 Languages and ethnic groups are found, with rich natural resources.

2.1.2 Overview of African Economy

For so many decades now, Africa has been qualified with many different names; the continent of misery, wars, epidemics, third world, an undeveloped continent and so on. All these descriptions come from Africa's failure to find effective solutions related to conflicts (ethnic, tribal and civil wars), and inability to well manage its resources in order to yield the expected results. Likewise, some believe that the continent is doomed to perpetual poverty and economic slavery. Also Europe's past (and present) exploitation of Africa played a significant part.

From Economic Commission for Africa (ECA, 2013: 5) report, another important argument was advanced. According to this report, the low level of Africa's development is the result of Africa's inability to transform its economies from highly commodity-dependent into manufacturing based economies. Add to this, military dictatorships, corruption, civil unrest and war, and deep poverty. Lack of a sound governance and poor leadership necessary to transform the natural resources into wealth has not helped provide significant socio economic infrastructures, thus aiding the development of the continent's misfortune. The majority of the countries classified by the United Nations as least developed are in Africa.

However, despite all these prejudices, things are changing in Africa. Indeed, *“the past decade of unparalleled growth and stability has changed perceptions about Africa for the better. Between 2000 and 2010, six of the world's ten fastest growing economies were in Africa (Table 2.1), and economists project growth to remain strong”* (AFDB, 2013: 5).

Table 2.1: Annual average growth of African countries.

2001-2010	Rate (%)	2011-2015	Rate (%)
ANGOLA	11.1	CHINA	9.5
CHINA	10.5	INDIA	8.2
MYANMAR	10.3	ETHIOPIA	8.1
NIGER	8.9	MOZAMBIQUE	7.7
ETHIOPIA	8.4	TANZANIA	7.2
KAZAKHSTAN	8.2	VIETNAM	7.2
CHAD	7.9	REPUBLIC OF CONGO	7.0
MOZAMBIQUE	7.7	GHANA	7.0
COMBODIA	7.7	ZAMBIA	6.9
RWANDA	7.6	NIGERIA	6.8

Source: The Economist, 2011. IMF data

Though, the world economy tumbled during the 2008 global economic recession, Africa continues to maintain high economic growth rate. In the recent ten years, Africa's growth was the second highest (Figure 2.1) comparing to other developing regions.

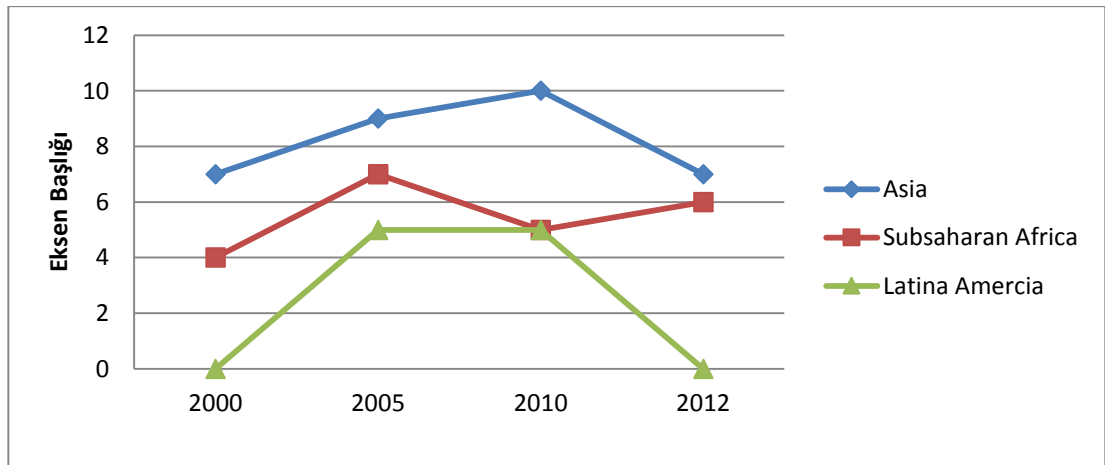


Figure 2.1: Percentage of GDP growth by regions between 2000 and 2012 (IMF, Deutsche Bank Research, 2013).

In terms of GDP per capita several African countries have seen their GDP per capita increased at historical rates (Table 2.2) between 2000 and 2010 period. The following countries are the examples in case; the Republic of Congo, Gabon, Namibia, Botswana, the Equatorial Guinea, South Africa and so on.

Table 2.2: Evolution of six African countries GDP growth (Data World bank Indicators).

	1990	2000	2010
Botswana	2739.1	3297.5	6980.4
Republic of Congo	1174.3	1030	2920.4
Equatorial Guinea	229.9	2018.6	16638.1
Gabon	6287.4	4135.3	9362.1
Namibia	1981.3	2059.4	5177.7
South Africa	3182.3	3019.9	7175.6

Agriculture sector

Agriculture remains the main source of employment in many African countries. From Africa Economic Commission Outlook Report (2013: 112) on “structural transformation and natural resources”, the above argument has been supported. According to this report, the agricultural sector employs more than 60 per cent of the Africa’s labor force. However, despite this impressive number, the agriculture sector only accounts for 25 per cent in Africa’s GDP. Crop production and livestock husbandry account for about half of household income. The poorest people in society are those who most rely on agriculture as source of income and jobs. Average agricultural value added per worker is low in many countries, showing the low degree of mechanization and limited penetration of improved seeds and inputs such as fertilizers.

Natural resources-led economies

Most African economies are still predominantly based on natural resources as drivers of economic growth, including major African economies like South Africa and Nigeria. Heavy dependence on primary commodities remains a common feature of production, exports and growth in all the sub regions. According to United Nations Conference on Trade and Development report (www.unctad.org, 2013) on

“Facts and figures on commodities and commodities trade”, trade in commodities products accounted for about 81 per cent in Africa’s export revenues between 2009 and 2010. Reliance on primary commodities was mostly high in western and central, where commodities represented 95 per cent of exports.

The majority of African countries are dependent on oil and minerals or a limited range of agricultural commodities such as coffee, tea and cocoa. This exposes the continent to external shocks and makes economic diversification to a top of priority for growth policy on the continent. However, economic outlook for Sub-Saharan Africa, is still satisfactory even though the region remains threatened by both a decline in commodity prices and fragility of the global economy (Africa’s pulse, 2013: 6).

Human well-being

Socially, human development conditions in Africa are improving overall. Poverty is gradually declining, while education and health care are advancing (AEO, 2014: 18). Nevertheless, exclusion remains strong, inhibiting equal access to social and economic opportunities leading to the deterioration of necessary efforts for livelihoods improvement and human rights. Therefore, African countries need to emphasize on gender equality, equitable economic and social transformation, youth empowerment, and environmentally sustainable development can help to address people’s vulnerability to economic, social and environmental risks. However, major challenges for African countries are to preserve political and social stability.

Labor force

According to ILO (ILO, 2009: 5), the African workforce was estimated to totalize 368.8 million persons in 2006, representing a participation rate of 69 per cent. The estimated workforce for the world was 3 billion, meaning that Africa represented 11.9 per cent of the world’s economically active people with a participation rate exceeding the world’s participation rate by 3.1 per cent.

The labor force participation in both sexes according to ILO criteria by sector in 2011 was established as follows; 61.8 per cent of labor force work in agriculture sector, 8.7 per cent in industry and 29.5 per cent of people working in the service sector. During the same period, the number of unemployed persons was of 25.4 million with an unemployment rate of 7.6 per cent. Unemployment among youth estimated at 11.9 per cent about 10.7 million of people.

2.2 Transformation of African Economy

Africa has recorded unprecedented growth over the recent years and has been remarkably resilient to the global economic crisis. The continent ranked the world's second fastest growing region just behind East Asia.

“The business climate in the continent has also improved and there is a nascent and growing middle class. Social indicators have also improved as evidenced by significant achievements in primary enrollment, gender parity in education, decreasing maternal and infant mortality rates, improvements in governance and less violent democratic transitions” (UNECA, 2013: 92).

Lessons learned from countries that have managed to transform have shown that economic transformation does not only come from a single model, but it requires vision, flexibility and hard-work. Indeed, the main fundamentals of the African economic transformation are liberalization, stabilization (Fiscal reforms), privatization and regional integration.

However, these fundamentals need to be supported with an institutional backing. A strong fiscal position, balanced budgets, balance in current accounts, low inflation, improvement in employment rate, liberal regimes toward international trade and capital flows; all these will contribute towards the growth of the economy only if they are supported by adequate organizations, good institutions, and respected and organized market rules.

2.2.1 Liberalization

According to Woodward (Woodward, 1992: 31), economic liberalization can be defined as a process in which government set policies that help to promote free trade and deregulation. Those policies include price controls and rationing, elimination of subsidies and the privatization of public services.

The liberalization policy starts in 1980s with the publication of the World Bank report on “*accelerated development in Sub-Saharan Africa*”, known as Berg Report. That report aimed at the adoption of a more liberal policy by eliminating controls and subsidies, allowing free market which should be able to self determine raw material prices (Rudiger, Arnim and Sundaram, 2008: 13).

Among the main issues of economic liberalization, the impact of liberalization on the sector of services is the most discussed.

Policies that make an economy open to trade and investment with the rest of the world are needed for sustained economic growth. The evidence is clear. No country in recent decades has achieved economic success in terms of substantial increases in the standards of living for its people without being open to the world. However, trade openness (with the opening to foreign direct investment) has been an important element in the economic success of East Asia, where the average import tariff fell from 30 percent to 10 percent over the last 20 years (www.imf.org, 2001).

2.2.2 Trade Liberalization

It is generally known from everyone that there is a positive relationship between trade liberalization and development. The widely accepted argument by economists around the world is that, countries with less trade barriers have faster growth than countries that are subject to trade restrictions.

By removing all economic restrictions and protectionist provisions, African countries have been able to attract more international firms and foreign investors to invest in Africa and help create jobs.

Trade liberalization therefore has corrected and promoted capital inputs through the foreign currency, thus revived growth and enabled economies to play a more competitive role in a globalized world. This argument confirms the fact that countries with trade openness tend to grow faster than countries with trade restrictions.

Being open to open foreign markets help ensure a sound resource allocation, promote and attracting investment towards the export sector which had already been adopted by development strategies based on domestic markets; causing considerable distortions in the operation of market forces in developing countries. Protective policies applied by African countries since the 1960s has resulted in poor allocation of scarce resources and weak growth and productivity in economies (ECA, 2004: 1).

Africa's development policy has changed over years. State intervention or public ownership has been replaced by liberalization and privatization policies with

the objective of attracting private investment and opening up to the global market forces. More job creation and wealth are increasingly being driven by private sector.

2.2.3 Foreign Market Liberalization

During several years, African countries have been encouraged to promote Africa's integration into the world economy, in order to benefit from expanding world trade and gain access to the necessary private capital in the context of attracting foreign investments and accelerate growth.

Likewise, policymakers in Africa have been encouraged to step up Africa's integration into the world economy, so as to take advantage of extending world trade and gain access to the private capital needed to accelerate investment and growth. This argument supported the experience of the successful Asian economies as examples of the advantages of integration into the globalized economy (www.imf.org, 1998).

The cooperation and aid relations have evolved considerably in this new geopolitical context. Africa is diversifying its partners and accessing to new funding in emerging and oil-producing countries. The relations of influence and power go through the fields of trade and finance. There is also an updating of historical links between large African zones and areas of influence.

The global context has changed dramatically in contrast and Africa has greatly diversified its partners. In fact, on the eve of the transformation, the foreign trade of Africa was heavily dependent on its former colonial powers. The mutual foreign trade created more than 90 percent of total foreign turnovers.

2.2.4 Privatization

The benefits that usually justify the need for privatization are mainly of two types especially macro and micro. On the macroeconomic level, privatization helps to restore the overall balance, particularly in terms of state budget. At the microeconomic level, privatization is supposed to provide technically high efficiency compared to public management. Private enterprise of managerial-type sets up several guardrails and control mechanisms and better flow of information at low cost.

It is in this sense that, through the adoption of privatization policy of public companies, privatization has enabled mostly all African countries to achieve greater efficiency of their economies and to make radical cuts to financial transfers to this sector. Through better resource allocation and increased efficiency, privatization has fostered the growth and poverty reduction. Privatization increased private investment in economic activities, leading to job creation, output and welfare.

The private sector is Africa's primary engine for growth and poverty reduction. It generates 90% of Africa's jobs, two-thirds of its investment and 70% of its output. Creating and promoting a sound climate for business and investments is crucial to enabling Africa's small and medium-sized enterprises to grow and flourish. During the last years, Africa has considerably made progress in terms of business environment by remarkably decreasing the cost and the time required to start a business in promoting the creation of single desk.

From the AFDB (AFDB, 2013: 35) report on "*Annual Development Effectiveness*" it was revealed that the private sector played a significant role on African growth. According to this report, "*the growth was largely driven by the private sector, due to economic governance and improved and a better business environment on the continent*". This has led to increased trade and investment, increasing the rate of foreign investment by five from 2000 until now.

2.2.5 Political Liberalization

"In the years following the end of the Cold War, African countries have moved rapidly toward political liberalization. The most notable developments are those involving regime changes. Countries that were previously under one party or a military regime began to close their eyes to the multiparty system, the adoption of competitive electoral systems, one after the other" (Shin'ichi TAKEUCHI, 2007: 172).

In several countries, including Ghana, Nigeria, Tanzania and Senegal, new leaders chose to appoint to government's senior positions some internationally educated technocrats who were more willing than their predecessors to embrace reforms.

Improved macroeconomic policies also arose with the need to gather broad support for competitive elections. Instead of focusing on pleasing the urban elite as in previous authoritarian regimes, new governments started in some ways to cater to the rural poor.

As mentioned above there has been successful and peaceful transition in Africa these recent years. Herbst (Herbst, 2001: 357-377) uses peaceful transfer of power through elections to as an indicator of deepening of democracy and identifies Benin, Madagascar, and Mauritius as multiparty democracies. We must also note that Senegal and Ghana had nationwide elections in 2001, with successful and peaceful regime changes, Uganda successfully completed elections in 2001 even though there were no regime changes and South Africa undertook its second democratic elections in 1999 with regime change.

A major consequence of political liberalization has been the economic development through, the arrival of private investments. One way was to allow the exchange rate to decrease (thus making it easier for farmers to export their crop) rather than keeping the rate artificially high (thus benefiting the rich eager to buy imported goods) as well as making it cheaper to import goods necessary for industrialization.

2.2.6 Macroeconomic Stabilization

According to IMF (Sourcebook, 2001:4-5) macroeconomic stability is defined as;

current-account and fiscal balances consistent with low and declining debt levels, inflation in the low single digits and rising per capita GDP, whereas instability is understood to imply large current-account deficits financed by short-term borrowing, high and rising levels of public debt, double-digit inflation rates and stagnant or declining GDP.

Macroeconomic performance of African countries has improved enormously over the past few years. The average GDP growth rate has more than tripled, from low level to 5% between 2000 and 2008. This improvement was a general and

uniform. The number of countries with GDP growth rate of over 5% almost doubled and continues to rise.

The main macroeconomic indicators have improved significantly in an increasing number of countries. Inflation in African countries has seriously declined over the past decade. The average number of countries able to keep inflation below 10% a year has risen (World Bank, 2015: 2). This performance is even more remarkable when one considers the significant increase in oil prices that began in 1999. The budget balance, other macroeconomic stabilization factor, has also improved. As a percentage of GDP, the average budget deficit in the African country declined significantly.

According to Dhonte & Kapur (1997: 9), macroeconomic stability can have very effective role. It is in this regard that, African countries that have managed to reach macroeconomic stability, succeeded to achieve good growth performance and stability; stability meaning a predictable political climate, leading to investment, both domestic and from international. The resulting virtuous circle of poverty reduction, job creation, raised state incomes and investment in infrastructures and education providing benefits to all in society such that a return to violence or chaos is in no-one's interests.

2.2.7 Fiscal Reform

Africa has accomplished important improvements in terms of fiscal reforms in the recent years. With considerable progress having made towards a stable macroeconomic environment, the African continent is now attracting and interesting investors from all over the world.

Clear improvement is visible on the World Bank's Ease of Doing Business Index. Out of the fifty economies making the most improvement in business regulation for domestic firms since 2005, seventeen are in SSA. Out of the top twenty five countries in terms of improvement, eight of them are in SSA (www.doingbusiness.org, 2012).

In the recent years, African countries implemented several measures and reforms. The restrictions on imports have significantly been reduced.

Also, as put forward by Andrew Mwaba (Andrew Mwaba, 2000: 20), "many countries also eliminated quantitative restrictions on imports, and introduced

rationalized licensing systems that allowed importation of goods without restrictions. Other countries removed import-licensing systems and adopted negative or positive list approaches to streamline import procedures and finally fully terminating all kinds of import licensing and all kinds of prohibitions. The countries also implemented several rounds of tariff reforms, aimed at rationalizing the import tax structures, and reducing significantly the tariff levels and their dispersion”.

According to African Development Bank Group report on “*Annual Development Effectiveness Review (www.afdb.org, 2013)*” the new economic dynamism in Africa is the result of significant improvements in terms of economic governance. Therefore, sound macroeconomic and fiscal reforms have been critical to Africa’s growth performance. Even though, poor governance in some countries persists, improvements are increasingly being made.

2.2.8 Regional Integration

“Regional economic integration has a fairly long history in virtually all parts of Sub-Saharan Africa (SSA). A number of leaders called for the integration of Africa already soon after independence, but it was only in the 1970s and 1980s that concrete steps were taken to re-launch or establish economic integration institutions in all sub-regions” Lolette Kritzinger-Van Niekerk (www.sarpn.org , 2005).

Intra-African trade has increased from its low level, more than doubling over the past years. According to UNCTAD (2013), in terms of intra-African exports rose with an annual average rate of 2.6 per cent in the period between 2001 and 2006 and 3.2 per cent in the period between 2007 and 2011, regarding the intra-African imports, its net growth rates were 9.4 and 4.2 per cent respectively. The level of intra-African trade was \$32 billion in 2000 and \$130 billion in 2011 in nominal terms.

If informal trade mainly food, handcrafts and simple manufacturing goods were to be included, this figure would be even more high. However, with intra African trade worth just \$130billion in 2011, it is clear that much faster progress is needed to remove trade barriers and create larger markets. Domestic demand for food and other products is growing rapidly. This provides great opportunities for African businesses if they can provide quality, low-cost goods to compete with foreign imports.

According to African Development Bank (AFDB, 2013: 35), as Africa integrates its markets and reduces production costs, enhanced competitiveness should lead to increased access to global markets. Africa's global share has progressed from 2.5 per cent to 3.1 per cent respectively in 2005 and 2013. Collaborative actions and regional approaches are increasingly being adopted by African countries in order to achieve their development goals for the many African countries that have small economies, small populations and land-locked.

However, Regional integration is progressing slowly but steadily. Africa's regional economic communities have launched some bold initiatives in recent years, beginning to rationalize Africa's complex architecture of regional institutions. Increasingly, integrated development planning is being led at the regional and continental levels.

2.3 African Transformation Index

This part gives an overview of the African Transformation Index known as ATI. It discusses its meaning and explains why growth with DEPTH and its function. It also, gives a clear detail of each sub-indicator of DEPTH especially diversification of economy, Export competitiveness, Productivity, Technology and Human Well-Being. The researcher found it important to make the readers understand all the aspects of the ATI in the purpose of better comprehension.

2.3.1 Definition

The African transformation index is a measurement index established by the African Center for Economic Transformation (ACET), with the primary objective of assessing the performance of African countries on five depth attributes of transformation and aggregate them in one overall index that will help policy-makers, business people, the media and the public track how African economies are transforming and how they stand comparatively to their peers.

2.3.2 Function

The main concern of ACET is that African countries now need more than growth if they are to transform; they need growth with DEPTH. This means that,

they must diversify their economies (production), make competitive their exports, increase their Productivity, and upgrade their technology and improve the Human well-being.

Through the ATI, the ACET aims at “supporting long-term growth with transformation of African economies by involving, both the private sector and countries to work together in order to promote exports and developing skills for economic transformation”.

2.3.3 Why growth with depth (Objective of ATI)

The ACET in its report (ACET, 2014: 5) on “growth with DEPTH” argued that a DEPTH-based growth is important because it can propel and sustain the economic transformation of Africa. Through a DEPTH-based growth, economies are less subject to commodities price volatility and technologically advanced. Also, a DEPTH-based growth can extend the formal employment and connect it with the informal sector to boost productivity and incomes.

However, a DEPTH-based growth does not come overnight. In order to achieve it, countries need to institute and implement strategies that suit their particularities. Though, economic transformation does not necessitate any specific formula, however, many believe that policies and institutions have played an important role in leading countries that have successfully transformed.

The argument is that, it is important to African countries to combine economic growth with depth. Simple economic growth is not enough for them if they are to transform their economies and to reach a sustainable development. Therefore, they should emphasize on more diversification of their economies, being more competitive, increasing their production, upgrading their technology and ensuring the human well-being.

The report further highlights the performance of African countries by making a comparison with some countries that have succeeded to transform their economies in other regions of the world such as Brazil, Singapore, South Korea, Thailand, and Malaysia. According to the report, their economies, forty years ago, were at the same level with African countries in terms of poverty, low level of productivity, weak use

of technology in the production process, and limited number of goods exported, a manufacturing sector relatively low.

Arguing on that report, Obadias Ndaba (www.huffingtonpost.com, 2014) states that, “in development lessons are good as long as countries are able to discern what to take and what to reject because countries cannot import a model of development. There is no formula for economic development. However, we know that if a country is at war or lack of institutions, its economy is condemned. We know that if a country is based on the export of raw minerals without added value, its economy is doomed in the long term. We know that if a country does not invest in the modernization of its agriculture, its population is prone to famine and inadequate nutrition, which have an impact on human capital, creating a vicious circle. This knowledge gives us a margin of at least a partial plan, at least a partial economic success rise out of deep poverty by distributing the benefits of growth”.

a- Diversification

African countries have been recording high levels of economic growth, political stability, and human development for several years now. Therefore, while they continue to make economic progress, it becomes imperative that they start to think about the diversification of their economies, especially by developing non-natural resources led sectors; expanding their range of products and exports.

From UNECA report (2007: 29) on “Accelerating Africa’s development through diversification” this argument was supported. According to that report, a number of key engine are necessary, this includes investment, institutional variables such as good governance and absence of conflict a dynamic growth performance, trade and industrial policies, macroeconomic stability, a competitive exchange rate and expansionary but responsible fiscal policy. Since, diversification does not occur in a vacuum. Thus, there is a need to set an environment which makes diversification possible.

The ACET, from its report on growth with depth also supported the above argument by saying that, “the fact that sub-Saharan African countries produce a small range of products and exports it is not due to the fact that they choose to specialize but rather this is because they lack today technical and other capabilities to expand into other higher technology products and services. The region’s average share of manufacturing value added in GDP, which is one of the indicators of

diversification in production, was less than 10% in 2010, much the same as in the 1970s”.

It exists several advantages that African countries could benefit by diversifying their economies; this includes resistance to fall in commodity price, job creation (poverty reduction), and the development of the manufacturing sector and so on.

According to R. Shediak, R. Abouchakra, C. N. Moujaes & M. Najjar (2008: 3), economic diversity and sustainability are linked and diversification of the economy can decrease a country's economic volatility and raise its performance.

b- Export competitiveness

During the past decades, many developing countries including sub-Saharan African countries have made good progress in liberalizing their trade policies by removing import restrictions and reducing tariffs. Trade has grown faster than gross domestic product on a worldwide basis since the 1960s, particularly among developing country exporters of manufactured goods.

Export has several benefits, among which we have income increase through the increase in export. Also, through trade, a country can better manage its comparative advantage to increase its incomes necessary for the funding of manpower, capital, and the necessary technology to develop a country's comparative advantage over time (ATR, 2014: 3).

The favorable evolution that Africa has recently had in international trade is a good base from which to further benefit from trade. There are numerous actions that can be taken to ensure this. Primarily it is important that African companies begin to specialize much more than they do today. According to the theory of specialization, specialization is one of the most important advantages to benefit from international trade. This can also increase technological development on the continent, which is more than necessary in Africa.

c- Productivity

Over the last decade, many sub-Saharan African countries have experienced rapid economic growth and a significant social change. However, poverty, hunger and malnutrition remain highly widespread obstacle. With a large number of people living in the rural areas and working in agriculture, the solution to these problems lies largely in the increase of agricultural productivity.

Indeed, “in South of the Sahara, it is estimated that 273 million people live on less than one US dollar a day, with 76% of them living in rural areas” (Chen & Ravallion 2007). Therefore, there is a need to increase the productivity. To achieve this, Governments should invest or allocate more resources to agriculture and rural development policy.

Increasing agricultural productivity in Africa calls for policies and policy frameworks which encompass the entire agricultural value chain, including the areas of agribusiness and agro-industry and agriculture in general. In a sustainable manner meeting the food demands in the future despite a growing population and depletion of natural resources, will greater emphasis on productivity growth.

Thus, increasing agricultural productivity in Sub-Saharan Africa could thereby reduce rural poverty, hunger, and malnutrition in the region.

d- Upgrade technology

Technology is seen as a means by which, many African countries can make their exports more based on a higher degree of manufactured products, and less on commodities, which will result in a rise of their income. By doing so, African countries can manage to reduce extreme poverty on the continent. This, in turn, may also help Africa benefit more from international trade.

“The SSA countries need to tap into the advanced technology. New technologies provide an array of diverse new application in agriculture, health, an environmental management that can be of a significant value for SSA, undoubtedly many of these technologies can help provide solutions to basic needs. They can also create aids to better governance via the effective use of data and transparency of public information and help to improve productivity both in agriculture and industry” (Industrial Development Report, 2004: 19).

Furthermore, with an increase in technology, African countries can produce expensive goods with high added value on international market. Taken together, in both production and export, the share of medium and high-technology manufactures in SSA are relatively low about 12%, less than a third of 39% of developing Asian and Latina American countries (ATR report, 2014).

e- Human well-Being

From the United Nations Development Program report (UNDP, 1998: 10), on “*human development report*”, “human well-being or human capital development is considered to be an essential means for sustained economic growth, poverty reduction and as a significant end in itself”.

Human welfare has several dimensions. Through human well-being people meet their needs and they have a wide range of choices and opportunities to develop their skills. Also, human well-being is a powerful means to face a variety of challenges. This includes the fight against poverty through precarious social and economic conditions, corruption. According to David Casagrande (www.eoearth.org, 2007), human well-being means people’s food security, investment and business opportunities, political stability and reliable governance systems.

Therefore, from the above arguments, it can be retained that human well-being is about improving people’s welfare, job opportunities and productivity through investment in education and health. Hence, improving human welfare may have several positive impacts.

CHAPTER THREE

REPUBLIC OF CONGO AND ITS ECONOMY

This chapter provides an introduction to the Republic of Congo and its economy. The chapter gives an overview of the society and history of the Republic of Congo. It highlights and discusses the structure of Congo's economy, the sectoral structure of Congo's economy, Congo's political profile, the structure of employment of Congo and lastly the foreign trade in Congo's economy.

This will help the reader understand the history and the economy of the Republic of Congo through elements mentioned above and therefore will contribute towards a better understanding of the Republic of Congo. It is reasonable to point out some significant aspects of the current economy, society and history of the Republic Congo.

3.1 Overview

Former French colony, the Republic of Congo (sometimes called Congo-Brazzaville) to distinguish it from the neighboring Democratic Republic of Congo is situated in west-central of Africa (Figure 1.2), astride the equator. The country has a small stretch of coast (170km) on the Atlantic Ocean between Gabon and Angola. It is bordered with Cameroon to the north, the Central African Republic to the north-east, Gabon to the west, the Democratic Republic of Congo to the south-east and the Angola exclave of Cabinda. The country has a total area of 342,000 square kilometers, 60% of which is covered by rainforests drained by tributaries of the Congo River (World Factbook).

As a country located along the Equator, the average daily temperature is 24 °C and the climate is generally humid. At night temperatures ranges around 16 °C and 21 °C. The Republic of Congo has two types of seasons especially the dry season

which usually starts from June to September and the rainy season beginning in October and ends in May with a short dry season between January and February.

The country's population is estimated at 4.6 million (www.statistiques-mondiales.com, 2014), over half of which live in the two major cities of Brazzaville and Pointe-Noire which is located on the coast. Since the 20th century, urban migration have led three fourth of the population to live in urban areas, this is the reason why the Republic of Congo is one of most urbanized countries in Africa.

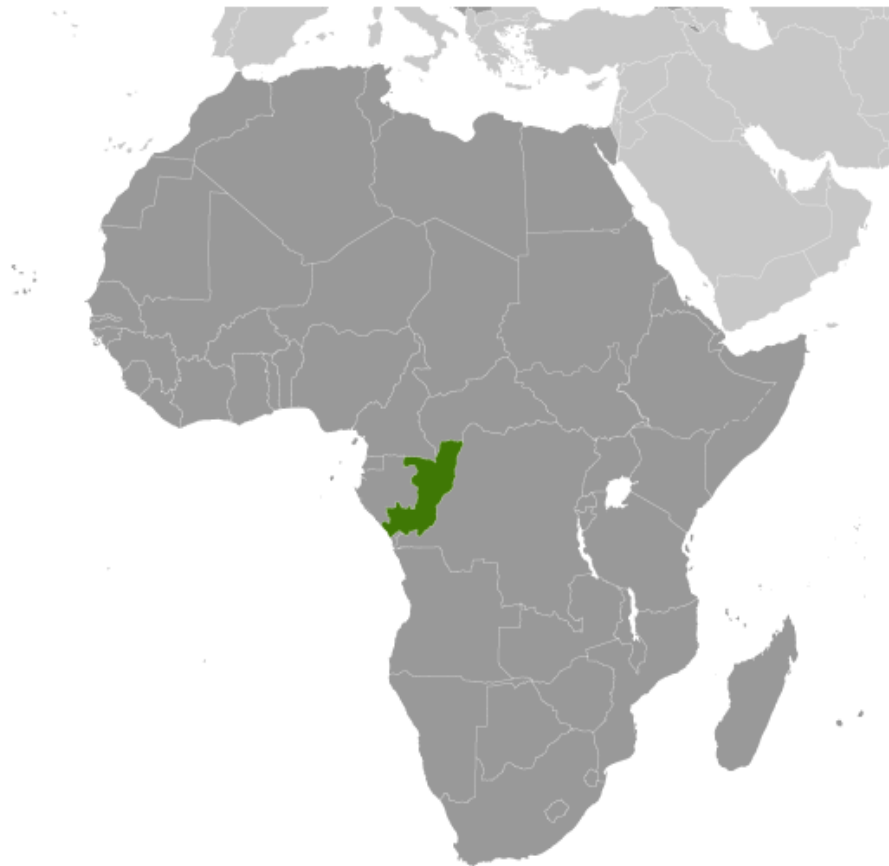


Figure 3.1: Geographical situation of the Republic of Congo (World Factbook).

Brazzaville is the political city and largest city of the country. It is found on the banks of the Congo River and faces Kinshasa, the neighboring city of Democratic Republic of Congo. Let us recall that Brazzaville and Kinshasa are the world's two closest cities (Figure 3.2).



Figure 3.2: The world's two closest cities Brazzaville and Kinshasa

The Republic of Congo received full independence from France on August 15, 1960 after several decades of colonization. “French is the official language spoken in the Republic of Congo. However, other native tongues such as Lingala and Munukutuba rank just behind French as national languages”. The currency used is the Central African franc (CFA) which is guaranteed by the French treasury and has a fixed exchange rate to the euro (1 euro = 655.957 CFA francs exactly).

The Republic of Congo is a member of the Monetary Community of Central Africa states (CEMAC) and the Bank of Central African States (Banque des Etats de l’Afrique Centrale, BEAC.) which includes Chad, Equatorial Guinea, Gabon, Cameroon and Central African Republic.

3.2 The Structure of Congo’s Economy

The objective of this part is to first describe Congo’s macroeconomic situation and then to briefly introduce the characteristics of Congo’s agricultural, industrial, oil and service sectors.

3.3 Congo's Macroeconomic Status

In this section the author aims to present mainly the analysis of GDP growth rates, evolution in GDP per capita, the country's national debt and the overall fiscal balance as a percentage of GDP over the past years.

Since the 2000s Congo's economic performance has been characterized by steady and sustained growth (Table 3.1). Between 2000 and 2010, the annual GDP grew every single year. In only one of those years was the real GDP growth rate negative in 2007 (Figure 3.3) and below 4% in 2012 and 2013 (AEO, 2014: 3).

Table 3.1: Macroeconomic indicators (The world development Indicators 2013, International Monetary Fund (IMF), World Economic Outlook, African Economic Outlook).

	2009	2010	2011	2012	2013
GDP (\$M)	9,593,536,719.1	12,007,880,067.4	14,425,606,793.4	13,677,929,161.7	14,085,852,120.5
GDP Growth (%)	7.5	8.8	3.4	3.8	3.4
GDP per Capita (\$)	2,401.3	2,920.4	3,414.1	3,153.7	3,167.0
GDP per Capita Growth (%)	4.3	5.7	0.6	1.1	0.9
Inflation (CPI)	5.3	5.0	1.3	3.9	6.0
National Debt (% GDP)	57.2	22.9	35.1	35.8	30.8

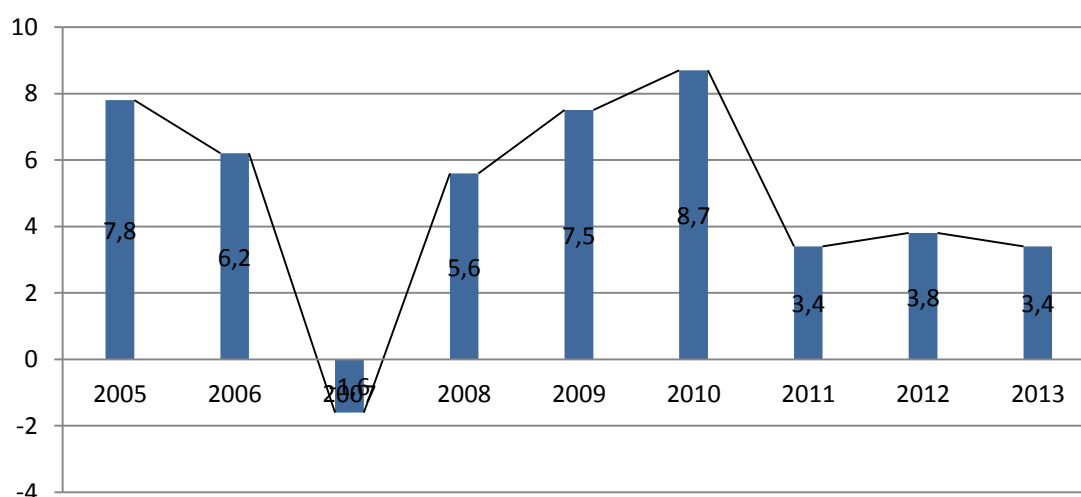


Figure 3.3: Real GDP growth (%) (African Economic Outlook, Republic of Congo, 2014).

The country's gross domestic product (GDP) increased at US\$ 14.09 billion in 2013 according to world development indicators and the country's gross domestic product per capita at US\$ 3167 making the country a middle income country. The country's public debt is estimated at 30.8% of its GDP in 2013 (www.gfmag.com, 2015).

From the IMF (IMF, 2009: 4-6) report on "country report", it was shown that, almost all of these changes were due to resumption in the value of oil output and buoyant non-oil activity, driven by the telecommunications, construction, and transportations sectors. Inflation has recently increased due to increase in food and energy prices from 5.3% to 6% respectively between 2009 and 2013.

The analysis of the debt sustainability carried out by IMF and the World Bank in 2013, shows the risk of debt distress to be low. "Its conclusions are confirmed by the ranking "B+/B" with a stable outlook and Ba3 awarded in October 2013 by Standard & Poor's and Moody's respectively for Congo's long-term and short-term foreign-currency debt. Both agencies note the high level of foreign-exchange reserves as well as the country's solid growth outlook, underpinned in the medium term by mining" (AEO, 2014: 7).

Congo's growth in the last five years has averaged about 5% per year, higher than in regional peers (Figure 3.4), comparing to CEMAC and SSA countries for the time period ranging from 2009 to 2013. The country's debt situation improved markedly as a result of the 2010 HIPC (Heavily Indebted Poor Countries) debt relief. Gross oil revenue averaged more than US\$8 billion per year in 2012 and 2013, equivalent to about 60% of GDP. Substantial fiscal savings have been set aside by virtue of prevailing high international oil prices (IMF, 2014: 4).

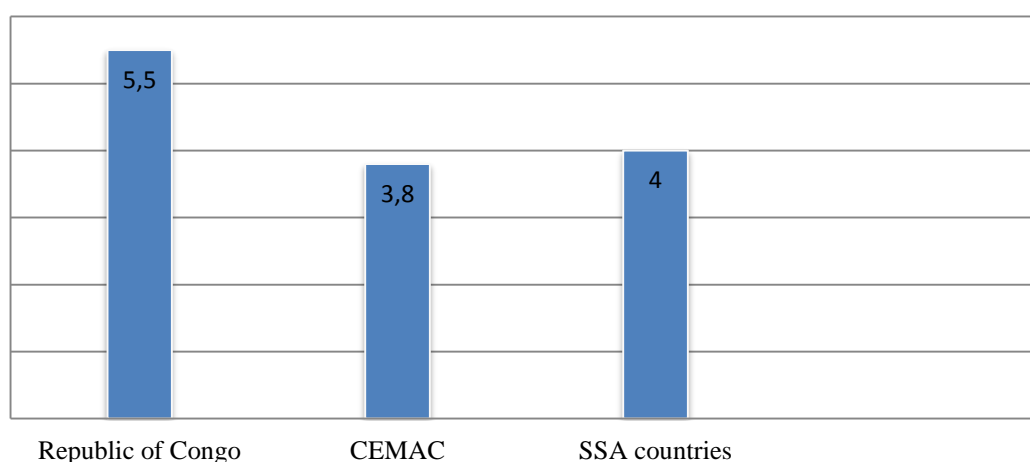


Figure 3.4: Republic of Congo's growth has outperformed regional peers (World Economic Outlook, database and IMF staff estimates).

The economic indicators for the upcoming year remain positive with a GDP growth rate estimated at around 3.5 percent from 2014 to 2016. This insufficient growth is attributable to the below average performance of the oil sectors and to the decrease in oil price. However, the relatively strong performance of non-oil sectors will help mitigate the performance of oil sector (www.worldbank.org, 2014).

3.4 Sectoral Structure of Congo's Economy

This section presents the structure of the Republic of Congo's GDP composition. The aim of this section is to help the reader know, which economic sector or industry most contributes to Congo's GDP. The section starts with an overview of Congo's GDP by sector (Table 3.2) and do an in-depth analysis of the most significant sectors.

Table 3.2: Congo's GDP by sectors (African Economic Outlook, Republic of Congo, 2014).

	2008	2013
Agriculture, hunting, forestry, fishing	4.3	4.5
Of which fishing	0.4	0.4
Mining	67.6	64.6
Of which Oil	67.6	64.6
Manufacturing	4.1	4.4
Electricity, gas and water	0.7	0.7
Construction	3.1	3.8
Wholesale and retail trade, hotels and restaurants	6.0	6.9
Of which hotels and restaurants	-	-
Transport, storage and communication	4.5	5.1
Finance, real estate, business services	5.4	5.4
Public administrations, education, health, social work...	4.3	4.6
Other services	-	-
Gross domestic product	100	100

3.4.1 Oil Sector

The Republic of Congo emerged as a significant oil producer in the late 1970s, with production expanding considerably during the 1990s. But, by the end of the century, production started to decline as existing oil fields reached maturity in 2001. However with the entry into production of the country's first deepwater field Moho Bilondo in 2008, the declining trend was reversed. The new production field propelled the country's production as a result the country produced over 311,000 bbl/day in 2010 (www.eia.gov, 2014). According to the British Petroleum (BP, 2014: 6), the Republic of Congo has proven reserves of 1.6 billion barrels equivalent to 18 years of current production. The country possesses 0.11% of the world's reserves and is the fourth largest oil producer in sub-Saharan Africa just behind Nigeria, Angola and Equatorial Guinea.

The industry sector in Congo is largely dominated and highly dependent on the oil and oil-related services with few linkages to the rest of the economy. The oil industry has been providing the major share of government revenues and exports since the 1980s (Figure 3.5), replacing timber production and exports as the principal growth sector. From the African Development Bank report (2014) on “African Economic Outlook” this fact was confirmed. According to this report, oil accounts for about 67% of Congo's real gross domestic product (GDP), represents 78% of the government budget and contributes to 85% of Congo's export earnings.

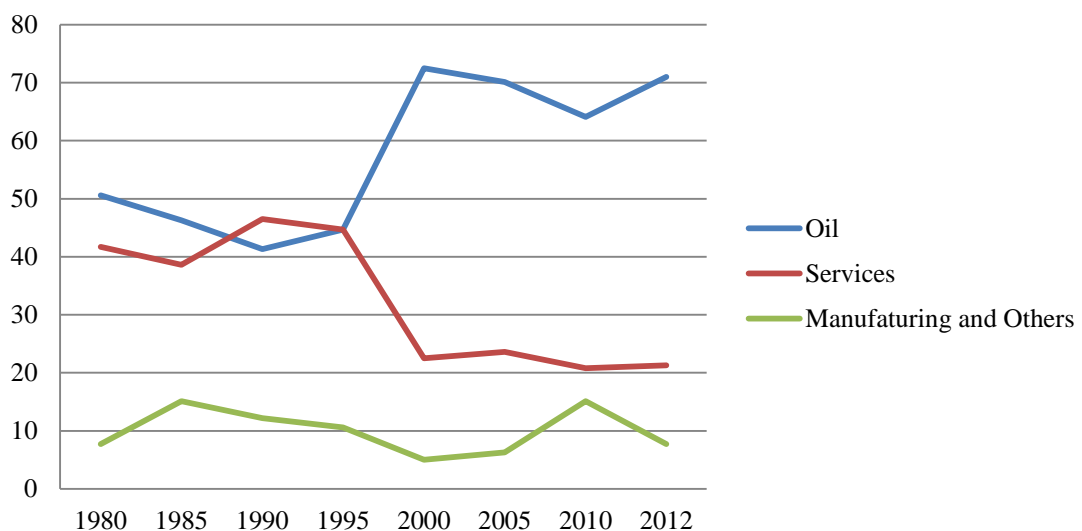


Figure 3.5: Oil share in percentage to Congo's GDP from 1980 to 2012 (World development indicators).

A vast majority of oil exploration activities and production in Congo comes from offshore fields, containing many associated gas. The oil industry is predominantly run by foreign companies especially Total (France), Eni (Italy) which are the leading oil and gas producers in the country with the participation of the Société nationale des pétroles du Congo SNPC (Congoese National Oil Company). Petroleum activities in the country are at the stages of production, exportation and refining.

The exploration of oil industry is located on the coastal city of Pointe Noire where the Congolaise de Raffinage (Coraf) which can be translated into English as Congoese refinery operates over 21,000 barrels per day. The refinery has been out of commission for four years and has only recently started operating again.

3.4.2 Mining Sector

The mining sector in the Republic of Congo is under the authority of the Ministère des Mines et de la Géologie (Ministry of Mines and Geology). This sector is endowed with large mineral resources. “The reserves of iron ore are estimated to exceed 10 billion tons; while potassium and phosphate reserves are assessed at about 1 billion tons and 500 million tons, respectively”(ciemcongo.com, 2005). To date, the mining sector is underdeveloped, but there is significant potential. In recent years; diamond, gold and other mining activities have been mainly accomplished primarily through small-scale domestic operations.

Exploration especially for diamond, potash, ferrous and precious metals which resulted in the government’s adoption of the more attractive 2005 mining code in 2005 with a number of exploitation, exploration, and prospecting licenses has attracted interest from international investors in mineral occurrences in Congo. So far, 48 prospecting permits have been awarded to 28 companies; 49 exploration permits to 26 companies; and 3 production permits to 2 companies (IMF, 2013: 8).

In recent years the Republic of Congo's government has shown a genuine commitment to developing a mining sector as a central part of the country's economic diversification program. “In addition, in order to reduce dependence on oil, the government has been working to diversify the economy through the development of the mining industry. By introducing this mining code, the Republic of Congo has provided investors from all over the world and the mining companies

an interesting and attractive law in order to support the development of mining sector” Madeleine R. Young (africanarguments.org, 2012).

As a consequence, Congo is quickly becoming a hot spot for global mining investments. Madeline R. Young, also put forth the benefit of mineral industry to Congo’s economy. In fact, the mining sector is likely to increase the country’s national GDP, improve the standards of living and promote opportunities of business for the citizens. Hence, sound management of the country's mineral resources will result in the improvement and infrastructure development and much more.

From all these aspects, we can say that the Republic of Congo must create a propitious environment, especially for investments in mineral industry necessary to attract foreign investors. This will be an important factor of development and youth employment.

3.4.3 Agriculture Sector

The Republic of Congo has a huge agricultural potential. The country has about 10 million hectares of arable land. However, since the 1980s, the agriculture contribution to the country’s national GDP started to remarkably fall (Figure 3.6), accounting for only 4.5% of the country’s national GDP in 2013 (Table 3.3). And this, despite the country's good rainfall levels, reaching approximately about 1200 mm each year as well as its many rivers and streams particularly the Congo and the Kouilou-Niari River.

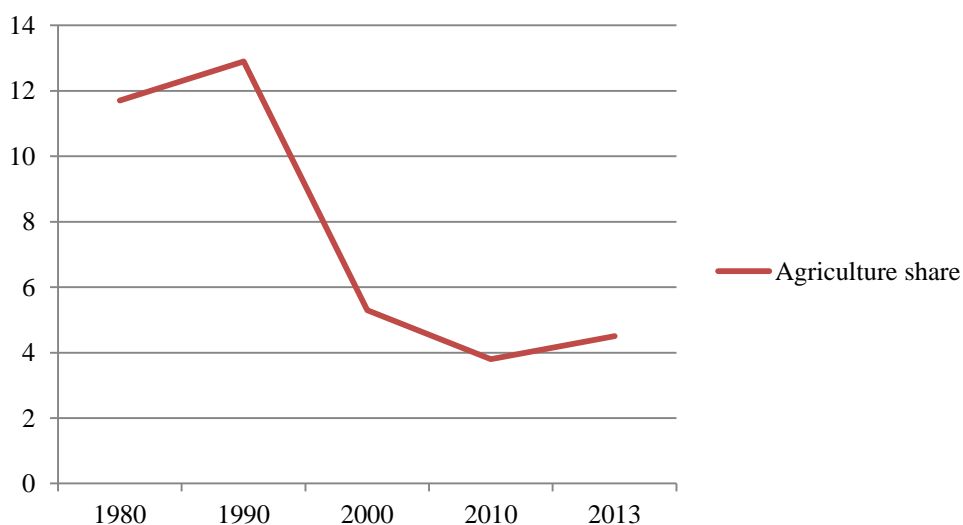


Figure 3.6: Agriculture Share in Congo’s GDP over time 1980-2013 (World development indicators).

Over the country's 10 million of arable land, only 2% of them are exploited. Domestic production which uses the largest share of arable land does not match the domestic demand. This gap constrains the country to import food from outside. From Agricultural science and technology indicators (ASTI, 2010: 1) report on “recent development in agricultural research” mentioning FAO, the total annual food imported by the Republic of Congo in 2008 averaged more than 100 billion CFA about 174 million USD.

Strengthening the agricultural industry will help the country meet the food needs of the population; reduce reliance on imports and to set up a new source of revenues. Also, with food prices on the rise and with the falling commodities prices, the government increasingly understands that agriculture must be a top priority and that increase investments in agricultural will help insure food security.

It is in this context that, the Congolese government has put greater emphasis on these sectors these recent years, having strengthened regulations and earmarked a greater percentage of the budget for agriculture programs. To do so, the government has created projects named New Agricultural Villages, an innovative way to develop agricultural sector for the authorities. With these villages, an important step has been taken in the reduction of the Congolese food imports, estimated at millions of US dollars each year. Thus, Conditions here are suitable for large-scale agriculture since the country has water and millions of arable lands.

3.4.4 Service Sector

The sector of services is one of the fastest growing sectors in Congo's economy (Figure 3.7). This sector represents 25.8% of the country's GDP (Table 3.3) and employs about 51.3% of the population according to the Centre National de la Statistique et des Etudes Economiques (www.cnsee.org, 2011).

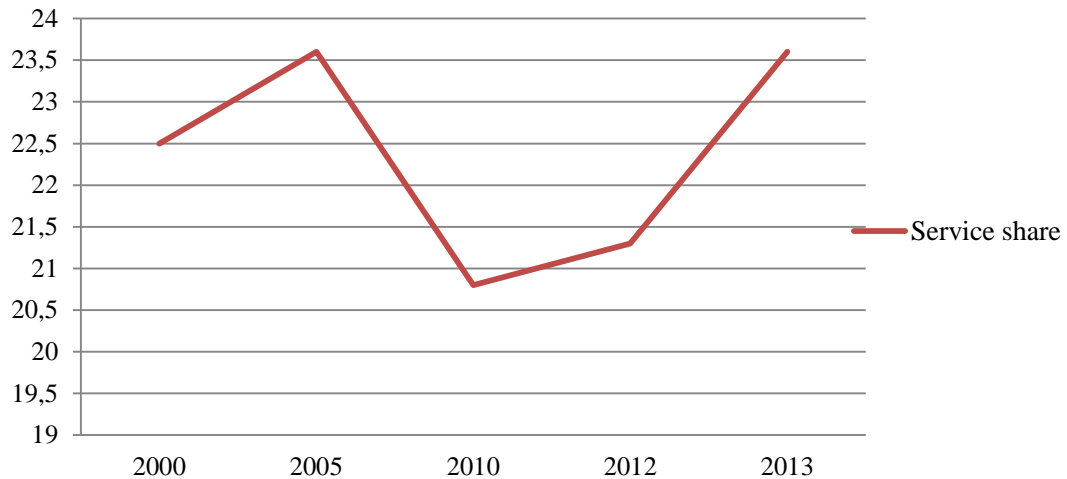


Figure 3.7: Service share in Congo's GDP over time (World Development Indicators).

The bulk of services are in telecommunications, hostelry, banks, restoration, bakery and pastry, guarding, training, transport, new communications and technologies, cleaning and so on. The telecommunication sector has remarkably known a rapid growth with the arrival of several telecommunications networks which are playing a significant role in the employment market mostly for youth.

The hostelry for its part keeps on growing at a faster rate. According to data from African economic outlook (Table 1.4), this sector has recorded a slight growth from 6% to 6.9% respectively in 2008 and 2013. Hotels are being built across the country and start attracting tourists although efforts still need to be done in order to increase the tourist number.

One of Congo's promising service sectors is the banking sector. The liberalization of the banking sector after the implementation of structural adjustment programs as wished by the World Bank and the International Monetary Fund, led to the creation and installation of several national, regional and international banks. Today, as many as ten banks are found in Congo, employing a big number of people. In addition, there is also an important number of insurance companies located in Congo, as well as security brokerage services, leasing companies, money transfer agencies.

The sector of transport after a decline due to infrastructure problems is now growing increasingly due to the program of infrastructure constructions implemented by the government especially the construction of roads. The country is being connected from north to south and east to west.

3.5 Political Profile of the Republic of Congo

In this section, the author highlights the political history of the Republic of Congo in particular before, during and after the country's independence. In this section, the author makes a historical briefing of different presidents who have ruled the Republic of Congo and gives an overview of various periods of trouble that the country went through. The objective here is to help the reader know the political history of the Republic of Congo.

The Republic of Congo became autonomous within the French community under Prime Minister Abbé Fulbert Youlou in 1958. After two years, on 15th August 1960 the country became independent. Fulbert Youlou was elected president and a new constitution was adopted giving the president extensive powers in 1961. In 1963 Youlou resigned the presidency following a general strike and a transitional government was established headed by Alphonse Massambe-Débat. The following year, in 1964, Alphonse Massambe-Débat was elected president and the National Movement of the Revolution became the unique political party.

In 1968, Captain Marien Ngouabi seized power in a coup d'état and was elected president in 1969. He created a new political party, Parti congolais du travail (PCT) that can be translated as Congolese Labor Party in English. In 1970, Marien Ngouabi changed the name of the country to the People's Republic of the Congo.

In 1977, following the exacerbation of ethnic tensions and power struggles among the elite; Ngouabi was assassinated in unknown circumstances. General Jacques-Joachim Yhombi-Opango was named head of state. In 1979, Yhombi-Opango surrendered power to the president of the PCT, Denis Sassou Nguesso who became president of the Republic.

In 1992, after the National Sovereign Conference, Pascal Lissouba became the first president elected in Congo during the period of multi-party democracy. Denis Sassou Nguesso came back to power in 1997 after a four month of civil war between Sassou and Lissouba's troops which caused thousands of civilian deaths.

3.5.1 Structure of Politics Since 2002

The Republic of Congo is a multi-party republic with a presidential regime, in which the president is both the head of state and head of the government. The

president is elected by universal suffrage every seven years, with tenure limited to two seven-year terms. The executive power is in the government's hands while the legislative power is shared between the government and the two parliament chambers made up of the national assembly and the senate.

From 1970 to 1992, the country called People's Republic of Congo was governed according to unique party system. After the adoption of new constitution in 1992 and till the 1997 war, the Congolese system of government was as same as the France's system. After taking over, the president Denis Sassou Nguesso suspended the 1992 constitution.

The new constitution adopted by referendum in 2002, led to legislatives elections in 2002 and 2007 and presidential elections in 2002 and 2009 with the re-election of the current president (Denis Sassou Nguesso). This constitution provides a 7-year presidential term, with a parliament of two houses whose members serve for 5 years.

3.5.2 Political Stability

Since the end of the civil conflict in 2000, the Republic of Congo has taken important steps towards consolidating peace and rebuilding the state. All political parties have renounced violence, accepted all election results since the end of the war, and are pursuing their agenda for social change through the Parliament and decentralized legislative bodies. Almost all key political leaders exiled during the period of conflict have returned to Congo and are participating in the reconciliation process.

The disarmament of the last remaining rebel group has been completed, and the social and economic reintegration of the rebels in their communities started in 2009. Thus, with a political situation stable, the country is now looking forward to a brilliant future and the next presidential election that is scheduled for 2016.

3.5.3 Human Rights

According to amnesty international, from its 2014-2015 report on the Republic of Congo (www.amnesty.org, 2014); the main human rights concerns are related to restrictions on press freedom, ethnic discrimination, assembly, expression and

movement. Additionally, it has a poor prison conditions, corruption, lack of transparency and failure to protect asylum seekers.

However, there has been human rights progress in several sectors in the country which is of significant importance. The Congolese government has been making some progress in the media and press freedom sectors in the recent past years leading to the arrival of new private newspapers, television and radio channels. Since the adoption of the 2002 constitution, progresses have been made in the press freedom. More than ten private newspapers now exist in Brazzaville even though the government continues to monopolize the media. Often they publish articles and reviews that criticize the government's actions. There are about ten domestic internet providers and there is no internet censor or restrictions from the government.

Also the government is working with human right organizations among which the United Nations High Commissioner for Refugees (UNCHR) for the protection of refugees and asylum seekers. There is increasingly more transparency and the rate of corruption is falling even though efforts still to be made.

3.5.6 Structure of Employment

The employment structure of the Republic of Congo which mostly dominated by the two big cities of Brazzaville and Pointe-Noire (Table 3.3) is divided into three sectors, especially the secondary sector, the primary sector and lastly tertiary sector.

Table 3.3: Representative table of Congo's employment by sectors (National authorities, table Annuaire.3 page 85; "Enquête 1, 2,3. CNSEE, 2010).

Activity sectors	Cities				Total	
	Brazzaville		Pointe-Noire			
	Number	%	Number	%	Number	%
Primary	15185	3,7	11120	4,5	26305	8,2
Industry (Secondary)	68225	16,7	63642	25,7	131867	42,4
Commerce	101081	24,7	60357	24,3	161438	24,6
Services	224151	54,9	112968	45,5	337119	49
Total	408642	100,0	248087	100,0	656729	100,0

The primary sector which only represents 4.5% of the country's GDP (Table 1.4), consists of agriculture, hunting, forestry and fishing. Although the country possesses about ten million hectares, just a few two million of them are cultivated. The Congolese agriculture which occupies 40% of active population, only contributes to 4.5% of the country's GDP. The breeding is almost nonexistent. This is the reason why, the country relies on outside for its needs. Sea coast, rivers and streams although are full of fishes, unfortunately the production is still not enough.

The secondary sector which represents 73.7% of the country's GDP is composed of industry. This sector is dominated by extractive industry which is essentially based on the oil exploitation (64% of GDP). Non-oil industries are not very intensive just about 7% of the GDP. They mainly include the wood transformation, cement and oil products, sugar cane production.

The tertiary sector counts for 21.8% of the GDP. It is made up of commerce, tourism, transportation and telecommunications, the education... After periods of recession this sector is increasingly playing an important role in the employment market (Wilfrid MBA-NZOO, 2014: 10).

The employment situation is characterized by a high rate of youth unemployment, about 40% while the overall unemployment rate is of 19, 4%; a strong mismatch between labor supply and demand supply. The distribution of the workforce by activities (Table 3.3) illustrates this mismatch: 8.2% of the workforce is employed in the primary sector, against 42.4% in the secondary sector and 49% in the tertiary.

It must be recalled that, the informal sector is the most predominant sector which concerns the highest number of occupied assets about 78%. This sector also concentrates the highest number of poor people, 83%. In the opposite, the proportion of poor people is very weak (www.cnsee.org, 2010).

A number of underlying reasons can be identified for the current situation. These reasons include demand side aspects, such as the undiversified economy and limited activity of the private sector, the dominance of the public sector, supply side issues, such as the mismatch of skills offered by job seekers and demanded by employers, and a regulatory and institutional environment that has not promoted employment creation sufficiently.

However, a number of positive developments have been recorded in the last years. The reform effort of the government in many areas has to be commended, especially regarding public finance management. The implementation of the reforms will help the government to use its resources effectively. There is also a strong initiative to improve the business environment. Positive developments can also be seen in the private sector with increasing job creation in some sectors, such as telecommunication and banking.

Since 2010 now, the government set up a national employment policy in order to tackle unemployment with contribution of all stakeholders. The policy includes five main objectives; the decrease of unemployment in urban areas, to protect the existing jobs and modernize the informal sector to enhance productivity; the creation of local job opportunities in rural areas in order to stop the migration toward urban areas; the reduction of skill deficiencies by promoting technical and professional training; increase of employability of the labor force and the quality of work; and the development of human resources to satisfy the economy's needs.

3.7 Foreign trade in Congo's Economy

3.7.1 Balance Trade

The Republic of Congo has a positive trade balance sheet (Table 3.4). The total volume of Congo's foreign trade represents about 90% of the country's GDP which is undeniably high comparing to high-growth countries in which it is mostly about 100% as put forth by Leechor (1994).

Table 3.4: Trade Balance of Congo 2002-2007 (Bank of central of Africa states, BEAC, 2008).

	2002	2003	2004	2005	2006	2007
Exports	1716	1642	1935	2575	3312	2946
Imports	982	992	1049	1360	2318	2748
GDP	2105	2061	2297	3522	3881	3743
Trade Balance	734	650	886	1215	994	198

3.7.2 Exports Structure

The structure of Congo's exports is characterized by a very low level of diversification and a strong dependence on the oil sector representing about 87.5% of exports in 2007 and 67.7% in 2010 (figure 3.8). The next most important exports are timber including lumber and plywood and sugar far behind the oil. According to British Petroleum (2014), most of the growth in Congo's export came from an increase in oil production; 98.6 million barrels and 88.3 million respectively in 2012 and 2013 and an increase in oil prices.

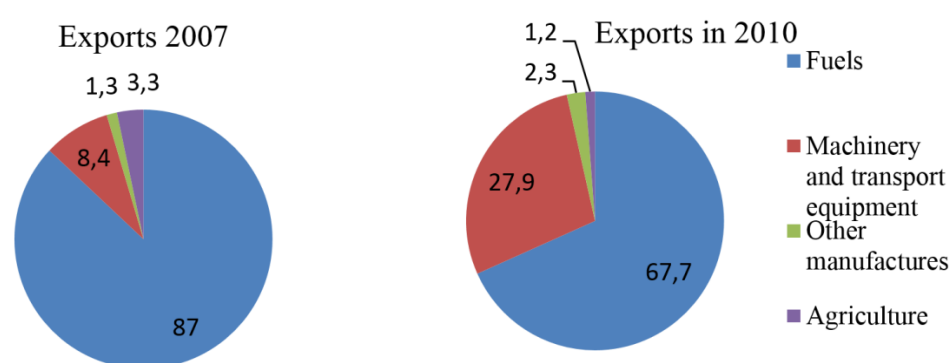


Figure 3.8: Structure of trade in goods, 2007 and 2010 (Secretariat calculations based on data from the UNSD Comtrade database , SITC Rev.3).

3.7.3 Congo's Exports Partners

The Republic of Congo exports the essential of its products to Asia (most of them to China), in 2007 and 2010; Congo's exports to Asia represented about 48% in 2007 and 20.9% in 2010 of the total exports (Table 3.5).

According to World Factbook (www.cia.gov, 2012), the United States of America represented a share of 13% of Congo's total exports in 2012 (Figure 3.9). The European Union countries, especially France, Spain and Netherlands with respectively 9.5%, 5.3% and 6.8% in 2012 are only the third region of Congo's exports behind Asia and America. Additionally, Congo exported its product to China, 39% which also represented the biggest share, to India with 5.2%; Australia represented 8.8% and the rest of the world.

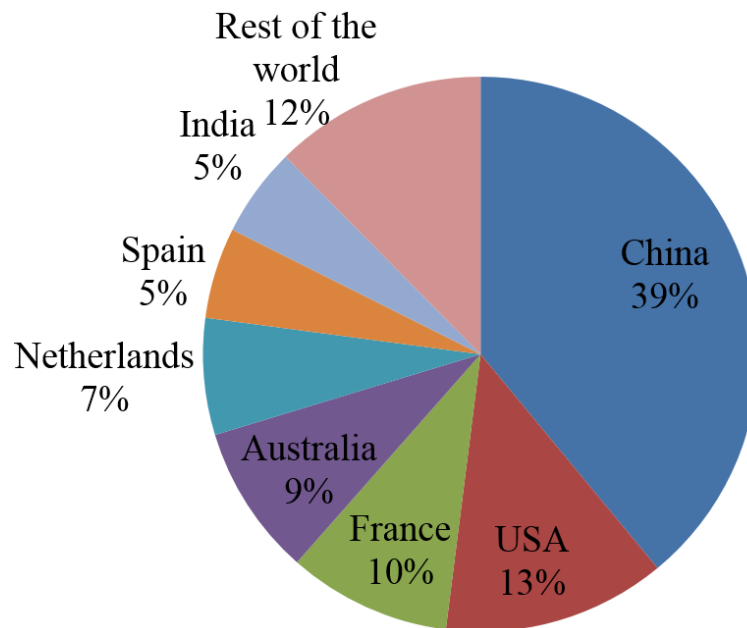


Figure 3.9: Share of Congo's export partners in Congo's exports in percentage (World Factbook).

The regional trade is less developed accounting for only 3% of Congo's exports toward Central Africa due to infrastructure problems. If Ghana, Cameroon and South Africa are the main African trade partners of Congo, the multiplication of declaration of favorable exchanges South-South lets imagine a strong diversification of trade partners.

3.7.4 Imports Structure

The structure of Congo's imports is mainly dominated by a large number of manufactured product (86,6%) including machinery, transport equipment, capital equipment, construction materials as well as medicines and foodstuffs products since Congo depends strongly upon outside for these sources (figure 3.10). This set of products represented two-third of goods imported in 2007 according to ECOPA (ECOPA, 2009: 14).

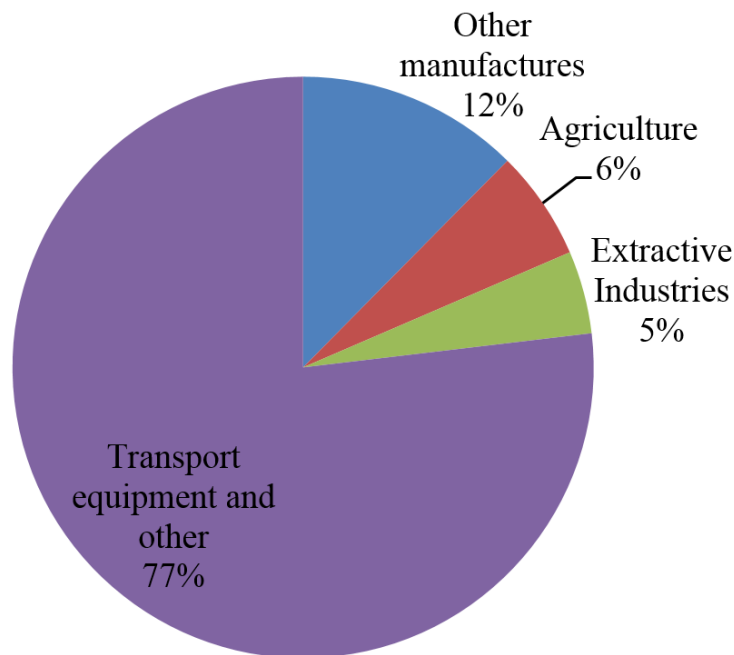


Figure 3.10: Structure of trade in goods in 2007 in % (WTO, secretariat calculations based on data from the UNSD Comtrade database, SITC Rev.3).

3.7.5 Congo's Import Partners

The European Union, represented by France, Italy and Belgium is still the first Congo's supplier it shows below (Figure 3.11). In 2012, according to data collected from the World Factbook, over a third of Congo's imports came from European Union, especially from France accounting for 19.5%, Italy for 4.8% and Belgium for 4.4%. During the same year, China's imports represented 13.5% of Congo's imports; Brazil's share in Congo's imports was 9.1%, the USA for 6.1% and India accounted for 5.8%.

However, in order to get the share of Africa and the rest of the world's products imported to Congo, due to data problem, we deducted it from the data that have been presented above. Therefore, the Africa and the rest of the world's import share to Congo are estimated at about 36.8%.

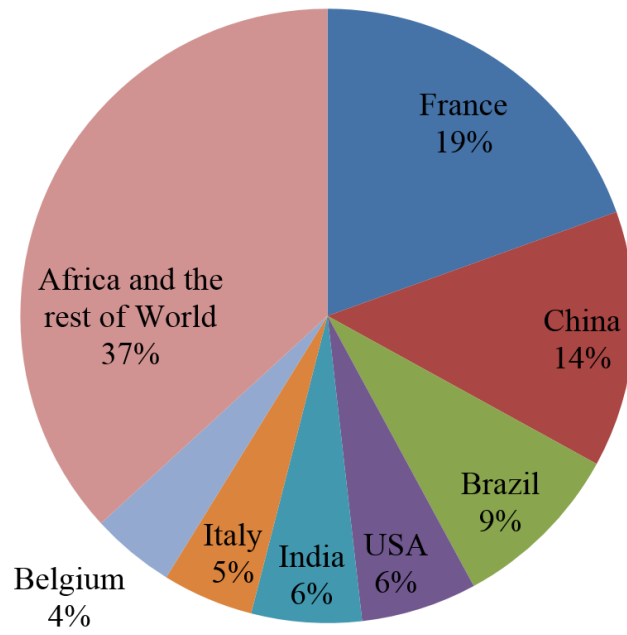


Figure 3.11: Origin of Congo's imports in 2007 (Data collected from the World Factbook).

CHAPTER FOUR

AN UNDERSTANDING OF CONGO'S ECONOMIC TRANSFORMATION THROUGH ATI

4.1 Methodology

This chapter details out the research methodology used to evaluate the economic transformation of the Republic of Congo. To do so, the researcher uses the African Transformation Index (ATI). In fact, the ATI is the combination of sub indexes constructed by the five indicators of economic transformation respectively, Diversification of economy, Export competitiveness, Productivity, Technology upgrading and Human well being (DEPTH indicators).

Objective

The main objective of this chapter is the understanding of the overall Congo's economic transformation. This involves an exhaustive and explorative study of the ATI upon Congo's economic transformation, and then the comparison of it with other Sub-Saharan African countries already calculated by ACET.

Data Sources

Sources of data came from ACET, publications and annual reports, books, brochures, journals, websites, national authorities and different development programs. Extensive research was conducted in the libraries for valuable data from various texts, individual works, journal articles, and newspapers.

Limitations

The chapter uniquely focuses on the transformation of the Congolese economy.

Construction of African Transformation Index

The table below shows the process explaining the establishment of the African Transformation Index:

Table 4.1: Construction of ATI (ACET).

Diversification of production and Exports (D)	Exports competitiveness (E)	Productivity (P)	Technology upgrading (T)	Human well-being (H)
Production diversification: share of manufacturing value added in GDP. (D1)	Country's share of world nonextractive exports of goods and services to GDP	Manufacturing: manufacturing value added per manufacturing worker (2005 US\$). (P1)	Production: share of medium and high-technology products in manufacturing value added. (T2)	The level of GDP per capita (2005 US\$ PPP). (H1)
Export commodity diversification: share of top five exports. (D2)		Agriculture: cereal yield (kilograms per hectare). (P2)	Exports: Share of medium and high-technology products in merchandise exports. (T2)	The ratio of formal sector employment to the labor force. (H2)
Share of manufacturing and service exports in total exports. (D3)				

Analysis of data

In order to better understand the Congo's economic transformation process, we set a dataset (Table 4.2) which allows us to build graphs so that we can make:

1. General Analysis and progress report of indicator for instance for each sub index,
2. Seek to know the Bottlenecks / hindrances/problems,
3. Compare with other African countries,
4. Future expectations and suggestions

Time periods

Normally, the time period that is taken into account is a time period based on a two three-year periods which are respectively 2000 (1999, 2000 and 2001) and 2010 (2009, 2010 and 2011) to show how countries are ranked according the ATI and DEPTH subindexes. However, due to difficult access to data of the Republic of

Congo as it is the case in our study, we only consider two periods of time, especially 2000 and 2010.

Dataset

In order to be able to assess the evolution of the economic transformation of the Republic of Congo between 2000 and 2010, we set a dataset (Table 4.2), necessary for this assessment.

Table 4.2: Congo's African transformation index.

	1999	2000	2001	2009	2010	2011
(D1) Manufacturing value added (% of GDP)	-	3	-	-	4	-
(D2) 100 minus Share of top 5 exports (%)	-	5.2	-	-	4	-
(D3) Manufactured and services exports(% of total exports of goods and services)	-	5.2	-	-	34.1	
(E) Nonextractive export-to-GDP share of country	-	26	-	-	25	
(P1) Manufacturing value added per manufacturing worker (in 2005 US\$)	-	213	-	-	-	-
(P2) Cereal yield (kilograms per hectare)	-	767	-	-	780	-
(T1) Medium- and high-technology Manufactures (% of total manufacturing output)	-	0	-	-	4	-
(T2) Medium- and high-technology commodity exports (% of total exports)	-	13	-	-	0	-
(H1) GDP per capita (PPP 2005 international \$)	-	1030	-	-	2920	-
(H2) Ratio of formal employment to labor force (%)	-	25	-	-	25	-

D1: World Development Indicators, D2: World Trade Organization: statistical data sets, D3: World trade organization and World Development Indicators, E: Author calculations, data collected from the world development indicators, P1: United Nations industrial development organization, P2: World development indicators, T1: calculations from UNIDO INDSTAT2, Revision 3, T2: World development indicators, H1 World development indicators and H2: average rate of employment

4.2 Economic Diversification of the Republic of Congo

The economic diversification has been considered for several years now as an important issue for both international and domestic trade. It is also an important topic in the discussions on the development policy. Numerous economic seminars have shown the opportunities and the benefit provided by diversification in terms of risk, especially for the Republic of Congo which depends heavily on commodity exports as main source of income and growth.

Also, the pertinence of economic diversification has been highlighted by several economists such as Kuznets (1971) who considers a country's economic growth as the capacity to produce diverse economic goods in the long term. According to Grossman & Helpman (Grossman & Helpman, 1992: 334), growing economies are those which increasingly produce quality, quantity and a wide range of goods and services (UNIDO, 2012: 4). A major characteristic of diversification is that diversified economies are less exposed to economic shocks than specialized economies. This argument is supported by Ramey & Ramey (1995) who argued that “diversified economies are less volatile in terms of outputs...”

Therefore, in order to do an in-depth analysis of Congo's economic diversification, we focus on the graphics below (Figure 4.1) which shows the evolution of Congo's economic diversification between 2000 and 2010.

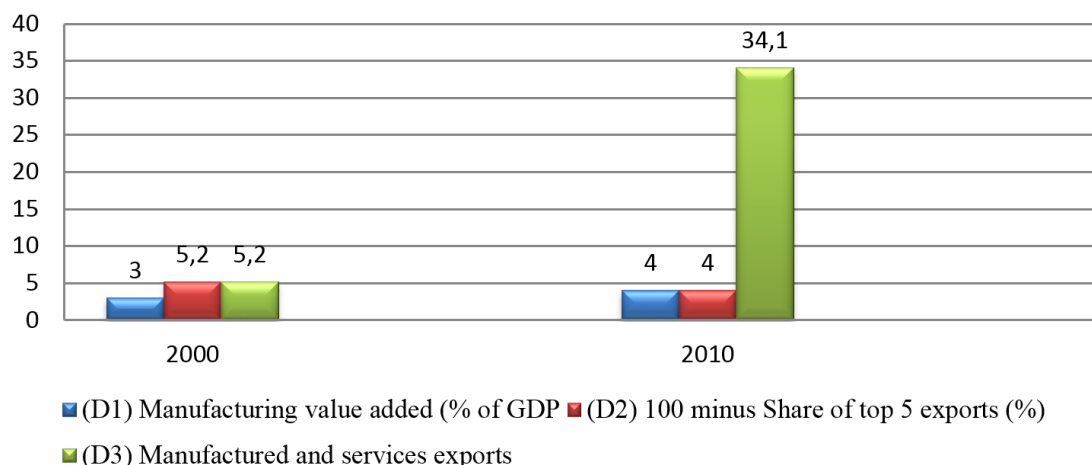


Figure 4.1: Evolution (%) of Congo's economic diversification between 2000 and 2010.

D1: World Development Indicators, D2: World Trade Organization: statistical data sets, (D3) World trade organization and World Development Indicators,

4.2.1 General Analysis and Progress Report

The analysis of these graphics shows us that, Congo's economic diversification did not show any significant improvement between 2000 and 2010. The situation even got worse with a decrease in the share of export commodity diversification from 5.2% in 2000 to 4% in 2010, and a slight increase in the share of manufacturing value added in GDP which rose from 3% to 4%. Though the share of manufacturing and service exports in total exports ranged from 5.2% to 34.1% respectively in 2000 and 2010, this did not have an important impact compared to other Sub Saharan countries for the same period of time. The contribution of the top 5 exports (Crude oil, sugar cane, refined petroleum product, wood and others) accounted for 94.8% and 95.9 respectively in 2000 and 2010.

4.2.2 Current Situation

The Congolese economy has a very low degree of diversification and is very exposed to the commodity price volatility which endangers the sustainability due to the traditional reliance on the oil sector. Extractive industries which mainly consist of oil and international raw materials, the biggest share of GDP; according to African Economic Outlook (AEO, 2014: 4), accounted for 67.6% in 2012 and 64.6% in 2013 in the GDP.

The dependence on the oil sector as the main source of state revenue is much more important than it seems. As noted by the World Bank (World Bank 2009: 19), these figures may underestimate the dominance of oil, to the extent that a significant share of economic activities conducted in non-oil sectors directly or indirectly depend on oil production under the form of services consumed by oil companies or public contracts financed by oil revenues. In contrast, this sector has very few multiplier effects on growth and job creation. That is why; the economy is sometimes based on a kind of unstable equilibrium, essentially determined by the prices of crude oil and the production level of this resource.

A part from extractive industries, principally composed of oil which is considered as main source of revenues, the share of other sectors in the GDP is still very low: construction (3.8%), Agriculture despite enormous potentialities that the country has, its contribution to GDP remains marginal and has been steadily

declining in recent decades: from 15% in the early seventies, this fell to 8% in the nineties and reached 4.5% in 2013, the manufacturing industry is essentially weak or mostly nonexistent (4.4%), whole sale and retail trade (6.9%), services and other (25%) and so on.

4.2.3 Main Problems

The non-diversification of the Congolese economy can be explained by several reasons among which two main facts can be retained: the colonial era and the government's lack of economic diversification vision to diversify the economy.

The colonial era

During the colonial era, the Republic of Congo was a territory that was used for the enrichment of French concessionaries companies whose main purpose was the exploitation of natural resources without regard to other economic sectors.

In fact, forged in the logic of colonial development to meet the objectives set for it, the Congolese economy was gradually transformed into a cash economy based on the production and export of raw natural resources. This logic of a non-truly national economy, but primarily for the benefits of colonial countries, continued and was strengthened with the entry of the Congo in the oil era. In some way, this was the beginning of a move away from traditional subsistence farming and cash crops, thus establishing the petro-dependency of the Congolese economy.

Studies on the vulnerability of the Congolese economy and its diversification prospects as well as the various structural adjustment programs implemented in the mid eighties by the World Bank and the International Monetary Fund have failed to change this economy to make it more efficient, and more solidly established in other economic pillars. It has to be said that despite the various plans and political will, the desired transformation of the Congolese economy has not translated into reality.

Government's responsibility

Indeed, despite unprecedented growth that the country has recorded in recent years, the government has failed to establish a diversification strategy to implement measures for the creation of new activities out of oil production, the reinforcement of agricultural activities in order to avoid a total dependence on oil. In this context, we can mention Vincent Bolloré, CEO of the Bolloré group, which states that: "Diversification is not a matter of company size or business: it is a decision that the

leader takes a day and to which he stands." Here, the leader is considered to be the government which is in charge of project execution.

In addition, many budget surplus from the rise of oil prices in recent years have failed to diversify the sources of the state income and therefore to fight against the trend of the volatility of oil prices to meet the expectations of the people by, creating employment, developing other economic sectors such as tourism, agriculture, manufacturing in rural areas and big cities, enhancing local resources and find new opportunities and contribute to the maintenance of the rural population. Weaknesses in economic governance in general, and especially in the structural changes required to expand and diversify the productive and social base of the economy, have helped to strengthen its petro-dependency.

Consequently, the Congolese economy remains highly dependent on oil whose contribution to GDP is more than 70%, more than 90% of Congo's exports and over 80 % of the state income. This oil dependence has several negative impacts on the overall performance of the Congolese economy during difficult times, such as decrease in oil commodity prices, or the disruptions in the production. It increases income inequality and weakens the ability of growth to print a significant reduction of poverty. Eustache Ouayoro (www.banquemonddiale.org/fr/news/feature/2013/01/18/congo-must-diversify-its-economy-and-think-about-the-post-oil-era), the World Bank's director for both Congo (Republic Democratic of Congo and the Republic of Congo), in an interview with Tosolola News supported this argument by saying that "the dominance of the oil industry makes the country particularly vulnerable to a fall in oil prices. Moreover, it is a capital-intensive industry that does not create many jobs, with oil offshore work that has very little connection to the local economy. Congo must diversify its economy if it wants to effectively fight against poverty because sectors such as agriculture (including agri-food sector) are job creators"

Lastly and also very important it is the low level of the private sector participation in Congo's economy and the lack of basic infrastructures. Congo must improve its business environment in order to be more attractive so that the private partnership can get interested, set up and produce more in manufacturing sectors such as wood processing, transportation and telecommunications.

4.2.5 Comparison with Cameroon

In order to compare Congo's economic diversification, we found it better to use the Cameroon's case. A country that is also a member of economic community of central African states (ECCAS) and which practically presents the same economic characteristics in terms of natural resources endowments like Congo: natural resources rich country, oil producer country, wood exporter country...

First let us have a look at the Cameroon's GDP composition (Table 4.3).

Table 4.3: Cameroon's GDP per sector (African Economic Outlook, 2014, country profile, Republic of Cameroon).

	2008	2013
Agriculture, hunting, forestry, fishing	23.3	22.5
Of which fishing	1.3	1.2
Mining	9.6	8.2
Of which Oil	9.5	8.1
Manufacturing	15.0	14.5
Electricity, gas and water	1.1	1.0
Construction	3.3	6.0
Wholesale and retail trade, hotels and restaurants	21.3	19.9
Of which hotels and restaurants	1.5	0
Transport, storage and communication	6.7	7.2
Finance, real estate, business services	10.5	11.0
Public administrations, education, health, social work...	8.0	8.5
Other services	1.2	1.2
Gross domestic product	100	100

The study of the Cameroonian economic structure highlights the relatively diversified structure of its production system, which makes it different from the neighboring Central African countries. This can be explained by two main facts, as mentioned by Wikipedia, firstly the presence of many foreign companies and secondly a big number of national companies. A completely improved economic structure compared to that of Congolese economy marked by a limited number of international and national companies.

The country's economic activity has a varied structure. They can be found there, agricultural and forestry sectors (rent and food crop), hydrocarbons, the beverage industry, candy, oil mills, soap, flour milling, cement, metallurgy, primary wood processing, etc.

Also, beyond the economic dynamism, we also note the relatively stable performance in recent years and this despite unstable output of oil sector.

Secret behind the Cameroonian's success

The relative issue of the price volatility which is often due to many fluctuations in the commodity market especially the one concerning the price of oil barrel as well as the related consequences, is one of the reasons why Cameroon engaged in a political that aims to reduce its dependence on the hydrocarbon sector in the context of a diversification strategy of its economy mainly dominated by oil, with the objective of making the country an emerging economy by 2035.

In the diversification strategy adopted by the Government, the contribution of extractives industries to GDP fell from 10.78% in 2005 to 5.49% in 2009 (UNECA, 2013: 25), add to that several investments in basic infrastructures (road, rails, training and education), agricultural policy marked by the liberalization of agricultural activity giving a greater role to the private sector and professional organizations.

The government has also committed itself in a rural development strategy aiming at the food self-sufficiency: increasing the productivity and growth of agricultural trade, increasing incomes of rural producers, improving their standards of living and job creation, sustainable management of natural capital.

The agriculture remains a key sector for the Cameroonian economy which, contrary to the neighboring countries reaches the food self-sufficiency. The agricultural sector employs approximately 70% of the labor force, represents a quarter of the added value and contributes to export incomes up to a third.

Add to this, an increasingly favorable business climate, ranked 125th in the world in 2013 (www.doingbusiness.org, 2013), better than any other ECCAS countries, as well as numerous institutional reforms undertaken by the government and a stable political situation enabling foreign direct investments.

The petroleum sector no longer accounts for only 5 percent of nominal GDP against 20 percent in the early 80s. This decline in oil contribution includes both a fall in production volume and deterioration of oil prices.

4.2.6 Future Expectations and Suggestions

Future expectations

The need to diversify the Congolese economy is known to all, and for many years. The responsible authorities as well as the other actors and stakeholders had to say it, and keep on repeating. However, it is obvious that the real diversification efforts are hardly evident and have not yet yielded tangible results.

In common speech on the need to diversify the sources of growth, diversification strategy is advocated sometimes as export diversification to take advantage of the opportunities provided by globalization, sometimes as expanding operating sectors of natural resources of the country, but as parallel lines mainly for export, or both.

The diversification that we are talking about here is the establishment of an integrated economic fabric, upon an integrated economic area, based on strong levers on both economic and social plan. A diversification strategy is therefore a complex undertaking. It is, in its merits, a development policy responding to a complex situation, the vulnerability of the Congolese economy. An economy that is often limited to oil dependency due to the contribution of this sector to the GDP, state incomes, and export incomes. But the right understanding of the vulnerability of the Congolese economy, in order to base a development strategy of diversification, goes beyond the oil-dependency, even though it would be the first factor.

Suggestions

As already outlined by the government's DSCERP 2012-2016 (DSCERP 2012-2016: 172) document aiming at growth strategy, employment and poverty reduction in Chapter 8 related to that question, the diversification strategy recommended in that document emphasizes on cluster approaches. Seven clusters have been identified. There are oil and hydrocarbons, mines, agriculture and agri-business, forest and wood industry, buildings and construction materials, tourism and hostelry, and lastly services.

Therefore as suggestions, this study focuses on:

Agricultural policy

The government should deal with issues related to agriculture, livestock, forestry, fisheries and sustainable management. The government should create incentives by establishing an agricultural policy by encouraging a public-private partnership in order to give a greater role to the private sector and professional organizations so that to increase the agriculture contribution to the GDP.

Business environment

The government should improve the business climate for the purpose of attracting foreign direct investments. This would encourage the installation of the private sector necessary to boost the production in the manufacturing sectors such as telecommunications, wood processing, transport, and others,

Investing more in research and development

The government should start to think about the post oil era because this resource is somehow called to finish. So investing in research could help face the situation.

Investing in basic infrastructures

The lack of basic infrastructures such as roads, schools and training center, electricity; remain the main problem in the diversification process of Congolese economy. Therefore investing in that will be of great importance.

4.3 Congo's Export Competitiveness

The importance of the export competitiveness in the international trade has considerably increased in the recent years. This growth has also led to a great interest of research, measured by the fact that reviews, journals, books and articles specialized in international trade have published several works about the topic. Export competitiveness plays a significant role in the competitiveness of a country in the foreign trade as source of foreign currency and economic growth.

However, an analysis of literature dealing with the concept of export competitiveness reveals that there is no specific or common definition of the term. Also, it seems that the competitiveness changes according to the analysis done (country, sector, and company) or the product analyzed (homogenous or

differentiated) and lastly the objective of the research or analysis. The following definitions are used to illustrate that viewpoint.

Export competitiveness is defined as “the ability of the country to produce and sell goods and services in foreign markets at prices and quality that ensure long term viability and sustainability” (Marilyn Whan-Kan, 2014: 2). The competitiveness of the economy broadly defined "as its ability to compete" (Petit Robert, 1991: 349).

Therefore, in our study, we will consider the Angel ASENSIO’s definition (1991), of a country’s economy competitiveness as “*its ability to sell its products outside, in a profitable way*”. Which means that, in our view, improve its terms of trade in order to achieve a maximum income effect so to save, invest and import a maximum of assets in return for a high-value export volume.

Though there are several methodologies, formulas or approaches to measure or evaluate the export competitiveness of a country, in this study, the export competitiveness is considered as the country’s non extractive share to GDP. When that share is greater, this means that the country can produce and export high share of nonextractive products in the world market and then, we can conclude that the country is competitive.

Therefore, before doing an in- depth analysis of Congo’s export competitiveness, let us first see (Figure 4.2) how is the non extractive industries in Congo’s economy.

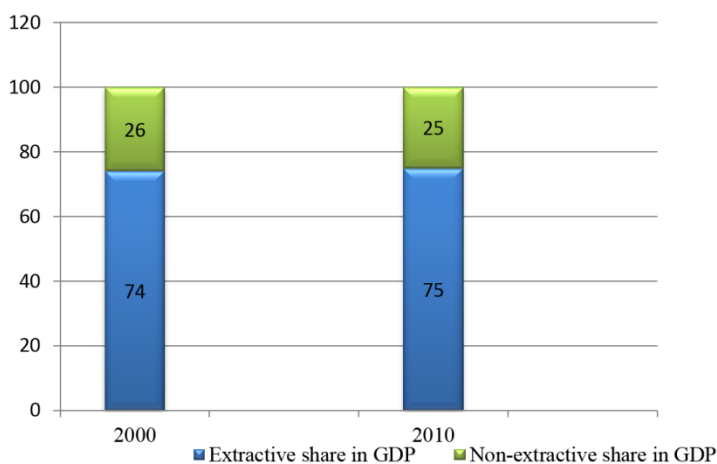


Figure 4.2: Evolution (%) of Congo’s non extractive share to GDP between 2000 and 2010 (Author calculations, data from world development indicators).

4.3.1 General Analysis and Progress Report

The analysis of Congo's export goods (Figure 2.4) shows a large gap between both extractive and non-extractive industries. Its structure remains largely dominated by the exports of extractive industries. The share of extractive industries even recorded a slight rise of 1% between 2000 and 2010 to the detriment of non extractive industries.

The dependence on extractive industries also reveals that the country's recent economic growth did not help diversify goods exported by country except the fact this reliance has even increased. The non-oil sector in the GDP particularly non-extractive industries have lost significant share as compared to GDP in oil exports (Table 1.4). In 2010, the non-oil exports combined with services only accounted for 24% of the GDP, approximately three times less than oil exports.

This highlights the non-evolution of Congo's exports content in favor of manufactured products or non-traditional goods, the non-oil export sector consisting respectively of sugar and wood.

4.3.2 Main Hindrances

The concentration of the Congolese exports in primary commodities particularly in oil and its derivatives has led to the country's low competitiveness, and above all the limited prospects for industrialization. Price volatility and unstable export earnings do not allow effective competitiveness.

Also, income elasticity of the main primary products is so low that an absolute specialization in these products necessarily generates the weakening of the relative share of world trade. So there is a low competitiveness of the Congolese economy which makes it vulnerable because of the price volatility of these materials. Alternatively, the structure of the comparative advantage of the Congolese economy is rather rigid and concentrated due to its concentration in primary commodities particularly oil and all these products.

Additionally, there has been no any extension of the diversification of the country's exports despite the growth experienced by the country in recent years. The recent performance of the Country has been heavily influenced by exports of petroleum products for which the world demand has been very strong in the 2000s.

According to data from the World Bank this sector accounted for 64.1% and 72.5% of the country's GDP share respectively in 2000 and 2010 (data.worldbank.org, 2010). Therefore, the export competitiveness is mostly nonexistent due to the country's dependence on the oil sector more than any other sector in exports.

Dependence on the oil sector is a serious problem for Congo's economy, first of all, this sector has a limited capacity to create employment and secondly this sector does not allow the improvement of the competitiveness. Congo's economy largely depends on oil which represents 70% of its GDP, 90% of foreign export and 80% of government income.

Other constraints, out of those enumerated above, have led to the weak performance of non-oil exports especially the lack of infrastructure, weak human capital, limited access and poor quality of technological services, weak financial sector, poor business environment and weak institutions enabling the FDI.

Finally, we note a limited number of export partners while as a developing country, Congo needs to diversify its products and the destination because the country exports a limited number especially for primary products, subject to reductions in the world demand.

4.3.3 Comparison with Senegal

Congo and Senegal have much in common economically. Both countries have a common currency, the Franc CFA. Each country is one of the main commercial partners for the other in the continent.

Both are also two countries whose recent economic performances have been similar: sustained growth and declining public debt. In the face of these results, it is interesting to undertake a comparison between the two countries in terms of export competitiveness and highlight the differences that exist between the two countries: In what areas did Congo not make any efforts and what challenges the country has to face? Why is Senegal performing better in world trade?

First, let us see how Senegal is ranked (Figure 4.3) in the African Transformation Index (ATI) in terms of export competitiveness among twenty other sub Saharan African countries.

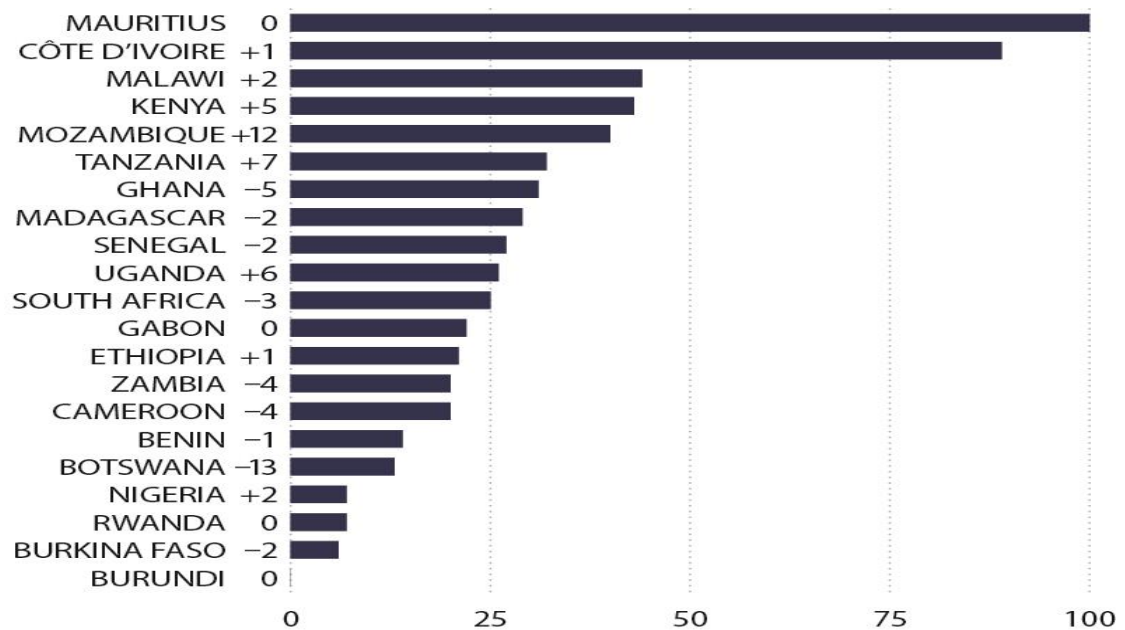


Figure 4.3: Rank of 20 African countries in terms of export competitiveness between 2000 and 2010 (ACET, 2014).

Senegal's rank overall (tenth) in the ranking shows us that the country managed well in recent years in terms of competitiveness.

Reasons for Senegalese success

In the context of the new strategies aiming to restore the growth process and sustainable development, Senegalese authorities have emphasized on:

1. The need for expansion and diversification of exports, considered as one of the most important drivers of economic recovery. In this perspective, restoring or enhancing competitiveness is a major requirement for a smooth integration of the Senegalese economy into international trade,
2. A commercial policy management of rent situation abandoned in favor of a policy which is globally in charge of the competitiveness in a globalized world,
3. The high degree of openness of Senegalese economy can be seen from the perspective of the development of the trade policy,
4. Reforms undertaken as part of the New Industrial Policy (NPI) to rationalize the tariff structure, reduce tariff rates, to remove most of quantitative restrictions and ultimately ensure greater openness of the Senegalese economy,

4.3.4 Future Expectations and Suggestions

Statistics on the recent performance of Congo's economic growth do not validate the hypothesis of improving its position in the competitiveness world because of the low contribution of the non-oil sector in GDP and the dominance of oil in exports.

Analyses done on the issues that explain the low diversification of the range of products exported by Congo, compared to that of Congo's economy as well as the quality of its governance, trade policy and international economic conditions suggest that an improvement is possible.

Therefore, in order to make its economy more competitive and gain an important position in the world economy, Congo must:

1. Rapidly implement economic policy reforms, and significantly improve the business climate,
2. Set up an industrial policy oriented towards the manufacturing industry

A well established industrial policy will enable, more than ever, the economy to reverse the deindustrialization dynamics that characterize the Congolese economy,

Establish an interventionist policy given the level of government

This question refers; to the government's ability to set clear and consistent objectives of economic and trade policy; to the information it has on technologies, markets, local capacities, the speed with which they can be developed, and institutions,

Develop an effective governance to improve export performance

In particular, it needs to be strengthened in order to draw a coherent industrial strategy to help markets function properly, to manage agency relationships with partners especially the private sector, preventing the risk of corruption, etc.

1. Adapting to changing export markets
2. The effects of labor productivity in export performance
3. A viable export-oriented strategy

4.4 Productivity of the Republic of Congo

Every economic system, enterprise, country, but also every single rational individual, seek to be the most efficient possible, that is to say produce the more

possible in view of production factors such as capital, labor, and land which they have. The thing is not only about seeking to have a high productivity level, but also seek to continuously increase it in order to dispose a gain in productivity, the gain in productivity that leads to a surplus which can be distributed to the employees in terms of rise in salary.

Productivity can be defined as a ratio between the output volume and the input volume. In other words, it measures how efficiently production inputs such as labor and capital, are being used within an economy to produce a given level of output. Therefore, being able to increase the productivity efficiently will have the beneficial effect of increasing incomes because productivity is one of the major sources of economic growth and a country's competitiveness as compared to the rest of the world.

Nevertheless, despite the relevance given to both agriculture and the manufacturing sector for a country's economy, the production of both sectors just as well the domestic market and the exports are still underdeveloped in Congo's economy (Figure 4.4). Hence, the importance of the role of agricultural sector to Congo's future hardly needs to be emphasized. With about 65% of its population living in the urban areas and some of them working in the agriculture sector, the Congolese authorities must invest in rural infrastructures such as roads, railroads, reliable communication systems and supply networks; and reinforce the research and development in the field of agriculture and manufacturing.

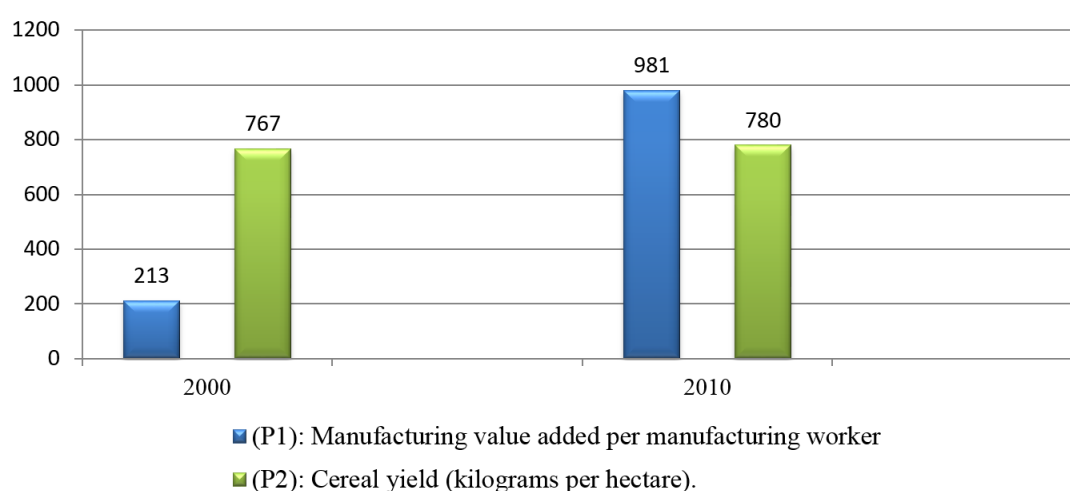


Figure 4.4: Evolution of Congo's Productivity between 2000 and 2010.

P1; United Nations industrial development organization and P2: World development indicators

4.4.1 General Analysis and Progress Report of Indicator

Manufacturing value added per worker was 213US\$ and 981US\$ (stat.unido.org, 2010) respectively in 2000 and 2010. The share of cereal yields ranged from 767 kilograms per hectares in 2000 to 780 kilograms per hectares in 2010 a very small increase.

The Republic of Congo remains a country with low food production. The commercial production of crops that would provide a range of products for the urban markets, local industries and exports is very low.

Manufacturing activity in country, rather modest, mainly comprises the agribusiness companies (Sugar Company, Bakeries and Pastries, Dairy, Mineral water, Tobacco, and Beverages).

4.4.2 Main Problems

The manufacturing sector is still very low and is mainly composed of enterprises dealing with the agri-food industry and serving the local market. Only the refined sugar is exported to the sub-region, under quota to European Union and the United States.

Likewise, the share of agricultural sector in the GDP is relatively weak. The main reason is the importance of oil activity in Congo's economy and the decline of rural sector due to the mass exodus of the population to urban areas and the disruption of the production system during the period of political instability. Consequently Congo's population is highly urbanized and therefore relatively far away from agricultural production centers. Agricultural activity only employs 4.37% of the population. Due to transportation problems within the country, imports constitute the main source of food supply for urban populations.

The ineffectiveness and high cost of production factors are among the main challenges faced by companies operating in the Republic of Congo. Although, the country has huge potentialities; water, electricity, transport (infrastructures) and bank loans are difficult to access, reducing the agricultural productivity.

Failure or ineffectiveness of official support service and guidance, limited involvement of nongovernmental organizations and private in the agricultural and rural development, isolation of production areas, making market access difficult ,

poor organization of marketing channels, poor level of transformation infrastructures, preservation or storage, lack of appropriate credit facilities, low level producer organizations and other stakeholders involved in agricultural development or rural, weak financial support, lack of fiscal support and customs, lack of financial mechanisms.

“Cultivation practices are traditional with low use of modern production equipments (inputs) including agricultural machinery, improved seeds, irrigation, fertilizers, and pesticides. Cassava is the main food crop, followed by plantain bananas, rice, corn, cocoa, coffee, forest products, fruits and vegetables”.

The lack of financial and technical capacity of farmers, the inadequacy of domestic production to consumers’ preferences, inefficient support and supervision services, inappropriateness of agricultural education programs to today’s requirements of rural development. All these factors constitute a significant obstacle to the country’s productivity.

4.4.3 Comparison with Mauritius

Making an economic comparison between two countries has never been an easy thing because each country differs from the other by its economic policies especially in terms of productivity as it is the case in our study. However, if we examine the Mauritius' economic productivity success in the world, nothing can prevent us from seeking to know the reasons behind this success.

In fact, following the publication of African Center for Economic Transformation's first report on “Growth with DEPTH”, a number of attentions were directed to the economic performance of Mauritius, as one of the most productive countries in Africa. Because if Mauritius (Figure 4.5) is more productive than Congo; several aspects can explain the reason why.

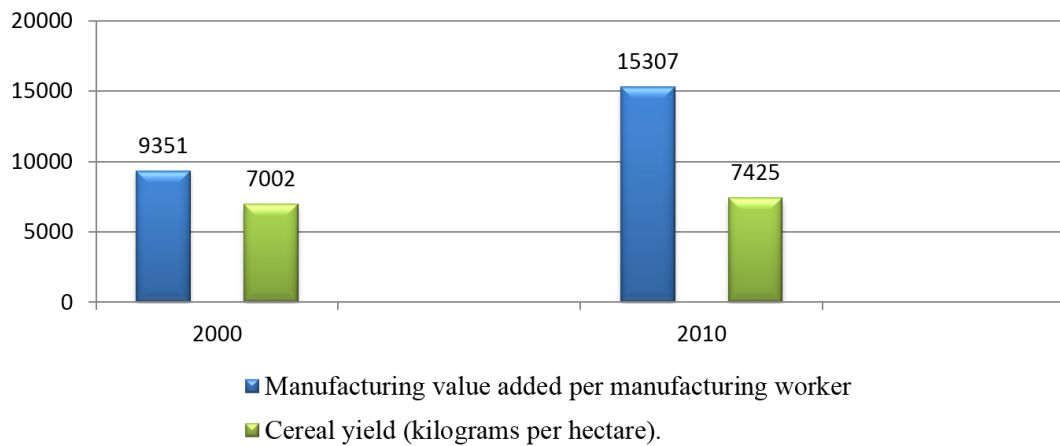


Figure 4.5: Evolution of Mauritius' Productivity between 2000 and 2010 (ACET, country profile "Mauritius" p.191, 2014).

Although, Congo has taken a number of measures to help strengthen the country's productivity, these measures slow to take form. As a result the Congolese trade balance in the agricultural sector is in deficit, each year the country spends millions of dollars in the import of agricultural products; more than 299 million US\$ in 2010 (countrystat.org, 2010), a number that the reduction is not progressive.

While the share of the agricultural sector of Mauritius has evolved significantly between 2000 and 2010, Congo's share was deteriorating. In fact, "manufacturing value added per worker ranged from 9351 US\$ to 15307 US\$ respectively in 2000 and 2010. During the same period of time, the cereal yields per hectare also rose from 7002 kilograms per hectare to 7425 Kilograms, which is far greater compared to the average in SSA estimated at 1500" (ATR, 2013:177).

Reasons for Mauritius' success

If Mauritius is often regarded as a small country, it remains a key example for its successful model for developing countries: small Indian Ocean Dragon, "*tiger of the Africa*" names are particularly flattering.

Several factors can be advanced to explain the success story of Mauritius, particularly:

a) Economic openness:

Creating a competitive dynamic on the world markets, discouraging the local rent seeking and the creation of local monopoly;

b) Favorable environment for investment:

To do so, the state succeeded to create favorable conditions especially; political and institutional stability, an advantageous tax system, treaties avoiding

double taxation with more than thirty countries, respect for confidentiality in integrated banking and financial laws and modern computer technology infrastructure, bilingual professionals;

c) Exploration of new growth sectors:

Information and Communications Technology (ICT), diversification of exports and production, outsourcing services;

d) An institutional environment that inspires confidence:

The state's commitment towards the free trade and the rule of law, as mentioned by Ibrahim Index of African Governance (IIAG, 2014: 34) ranking the country's governance ahead of all others African countries as well as the Doing Business Index, correlated with growth, it attracts many international sympathies and he opens access to world markets...

4.4.4 Future Expectations and Suggestions

Congo's perspectives and economic performances are still relatively encouraging and favorable. With sustained growth rates 3.8% and 3.4% respectively in 2012 and 2012 (AEO, 2014: 2), a small population (4.6 million), a high rate of urbanization (65% of the population), an impressive number of arable land (22 million hectares) for agricultural development; political stability significant factor for the development of manufacturing industries, also important mineral and oil resources.

Thus, in order to increase its agricultural and manufacturing productivity, many efforts should be promoted and this includes:

a) The agricultural sector should be among the drivers in Congo's growth:

The agricultural sector has significant advantages such as the extent of arable land and abundant rainfall, strong hydrography, and abundant labor force;

a) Opening up inside the country by building roads to make rural roads in good condition;

b) Making the institutional and economic environment favorable for the private sector;

c) Strengthen the private initiative and resources (especially financial) that the private sector possesses;

- d) Increase the farmers' productivity systems by reinforcing the transformation capacity in rural area:

Due to the lack of electrification and appropriate technology, the low level of financing in the agricultural sector, inadequacy of tax and customs policy leading to the increase of input costs (fertilizers, seeds,..) and agricultural equipments;

1. Establish a promotion policy of domestic production and its protection against competition from imports products;
2. Redefining the government's relation to its objective to withdraw from productive activity; improve the legal and regulatory environment; promote the integration of industry sectors; and support the actions of women in the modernization of the sector through training, extension and promotion of their groupings;
3. Exemption from all duties and taxes on agricultural inputs and equipment and different investments in the development of the rural sector ...

4.5 Congo's Technology Upgrading

Technology can be considered as the application of scientific knowledge for practical purposes, especially in industry. This argument contrasts with the technology definition of wikipedia that arguments about the fact that, "technology is a scientific study and use of mechanical arts and applied science and application of these two practical task in industries".

The definitions above show that technology plays a key role in the production process of goods and services in industries. Technology therefore fosters the reduction of cost in the production process and leads to the emergence of manufacturing sector, the creation of mechanical equipments and specific appliances enabling a better management of economic activities.

At the very heart of agricultural industry, several agricultural exploitations adopt tools of numerical technology to help them improve their productivity and their profitability. Also, several studies and seminars worldwide about the impact of technology on the economy have shown the roles that technology can have; by increasing the productivity and improving the competitiveness within the agricultural and manufacturing industries.

Thus, in order to better assess the impact of technology use in Congo's economy, let us first have a look on its evolution (Figure 4.6) between 2000 and 2010.

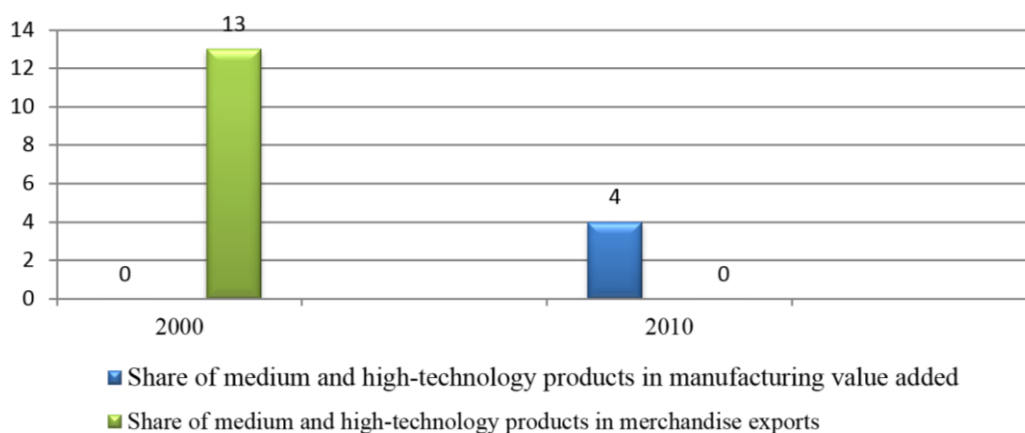


Figure 4.6: Evolution (%) of Congo's technology upgrading between 2000 and 2010.

4.5.1 General Analysis

We can say that Congo's technology upgrade is globally low, since its share has not known any significant evolution between 2000 and 2010 period, which means that production in the economy is still at very low levels.

A more refined analysis lets us notice that the share of Medium-and high-technology manufactures has known a slight improvement, rising from 0 to 4% between 2000 and 2010.

The share of medium and high-technology products in merchandise exports dropped significantly from 13% in 2000 to 0% in 2010. This highlights the fact that, Congo's exports structure is mainly based on the exports of raw materials as main source of the country's income and a negligence of agricultural and manufacturing sector. Therefore, the manufacturing sector in Congo's economy is still at a very low level of technology use.

4.5.2 Main Problems

Lots of factors explain the low levels of technology upgrade in both the manufacturing and agricultural industries in Congo's economic production. Some of these factors are specific to the type of industrial policy adopted whereas others are systemic and must be resolved regardless of the type of policy implemented.

On one side we have the low level of manufacturing sector, the predominance of archaic modes of technological organization with very low productivity in all sectors of Congolese economic activities and on the other hand, technology is still rudimentary in almost all economic sectors.

Technological backwardness reduced the competitiveness of the country: for most Congolese industries, inadequate technological capacity for innovation and the development of new industries is also a major challenge. Often the technologies used in the production process in Congo’s industries are not adequate add to this, the inability to implement and master the new and improved technology in the economic activity.

4.5.3 Comparison with Rwanda

Ranked thirteen (13th) at the technology upgrade level in the first report of ACET on “Growth with Depth”, Rwanda’s technology upgrade has remarkably progressed (Figure 4.7) over the 2000 and 2010 period. The share of medium and high technology in exports rose from 3% in 2000 to 11% in 2010 (ATR, 2013: 197).

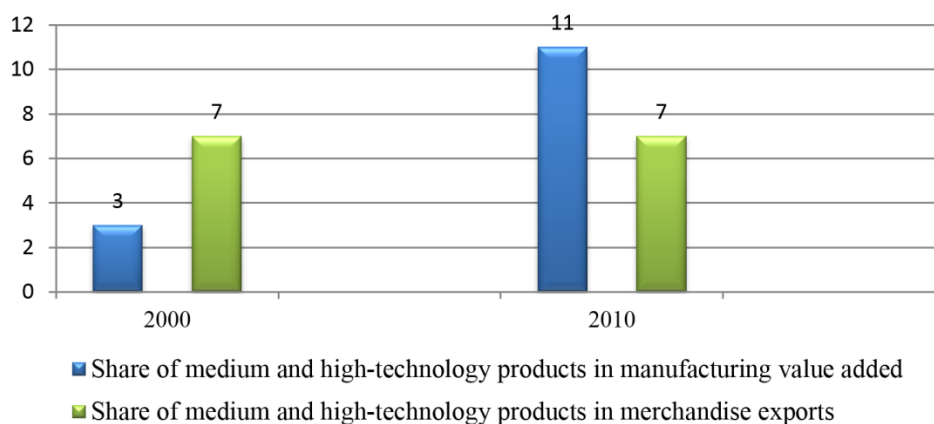


Figure 4.7: Evolution (%) of Rwanda’s Technology upgrading between 2000 and 2010 (ACET, African transformation report, country profile, 197, 2014).

Measures set by Rwanda’s government

The Rwandese government has given priority to the country's transformation into a knowledge-based economy, by accelerating the reinforcement of technical capacities, information and communications technology competency and investments to support the extension of network coverage. Also, the government has made it a priority to set up:

1. An economy based on the information and communications technology; in order to value the production surplus, increase and secure the producers incomes, promote income-generating activities and increase in overall production;
2. Modern farming techniques :
3. Farmers can receive the latest information on agricultural products they cultivate through new technologies, eliminating the middleman and allow them to increase productivity.
4. development policies for information technology and communication in order to stimulate the business creation and economic growth;
5. The government's ambition to make the country a regional hub:

To do this, the authorities have established five-year plans, the first (2000-2005) with the aim of creating a favorable environment for ICT initiatives. The second (2005-2010) allowed the construction of basic ICT infrastructures, leading to the installation of optical network. The third, ranging from 2011 to 2015 aims to introduce faster services using these new technologies;

1. Adoption of crop intensification program that aims to increase agricultural productivity in high-potential food crops and ensure food security and food self-sufficiency. These technological innovations have not only transformed the economic activities of the country but also the daily life, health, education,

These technological developments have led to changes in production techniques allowing small farmers to use modern agricultural equipment contributing to economic efficiency.

4.5.4 Future Expectations and Suggestions

In order to guarantee an economic activity that generates added value, job creation, sustainable growth, and to fill its technological gap, Congolese authorities should:

1. Invest heavily in new technologies through the creation of universities and training in the mastery of technologies both in agriculture and manufacturing,

2. Deploy remarkable efforts to implement measures that encourage innovation and accumulation of technology by enterprises and public services;
3. Put technology at the center of the country's economic emergence leading to economic transformation and industrialization, the keys to achieving added value in economic output;
4. Assess the capacity of the industrial base to invest in opportunity field generated by the key technologies. Technologies that generate productivity gains, and technologies of the future, paving the way for the development of new markets and the formulation of recommendations that could promote deployment;
5. Adopt measures based on the dynamic acquisition of knowledge about technological learning. Also by ensuring the introduction of new technological bases that would raise the level of competitiveness in the international market;
6. Facilitate the mobility of researchers towards the company:
 - a) Promote cooperation between public research and industry
 - b) Encourage operations to enhance research organizations and universities including the creation of incubators linked to public research,
 - c) Stimulate the creation of innovative companies, especially those from public research
 - d) Create favorable fiscal conditions for innovative companies;

The overall policy on technology and innovation should be modified in order to be consistent with the development of innovative models and new production techniques. Innovation is gradually becoming more open and global and relies more on networks and collaboration.

4.6 Human Dimension of Transformation of the Republic of Congo

We cannot speak of development without taking into account the population. Congo's development is, and will largely depend on its human development, which must expand both as human resource development and as people's standards of living improvement in terms of revenues, health, education, well-being in general.

Human well-being is the result of the development and it is closely related to the economic transformation. Being able to assess the impact of economic transformation on the human well-being, and show the significance of the economic transformation for the well-being of people, especially for a country where more than 32.8% of people live with less than 1.25\$ a day (World Development indicators, 2011), becomes a crucial challenge in order to fulfill the objectives set towards the Millennium Development Goals.

Although there are several definitions of human well-being, but in this study, we use the Mark Mc Gillivray & Matthew Clark's definition of human well-being. Mark Mc Gillivray & Matthew Clark (Mc Gillivray & Matthew Clark, 2006: 3) defined human well-being as "life quality, welfare, well-living, living standards, utility, life satisfaction, prosperity, needs fulfillment, development, empowerment, capability expansion, human development, poverty, human poverty, land and, more recently, happiness".

Therefore, human well-being is considered as the capacity and the possibility for individuals to live the kind of life they choose and prefer. This includes personal security, access to the necessary resources, for a pleasant life, a good health and good social relationships, the freedom to make choice and to act. Among other important elements in the analysis of human well-being feature poverty, sex inequality, quality of life, welfare, happiness and so on.

However, in order to understand the situation of human well-being in Congo, let us first have a look at its evolution (Figure 4.8) between 2000 and 2010

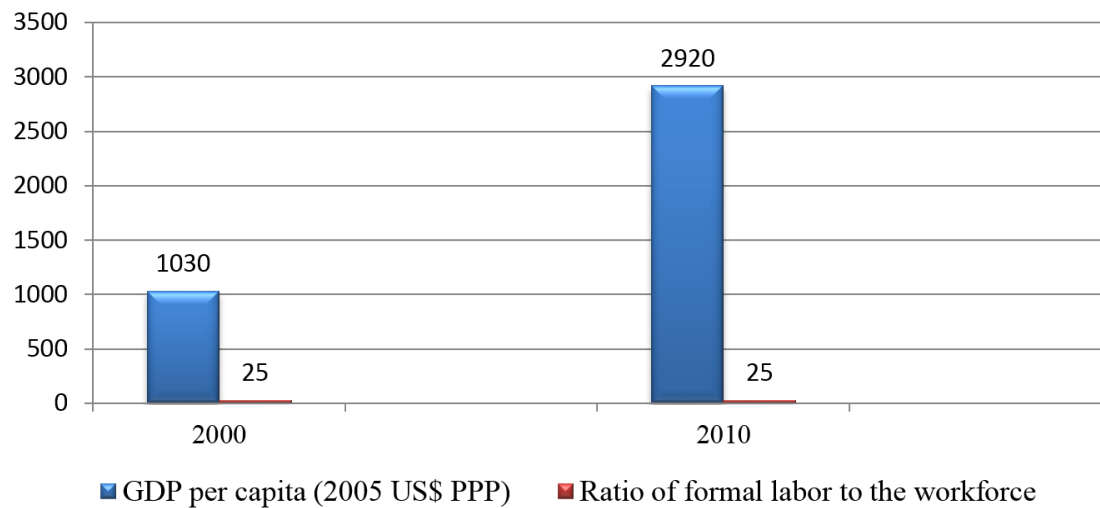


Figure 4.8: Evolution of Congo's human well-being between 2000 and 2010.

4.6.1 General Analysis

These graphics show the evolution of Congo's well-being in terms of gross domestic product per capita and the employment in the formal sector. By looking at these graphics we can easily see how significantly the country's GDP per capita has evolved between 2000 and 2010 making it a mid-income country.

Congo's GDP per Capita was 1030 in 2000 and rose up to 2950 US\$ a decade after, in 2010. There has been a substantial increase of more than 170% in GDP per Capita rise over the two periods.

However, the employment in formal sector is still very weak and did not know any progress or improvement remaining 25%.

4.6.2 Main Problems

Social welfare in Congo remains plagued by a number of factors that explain the delay of the human and economic development of the country including in particular:

a) High level of informal sector:

Most of employments in the country are found in the informal economy, which plays a key role within the economy, leading to lower paying jobs,

b) Income inequality and poverty:

Despite sustained economic growth in recent years, poverty and income inequality did not regress or decrease, accumulating large inequalities between

political class and the rest of the population. With more than 32.8% of the Congolese population living with less than \$ 1.25 a day therefore, both poverty and income inequality remain high in Congo;

c) Poor Governance:

High privilege on personal interests at the expense of the people, administrative incompetence, and abandon of infrastructure project expenditures, poor strategic development choices, investment insecurity and so on. All these factors call into question the way the country is governed, although it is generally rejected by officials;

d) Corruption:

The prevalence of corrupt practices causes serious problems in the country's development. It is a scourge that gnaws deeply Congolese social structure. It results from Transparency International, that Congo is one of the most corrupt countries across the world,

1) Justice and equal opportunity:

Corruption in the country undermines the objectivity, justice and equal opportunity, fairness and non-discrimination, principles that underlie human rights. Corruption undermines democracy and good governance,

2) Economic plan:

Corruption generates in the country some distortions in the public sector by moving away government investment in priority sectors to projects where bribes or kickbacks are more numerous,

a) Inadequacy of educative system

Over fifty four years after the country's independence, the education system is still not adapted to the realities of today's world and the evolution of modern societies. Higher education largely train unemployed graduates, unable to undertake or to integrate into the workforce as soon as they leave or finish their training,

b) Lack of vision

The government's lack of long term political vision hinders the country's economic and social development, the lack of ambition of the authorities more concerned about their own interests than those of people which it claims to defend the interests;

c) Lack of democracy

Although there have been some progress in the field of democracy in Congo, but these are not enough which obligates people to have their rights violated, lack of freedom of expression;

4.6.3 Comparison with South Africa

South Africa is a sub-Saharan African country. The country has a population of over 52 million people and covers an area of 1,221,037 km². The country is member of BRICS countries (Brazil, Russia, India, China and South Africa) and the G20.

Middle-income country, social well being in South Africa has experienced a significant transformation (Table 4.4) between 2000 and 2010. South Africa's GDP per capita, 9 510 USD, is one of the highest in Africa. South Africa is the second economy in Africa just behind Nigeria, its GDP 350.6 billion dollars, accounts for 30% of Sub-Saharan Africa and 70% in southern Africa.

South Africa is also the most developed country in Africa, its economy is mainly made up of several natural resources including gold, diamonds, platinum, ferrochrome, coal and a strong services and manufacturing sector.

Table 4.4: Evolution of South Africa's human well-being between 2000 and 2010 (ACET, African transformation report; "country profile").

Human well-being	2000	2010
H1: GDP per capita	7617	9510
H2: Ratio of formal employment	30%	30%

Key Factors of success

The South African government has implemented a number of policies to promote social well being, including:

a) Access to education for all:

Compared to other countries in the region, the adolescents out of school rate is relatively low in South Africa. In fact 104% of South Africa's population has access to school (data.worldbank.org, 2010);

b) South Africa offers a favorable business environment;

According to Doing Business report from the World Bank, South Africa ranks 37th out of 183 (www.doingbusiness.org, 2014) worldwide in 2014, this allows investment from the private sector, factor of youth employment;

c) Reforms

The country has developed a significant number of political, economic and social in order to achieve a stable social democracy since the end of apartheid in 1994, ensuring a balance between social objectives and good macroeconomic management;

d) The New Growth Path framework (2010)

The New Growth Path framework aims at addressing persistently high unemployment through the creation of decent jobs. The Reconstruction and Development Program (1994) focused on growth with government investment playing a major role (ATR, 2014: 201)

4.6.4 Future Expectations and Suggestions

Improving the human well-being necessitates numerous factors. Government must take efficient measures, especially: job creation (formal), access to health care, water and electricity, improve study conditions, justice and security of citizens, inequality reduction, good governance...

a) Job creation (formal)

Fight against unemployment and informal sector through the creation of jobs in the formal sector, promote the transition from informal economy to the formal economy to overcome poverty and develop formal economy;

b) Access to health care

With a high mortality rate, 10% in 2012, Government should promote equity on basic health care for all. Extend medical card; set up a reliable information system; organize a multiform of diagnostic and curative care; establishment of an initial and permanent training system and an efficient supply system, distribution of medicines and medical consumables. Preventive and curative medicine, ensuring health insurance for all;

c) Human resource development

Providing a good and worth education to everybody, signifying an effort to promote basic education, technical and vocational. Also increase the teaching staff's salaries, encourage recycling, improve training-job adequacy by focusing on short and medium term technical education, promoting the integration of young in professional life by providing credits for business creation;

d) Promote gender equality

Especially encourage women to tomorrow's challenges of the country, in a perspective of good governance and an approach that is both economical and ethical development of the country's wealth. Since the rate of women in senior positions is very low;

e) Justice and Security of citizens

Ensure freedom of expression, assembly and the press protecting journalists, opinion leaders, and sanctioning bodies that would prevent the popular expression, promote, protect and support the emergence of civil society by offering training to strengthen patriotism, patriotic consciousness, transparency, a justice system for all, so that it becomes a source of proposals;

f) Good Governance measures

Good governance is, in short, the best way to prevent corruption, it is in this that the authority and its institutions are required to report, to be effective and efficient, participative, transparent, responsive and fair. The government must ensure the existence of a detailed and credible budget, in relation to priorities and sectoral policies for a coherent and effective resource management. It is essential in promoting good governance, to fight against the abuse of power.

4.7 Summary of Main Problems and Suggestions

This section highlights the major problems, suggestions and a summary of analyses done in the previous chapters. The first part discusses the problems hindering Congo's economic transformation, the second part presents a series of suggestions relative to the second research question and the third ends up with suggestions.

4.7.1 Problems Which Hinder Congo's Economic Transformation

In terms of economic and social transformation, there are numerous challenges that the Republic of Congo faces today. We can mention, among others, the country's complete dependence on oil sector, a non-oil industry (manufacturing, service and agriculture) weak or nonexistent, transportation infrastructure (roads, rails, bridges), educational (most of the labor force are not qualified) and health (access to health care), business environment, corruption. Add to that, poor governance, a private sector less developed, an economic structure relatively undiversified turned much more towards the primary sector, the high rate of unemployment (especially of youth). All these factors hinder the country's economic transformation.

- a) Country's strong dependence on oil to the detriment of manufacturing and agricultural sector

The Congolese economy remains highly dependent on the oil sector of which it collects nearly 78% of its tax revenues and 85% of its exports, about 65% of its GDP. The economy is also characterized by the low participation of manufactured and agricultural sectors which each accounted for just 4.5% and 4.4% respectively in the country's GDP in 2013. Despite the many arable land (10 million hectares), the country still depends on imports for its food and agricultural needs;

- b) Economic diversification problem

The country's high reliance on primary commodities with a limited diversification of its productive structures is a serious bottleneck for its economic transformation.

The country's wealth that can be used to diversify its economy, remains until now poorly exploited. The country does not develop any other sector, for any drop in oil prices; the country will enter into a turbulent zone because this situation makes the Congo's economy highly vulnerable to external shocks due to price volatility in the commodity markets;

- c) Business environment

The business environment in Congo continues to be a major obstacle to the development of the private sector which is one of the main levers of economic diversification and employment generator. Indeed, the business environment in Congo is one of the least favorable in the world. In the 2013 Doing Business report

from the World Bank, Congo was ranked 179 out of 189 countries. It takes 178 days to start a business, 102 days for dealing with the construction permits (www.doingbusiness.org, 2015). This is one of the reasons why banks are less willing to granting loans. Hence the need for implementation of reforms;

d) Unemployment

We cannot say that it is the disaster, but unemployment remains a scourge that undermines the country, especially for young people. Of course GDP per capita has experienced rapid growth in recent years, but this does not yet benefit for all. According to the Centre National de la Statistique et des Etudes Economiques, unemployment remains high, especially among youths (15 to 29), for whom it reaches 25% of the labor force. This can be explained on one hand by the dependence of the country on the oil sector, a sector which is limited in job creation and on the other by a weak private sector;

e) les infrastructures

Education and Manpower

In sub-Saharan Africa, education is often seen as the main instrument in the fight against poverty, because it can help individuals to have access to better jobs and, therefore, increase their labor income. Nevertheless in practice, if education's importance is strongly reaffirmed as an intrinsic component of development and well-being of people in this region (via in particular the Millennium Development Goals and Education Initiative for all), its economic efficiency is the more disputed (Mathias Kuépié & Christophe J. Nordman, 2013: 75).

National education in Congo unlike other Central African countries is not at the level. The state of education in Congo is no longer a secret. To take only the development of human capital of the Republic of Congo, this is seriously lagging behind the increase in population and the requirements of an economy increasingly modern. For a long time, the education system has deteriorated. Today fundamental education and basic health services have become poorer quantitatively and qualitatively. This situation is leading to a shortage of a skilled labor,

Electricity

Electricity is today in Congo a luxury for people in both urban and rural areas. With a rate of access to electricity of only 37.1%, electricity remains one of the main barriers for companies operating in Congo (Enterprise surveys, 2009: 6);

A poor transportation infrastructure

The poor conditions of transportation roads have a serious negative impact on the country's economy because it increases the costs of internal transportation. The lack of strong infrastructures also reduces the competitiveness of enterprises and regional integration.

This also does not enable connection between markets within the countries and neighbor countries,

f) The corruption

Corruption is almost invariably linked to doing business in the country. Indeed, Congo still holds a position that is not rejoicing according to the Corruption perception index (CPI) in the world established by Transparency International (TI). Thus in the 2013 annual report of Transparency International, Congo was ranked 154th out of 177 countries with a score of 22 points out of 100 (Transparency International, 2013: 5).

In Africa in general and specifically in Central Africa, Congo is and remains among the most corrupt countries in the world. In fact, even as the years pass, the reality remains the same in the field of corruption. The publication of the 2013 Transparency International survey shows that while in some African countries, the mechanisms of fight against corruption continues to produce tangible results on the ground, in Congo corruption remains an integral part of collective mentality.

g) Poor governance

When we speak of governance, we talk about many things. We talk mostly of a concept implemented by the Bretton Wood institutions, namely the World Bank and the International Monetary Fund. Given the difficulties or many failures that different investment and development programs the country has experienced as well as a growth whose benefits have been poorly shared, the issue of governance (public management) is required.

Although governance is the art of managing the society and business in a coherent way, governance in Congo is still poor. In fact, according to Ibrahim Index

of Governance in Africa (IIAG, 2013:1), the Republic of Congo is ranked 43rd out of 52 African countries with a score of 43 out of 100.

4.7.2 Suggestions

In order to reach a sustainable economic transformation and based on the analyses done in this study, the following suggestions are proposed:

a) Policy based on industrialization

In order to catch up and, more importantly, to achieve its own development goals, Africa in general and Congo in particular need to promote industrialization plan that will foster innovation, technological adoption, enterprise spirit, high added value and a manufacturing sector generator of employment. By doing so, Africa could increase the small share of industrial sector in GDP. Industrialization should also involve a green economy as part of Africa's development strategy;

b) Investing in Research & Development

Investing more in research and development is now crucial to African countries in order to stimulate and enhance the production. If African countries want to sustain growth and economic transformation, they must increase the budget share allocated to research and development which only represented 0.4% of GDP in 2007 (UNESCO, 2012: 2);

c) Social policy reviewed

For inclusive social transformation and sustainable development, African countries must set new social policies. Also, these policies must aim at reducing poverty and income inequality and provide access to basic education, health, and better living conditions. Therefore, social these measures must comply with the goals set in the MDGs;

d) Improvement of institutional environment and rules

Businesses, like society in general, must operate according to the principles of law. Without a proper legal framework to settle disputes, facilitate operations and to protect property rights, it cannot be a prosperous private sector. The legal framework, judicial, administrative and regulatory both Congolese and African must make adjustments required to adapt to the changing international environment if it

wants to attract investors and promote economic and social development. For this purpose, there is a need to:

1. Update different texts that regulate economic activities (company law, investment code, labor code...),
 2. Provide greater protection of private ownership or remove monopolies in relation to the liberal option of the economy,
 3. Fight against impunity by properly stating the law through justice or encourage the effective functioning of special courts (commercial courts, labor courts ...),
 4. Pursue the public administration reform process and implement the charter of good administrative behavior,
 5. Create a single access point in the form of administrative formalities center in other words a single desk or window,
- e) Support agriculture, livestock and fishery

In order to cover people's food needs whose deficit at the level of several products (maize, cassava, rice, sugar, beans, fish, meat ...) is increasingly getting important; to allow the supply of raw material industries and support as well, with regard to comparative advantage. This approach has the advantage to promote concurrently and in a value chain, the development of large and small and medium sized enterprises. This would lead to an integration of the economy at national and international level. The relaunch of the agricultural sector involves:

1. The adoption of an incentive plan (Agricultural Code) granting customs facilities, fiscal and parafiscal to people operating in the agricultural sector, fisheries and livestock,
 2. Authorities should take part in the supervision of farmers, breeders and fishermen by setting up improved seeds, agricultural machinery and fishing as well as pesticides and veterinary to increase yields and production and fight against certain epidemics,
 3. The rehabilitation of Agricultural Research Centers for the improvement of the quality of seeds and the fight against diseases of some crops,
 4. improving rural roads to facilitate the evacuation of products,
- f) The development of infrastructure

Physical infrastructure including roads, railways, ports, bridges and so on should be constructed in order to facilitate trade or exchanges between rural and urban areas, so that to allow:

1. Farmers to have access to inputs and other necessary services which contribute to the increase of agricultural production and the acquisition of manufactured products,
 2. Private companies that operate in that sector to enhance the performance of their investments especially by reducing the costs of economic activity;
- g) Availability of electrical power

The supply of electrical power supplied by countries (especially in the Republic of Congo) must be qualitatively and quantitatively increased to deal with the needs of households and businesses. Countries need to increase their capacity to supply electricity through the rehabilitation and construction of new turbines;

- h) Support and make medium-sized enterprises more competitive

Without a business fabric competitive and able to successfully export, Africa in general and Congo particularly cannot cope. Hence, the need for countries to support and train SMEs' managers and facilitating funding for their projects. Take measures to increase the number of SMEs and come out from the informal sector, which is often considered as the largest employer of African countries, where 9 out of 10 workers work in the informal sector (ILO, 2009). Initiate reforms to make their lives easier while improving the business environment by creating a single desk or window for starting a business, investment code, creating a commercial court...

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

This chapter concludes the relevance of the overall analyses done throughout this research work. It highlights reflections on the role of economic transformation, as well as its key drivers. The chapter ends up with recommendations and suggestions for further studies.

5.1 Conclusion

This study has shown us that economic transformation is a vast field to explore. The problem of economic transformation of African countries in general and that of the Republic of Congo in particular is even more important. Economic transformation does not occur overnight, it requires a structural transformation of the economy. Even though the economic transformation promotes the development, it is certain that without governments' willingness to change this cannot be possible.

Our study allowed us to understand the reasons which delay economic transformation of African countries in general and the Republic of Congo particularly, through a number of factors. We were able to understand the African economies, understand the key drivers of their growth, and also how African economies are structured.

One of the major issues of this study was to know how African countries can achieve a sustainable development and become competitive in the world market. Is African economies' high level of reliance on natural resources as drivers of economic growth a good thing? What should be the main factor so that economic development can be a factor of human well-being, poverty and inequality eradication?

As we lengthily mentioned it in our study, economic transformation is the result of several reforms especially; institutional, political, economic and social. Asian and Latin American countries which today present exceptional economic and social performance especially in terms of job creation, economic diversification, poverty and inequality reduction, have had to adopt reforms which allowed their economies to structurally transform by making their business environment propitious to foreign investment and the development of the private sector.

Throughout the analytical part of this study, we have provided answers to the questions that we had raised. There are different elements that promote economic transformation and sustainable development. We got to see the context of infrastructure, business climate and the governance which is very important for economic transformation of countries, in order to promote their long-term development.

The danger for African countries in particular the Republic of Congo, is firstly the weak transformation of the agricultural sector, secondly the weak participation of manufacturing sector which is listed as one of the main problems that hinder economic transformation (of Congo) and thirdly the lack of basic infrastructures. Added to this are the lack of concrete action against corruption, a sound business environment encouraging the private sector leading to the development of the manufacturing sector, diversification of economies which highly dependent on natural resources so that to improve the competitiveness of African economies.

Beyond the responses to the research questions, this study has brought a lot to me. Reading magazines, articles, newspapers, books as well as the efforts made, have been highly enriching, in terms of social work, because I was able to see what were the needs of African countries, especially Congo's needs, both economically and politically since researches were really interesting although sometimes difficult. This study allowed me, in a certain way, to make a step in the understanding of the economy of my country, the Republic of Congo.

To answer to the question of economic transformation, this manifests itself in a concrete way by the acceleration of growth (economic, demographic...) which marks the transition from a traditional economy dominated by agriculture to a new kind of economy dominated by industry. We can say that the more industrialized the economy is more it gets transformed. This is explained by the improvement of

standards of living, poverty and inequality reduction and the development of basic infrastructure to mention just a few...

It should be noted that economic growth recorded in recent years in African countries, although sustained and strong, has not succeeded in transforming the economies of these countries, if not that this has increased inequality, poverty, unemployment rates. Most of these countries particularly the Republic of Congo are unfortunately still facing this situation despite the high growth rates.

We can imagine what could happen if these countries do not undertake reforms to encourage private initiative through the establishment of a government guarantee in order to encourage SMEs, economic liberalization, upgrade and strengthen the government's innovation support policy, develop a strategy in order to attract the diaspora as well as major investment projects. Pursue and initiate economic diversification plan and structural reforms for better public services: transportation, housing, energy, health, education and so on.

5.2 Recommendations

Economists have been studying economic transformations for decades, and a lot is known about the necessary conditions for creating economic growth. GDP growth is of course not enough. It must be accompanied by employment generation and rising economic wellbeing for all members of society. Growth that generates employment and opportunities as opposed to GDP growth resulting from an increase in global commodities prices, rather a growth which relies on constant innovation and technical progress, which in turn depend on continuous economic transformation.

It is in this context that, according to the various analyzes and studies achieved in this study, this research work finds it better to suggest the following recommendations for the development of the Republic of Congo:

1. Given the importance of the relation between economic transformation and economic development, it is important to Republic of Congo to formulate and institute concrete development measures fostering economic transformation;
2. It is important to have strong institutions and completely independent of power, in other words, these institutions must provide good governance,

fight against corruption, lead to a fair and equitable business environment, ensuring property rights, the smooth functioning of market mechanisms, trade security, full respect of rights, the state authority, the integrity of administrations, popular representation mechanisms, protecting inventors. For indeed, as stated by Simon Kuznets (1968), “*underdevelopment is a failure resulting from the resistance of social institutions*”;

3. First, the majority of African countries especially the Republic of Congo are still very isolated and centralized. Thus, it is important therefore to establish policies to open up and decentralization in order to avoid the concentration of people in urban areas, which will promote the development of the hinterland;
4. Most African countries including Congo produce more for exporting and not for domestic consumption of the population. Therefore, the country (Congo) should think about a two level diversification; diversifying export to make the country competitive and efficient. The objective here to find policies which aim at strengthening the agricultural sector, improving the informal sector in order to avoid food dependency towards the external sector (Bardin Bahouayila, 2014: 18);
5. Support the manufacturing industry because sectors with low employment capacity such as mining or oil sector limit the potential of job creation. Also, reinforce the formal sector because the weakness of informal sector does not facilitate the transition from unemployment to employment and lastly the people's lack of adequate qualification of that undermines their employability,

Suggestions for Further Studies

Since this study was only focused on economic transformation, future research on the topic could emphasize on the reforms which are needed by the Republic of Congo in order to achieve an inclusive economic development. What types of reforms must the Republic of Congo focus on and what actions should be taken in order to ensure an efficient functioning of these reforms?

REFERENCES

- African Development Bank/Organization for Economic Cooperation and Development,
- African Economic Outlook – Congo Republic”, Country Profile Report. 2006
- African Economic Outlook – Congo Republic,” Country Profile Report. 2012.
- African Economic Outlook – Congo Republic.” Country Profile Report. 2014.
- African Center for Economic Transformation, African Transformation, Report 2013
- African Development Bank, “evaluation of progress accomplished in Africa in achieving the millennium objective goals”, Goal 1: Eradicate extreme poverty and Hunger; Section two, Page.2, 2013,
- African Development Bank, Annual Development Effectiveness Review: Towards sustainable growth for Africa, African Development Bank Group, 2013 p.35, 2013,
- African Development Bank “At the center of Africa’s transformation”, strategy for 2013-2022; African Development Bank Group, p. 52013
- African Development Bank: <http://www.afdb.org/en/news-and-events/article/africa-is-now-the-fastest-growing-continent-in-the-world-12107/>
- African Economic Outlook, special theme, “Global Value Chains and Africa’s industrialization”, African Development Bank Group, 2014,
- African Economic Outlook, Congo’s profile, p.2, 2014
- African Transformation report, country profiles “south Africa”,2014,P.201

- African transformation report “countries transformation profiles”, annexe2, p.177
- African transformation report “Rwanda- countries transformation profiles”, annexe2 p.197
- African transformation report “Rwanda, countries transformation profiles”, annexe2, P.197
- ACET, African transformation report: countries transformation profiles «Mauritius», 2014, P.191
- Alternative strategies for economic development: Can we settle a debate by looking at the empirical evidence? 2012
- Ames. B, Brown W, Devarajan S and A. Izquierdo, “Macroeconomic Policy and Poverty Reduction”. PRSP Sourcebook Chapter 6, IMF, April 2001,
- Andrew Mwaba, 2000; Trade Liberalization and Growth: Policy Options for African Countries in a Global Economy, Economic Research papers, No.60,
- Anne Krueger; “Why Trade Liberalization is good for growth?”, the Economic Journal, Vol.108, 1998,
- Annual Development Effectiveness Review: towards a sustainable growth for Africa, Report 2013
- Augustin K. Fosu (2010), “Growth, inequality, and poverty reduction in developing countries”, United Nation University, recent global evidence, World Institute for Development economics
- Bardin Bahouayila, « Pourquoi et comment diversifier l'économie congolaise ? », aide pour le développement économique et social, P.18, 2014
- Bertelsmann Stiftung's Transformation Index, country report: Republic of Congo, Report 2014
- Bertelsmann Stiftung's Transformation Index: Political Management in International Comparison, Report 2006
- Bardin Bahouayila, « Pourquoi et comment diversifier l'économie congolaise ? », aide pour le développement économique et social, P.18, 2014

- Bhattacharya, R. and D. Ghura. 2006. "Oil and Growth in the Republic of Congo." *IMF Working Paper* 06/185. Washington, DC.
- Brian Ames, Ward Brown, Shanta Devarajan, and Alejandro Izquierdo: *Macroeconomic Policy and Poverty Reduction*, PRSP Sourcebook Chap.6, 2001, P.4-5
- Briceño-Garmendia, C. and V. Foster. 2009. "Republic of Congo: Prioritizing Infrastructure Investments—A Spatial Approach". Unpublished paper, World Bank, Washington DC.
- British Petroleum ; *Statiscal Review of the world energy, country profile*; "Republic of Congo", 63rd edition, 2014, p.6
- C. Peter Timmer, *The Structural Transformation and the Changing Role of agriculture*, 2008
- C. Breisinger and X. Diao, *Economic transformation in theory and practice: what are the messages for Africa?* IFPRI Discussion Paper 00797, 2008
- Chenery.H.B & L.Taylor 1968, *Development patterns among countries and over time*. *Review of Economics and Statistics* 50:391-416.
- CNSEE, "Annuaire Statistique du Congo 2007." Brazzaville August 2009
- "Le Recensement Général de la Population en quelques chiffres." Brazzaville July 2010
- Clemens Breisinger and Xinshen Diao, *Economic Transformation in Theory and Practice: What are the Messages for Africa*, Development strategy and good governance, International Food Policy Research Institute, *IFRI Discussion paper 007*; Page 3, 2008,
- Congo International Mining Conference: "Republic of Congo mining fact life", available at <http://ciemcongo.com/info-links/republic-of-congo-mining-fact-file/>
- Country Reports on Human Rights Practices, "Republic of Congo"; Amnesty International, also available at: <https://www.amnesty.org/en/countries/africa/congo/report-congo-republic-of/>

- David Casagrande, United Nations Environment Program; Human well-being and livelihoods in Africa, the Encyclopedia of Earth, David Casagrande, Food, Health and Sustainable development, 2007 <http://www.eoearth.org/view/article/153599/>
- David Wilfird MBA-NZOO “Formation, Insertion et Emploi des Jeunes en Afrique, Conférence des Ministres 2014 du PQIP/DCTP “ : Cas du Congo Brazzaville, 2014
- Dhonte, P. & Kapur, I. Towards a Market Economy: Structure of Government. IMF, Working Paper. 11, 1997
- Dirk Willem Te Velde, Shaping Policy for development: economic transformation: where are we heading, post 2015?, 2013
- Dr. Jean de la Croix Nkurayija, “The requirements for the African continent’s development: Linking Peace, Governance, Economic Growth and Global Interdependence”, 2011,
- Dudley Seers, 1969, “The meaning of Development” Communication series, n°44, Institute of Development studies
- Easterly B.W.& R.Levine. 2003. Tropics, germs, and crops: how endowments influence economic development. Journal of Monetary Economics 50(1):3-39.
- Economic and Social Commission for Asia and the Pacific: Structural transformation, industrialization and poverty reduction: The case of India, Report 2012
- Economic Commission for Africa: Sustainable Development Report on Africa, Managing Land-Based Resources for Sustainable Development, Report 2013
- Economic Commission for Africa; Making the most Africa’s commodities, “Industrialization for Growth, Jobs and economic transformation”, Economic Report on Africa, 2013
- Economic Commission for Africa; Trade liberalization and Development: Lessons for Africa; African Trade Policy, work in progress No.6, 2004,
- Economy Watch Content, http://www.economywatch.com/world_economy/africa, 2010

ECOPA; Impact d'un APE Afrique Centrale/UE sur l'économie Congolaise, Rapport final 2009, p.14, informations are in French, available at http://www.inter-reseaux.org/IMG/pdf_APE_CONGO_.pdf

Education et Marché du travail à Brazzaville et Pointe-Noire, STATECO, N°107, 2012-2013

Energy Information Administration (EIA), "Congo – Brazzaville, available at <http://www.eia.gov/countries/cab.cfm?fips=CF>

Eyraud: Why isn't South Africa growing faster? A comparative approach. IMF working paper WP/09/25. Washington, D.C. 2009.

Formation, Insertion et Emploi des Jeunes en Afrique, Conférence des Ministres 2014 du PQIP/DCTP : Cas du Congo Brazzaville.

http://www.adeanet.org/min_conf_youth_skills_employment/sites/default/files/u26/Rapport_Pays_Congo.pdf

Gert-Jan Stads, Grégoire Bani, and Assori Itoua-Ngaporo, country note: Republic of Congo: recent development in agricultural research; Agricultural science and technology indicators, 2010; p.1

Ghana Strategy Support Program: Economic Transformation in Africa, Discussion Note # 001, 2012

Grossman, Environmental impacts of a North American Free Trade Agreement, P.Garber ed, The U.S- Mexico Free Trade Agreement, Cambridge MA: MIT Press, P. 13-56, 1993

Grzegorz W. Kolodkom, "From shock to Therapy", the political economy of post socialist transformation, UNU/Wider studies in development economics, 2006

Herbst, Jeffrey. 2001, Political liberalization in Africa after ten years; Comparative Politics 33. 357-377,

Hirschman, A.O. 1958, the Strategy of Economic Development. New Haven, CT: Yale University Press,

Hornby A.S (2000), Oxford Advances Learners Dictionary of Current English Oxford University, 6th ed.

- Ibrahim Index of African governance, country profiles “Mauritius”, 2014. P.34
- Indice Ibrahim de la gouvernance en Afrique (IIAG), countries profile “Republic of Congo” : Classements et scores, 2013
- International Food Policy Research Institute: Economic Transformation in Ghana “Where will be the path lead?” Discussion Paper 01161, 2012
- International Labor Organization; Informal economies in Africa: Promoting transition to formality: challenges and strategies, P.5, Geneva- Switzerland, 2009,
- International Monetary Fund, IMF Country Report No. 14/272; “Republic of Congo”, Consultation Staff Report; Press Release, 2014,
- International Monetary Fund: Global liberalization and the developing countries; IMF Staff, 2001, <https://www.imf.org/external/np/exr/ib/2001/110801.htm>
- International Monetary Fund, Opening and Liberalizing Markets in Africa: “A Response to Globalization”, <https://www.imf.org/external/np/speeches/1998/120298.htm>,
- International Monetary Fund; staff country report, Republic of Congo; IMF country report No.09/74, 2009
- International Monetary Fund; Country Report, “Republic of Congo”, Country Report No. 13/282, 2013, p.8
- Johnston D.G. and J.W. Mellor,; “the role of agriculture in economic development”. American Economic Review 51(4):566-593, 1961
- Krueger A. O., M. Schiff, A. Valdez. 1991. The Political Economy of Agricultural Pricing Policies. Washington DC, World Bank
- Kuznets, S, 1955: “Economic growth and income inequality”. American Economic Review 45:1-28.
- Kuznets, S. 1961. Capital in the American economy, National Bureau of Economic Research, New York.
- Kuznets, S. 1961. Capital in the American economy; National Bureau of Economic Research, New York.

- Kuznets. S. 1966, *Modern economic growth*. New Haven, CT: Yale University Press.
- Kuznets, S. 1973. *Modern economic growth: Findings and reflections*. Nobel Memorial Lecture. *American Economic Review* 63(3), P. 247–258.
- Kuznets. S, 1973,“Modern economic growth”, Findings and reflections. Nobel Memorial Lecture. *American Economic Review* 63(3): 247–258.
- L’Enquête sur l’emploi et le secteur informel au Congo: Enquête 1-2-3 Phase 1 CNSEE 2010 : <http://www.cnsee.org/pdf/eesic.pdf>
- Leechor, Chad, “Ghana: frontrunner in adjustment”; in Ishrat Husain and Rashid Faruquee, (eds.), *Adjustment in Africa: Lessons from Country Case Studies*; Washington D.C. Bank, World Bank, 1994.
- Lewis W. A, 1954; *Economic Development with Unlimited Supplies of Labor*; *The Manchester School* 22(2): 139-191.
- Lewis, W. A, “Economic Development with Unlimited Supplies of Labor”; *The Manchester School* 22(2): 139-191, 1954.
- Lewis, W. A. 1979. *The dual economy revisited*. *The Manchester School* 47(3): 211-229.
- Lolette Kritzinger-Van Niekerk, *Regional Integration: Concepts, Advantages, Disadvantages and Lessons of Experience*; 2005
- http://www.sarpn.org/documents/d0001249/P1416-RI-concepts_May2005.pdf
- Madeleine R. Young, *African arguments: “Mining in the Republic of Congo: waiting for profits*, African arguments editor, 2012
<http://africanarguments.org/2012/09/10/mining-in-the-republic-of-congo-waiting-for-profits-by-madeline-r-young/>
- Malaysian economic transformation programme,“a roadmap for Malaysia”, 2010, executive summary, chap2, P.75
- Marilyn Whan-Kan, “How to improve export competitiveness in Mauritius?”, p.2 2014

- Mark Mc Gillivray & Matthew Clark (2006), “understanding human well-being”, United Nations University, Studies in Development Economics and Policy, p.3, 2006
- Martin Luther Oketch, 2013, “Focus on industrialization for wealthy economy, IMF”, Daily Monitor.
- Martin Wolf, 2014. “Why inequality is such a drag on economies”
- Matthews, R.C.O. 1986, The economics of institutions and the sources of growth. The Economic Journal 96(384):903-918.
- Mathias Kuépié & Christophe J. Nordman: Education and labor market in Brazzaville and Pointe-Noire, STATECO, N°107, p.75 2012-2013
- McMillan, M S, and K Harttgen (2014), What Is Driving the ‘Africa Growth Miracle’? NBER Working Paper No. 20077, April 2014.
- Meier, G.M. 1989, Leading issues in economic development. Fifth Edition, New York, NY, and Oxford, UK: Oxford University Press.
- Ministère de l’agriculture et du développement rural “ stratégie de développement du secteur rural (SDSR)”, synthèse du volet agriculture et développement rural ; document de travail, 2006,
- Ministère de L’Economie, du Plan, de L’Aménagement du Territoire et de L’Intégration, CONGO, Plan National de Développement, livret 1: Document de Stratégie pour la Croissance, l’Emploi et la Réduction de la Pauvreté (DSCERP 2012-2016), p.172
- Nathan Rosenberg and L.E. Birdzell Jr 2008, “How the West grew rich”: The economic transformation of the industrial world, page 2-4
- National Center of Statistics and Economics Studies, available at http://www.cnsee.org/index.php?option=com_content&view=article&id=134%3Aphaseindicateurs&catid=34%3Aedsc-2&Itemid=61&limitstart=3
- Newspaper Limited. 2005. "Congo-Brazzaville Laughing looters." Economist (8425): 58. ISSN 0013-0613.

- Obadias Ndaba; how to tackle Africa's challenge of spreading the benefits of the new found growth, the world post, 2014, http://www.huffingtonpost.com/obadias-ndaba/how-to-tackle-africas-cha_b_5692055.html
- Paul Krugman, the age of diminished expectations, U.S Economic Policy in 1990s, The MIT Press Cambridge, Massachusetts London, England, 3rd edition, 1994,
- Planning the innovation agenda for sustainable development in resource regions: A central Queensland case study, Report 2014
- Porter, M, C. Ketels and M. Delgado (2008), "The microeconomic foundations of prosperity: findings from the business
- R. Abouchakra, C. N. Moujaes, M. Najjar & R. Shediak. Economic Diversification: The Road to Sustainable Development; Booz & Company, 2008,
- Ramey, Garey and Ramey, Valerie A. (1995): "Cross-country evidence on the link between volatility and growth", American Economic Review, vol. 85, no. 5, pp. 1138-1151.
- Rapport économique sur l'Afrique, Cameroun, communiqué de presse « le Cameroun se lance dans la diversification dans le cadre de sa stratégie pour devenir une économie émergente », 2013, UNECA,
- Republic of Congo, Investment Climate statement, 2012 report
- Republic of Congo: Country stat « employment in agriculture », African development Bank, 2011
- République du Congo, rapport National sur « Analyse de la situation et estimation des besoins en santé environnementale dans le cadre de la mise en œuvre de la déclaration de Libreville » septembre 2010 Review 51(4):566-593.
- Rezgui Samir (2004); « Localisation géographique, commerce international et diffusion des connaissances technologiques », Économie internationale 97 (2004), p. 129-144.
- Richard Wilkinson, How economic inequality harms societies: http://www.ted.com/talks/richard_wilkinson/transcript

- Rodrik D. (ed.) 2003. In search of prosperity: Analytic narratives on economic growth. Princeton, NJ: Princeton University Press.
- Rodrik. D, 2004: Rethinking growth strategies. WIDER Annual Lecture 8, UNU World Institute for Development Economic Research (UNU-WIDER).
- Rodrik D.(ed.) 2003. In search of prosperity: Analytic narratives on economic growth. Princeton, NJ: Princeton University Press.
- Rodrik, D (2014), “An African Growth Miracle?” NBER Working Paper No. 20188, April 2014.
- Rostow: The stage of economic growth: a non-communist manifesto p.4-16, 1960
- Rudiger V. Arnim & Jomo K. Sundaram, “Economic Liberalization and constraints to development in sub-Saharan Africa”; DESA, Working paper N°67, p.13, 2008
- Schultz T.W. 1968; Economic growth and agriculture; New York, St. Louis, San Francisco. Toronto. London. Sydney: McGraw-Hill Book Company.
- Shin’ichi Takeuchi; “Political Liberalization or Armed Conflicts?”, Political Changes in Post-Cold War Africa; the Developing Economies Vol.45, 2007
- Structural Transformation in Sub-Saharan Africa: The Regional Growth poles Strategy Sydney: McGraw-Hill Book Company,
- The American economic review, vol.63, No.3 (June,.1973) p. 247-258.
- The Economist online, Africa’s impressive growth “Africa is now one of the World’s fastest-growing regions”, Daily Chart, 2011, <http://www.economist.com/blogs/dailychart/2011/01/dailychart>
- The informal economy in Africa: Promoting transition to formality: challenges and strategies, International Labor Office, Employment sector and Social Protection Sector, Geneva- ILO 2009,
- The World factbook, country profile; “The Republic of Congo”, Central Intelligence Agency,<https://www.cia.gov/library/publications/the-world-factbook/geos/cf.html>

- Transparency International: Corruption Perceptions Index 2013, countries profile “Republic of Congo”, 2013, P.5
- Turnovsky & Aditi Mitra: The Interaction between Human and Physical Capital Accumulation and the Growth-Inequality Trade-off, 2011
- UNESCO, Institute for Statistics « Global Investments in R&D », UIS Fact Sheet N°22, 2012, P.2
- United Nations Conference on Trade and Development: Structural Transformation and Sustainable Development in Africa, Report 2012
- United Nations Development Organization: Economic Development in Africa, Fostering Industrial Development in Africa in the New Global environment Report 2011,
- United Nations Conference on Trade and Development: Then and Now, Remaining Africa’s future, “Catalyzing Investment for Transformative Growth
- UNIDO, Development Policy, Statistics and Research Branch, Working Paper 3/2012: Diversification vs. specialization as
- United Nations Commission on Trade and Development; Economic Development in Africa Report, Intra-African trade: unlocking private sector dynamism; United Nations, 2013, P.11?
- United Nations Conference on Trade and Development, “Facts and figures on commodities and commodities trade”, UNCTAD/Press/In/2013/002; Geneva, Switzerland, 2013,
- United Nations Conference on Trade and Development, report on Economic development in Africa: “structural transformation and sustainable development in Africa”, 2012
- United Nations Conference on Trade and Development: Structural Transformation and Sustainable Development in Africa, Report 2012
- United Nations Economic Commission for Africa & African Development Bank, African economic outlook, special theme “Structural transformation and natural resources”; United Nations Development Programme, 2013, P. 112

- United Nations Economic Commission for Africa, Economic Transformation for Africa's Development, p. 92, 2013
- United Nations Economic Commission for Africa; Accelerating Africa's development through diversification; African Union, 2007
- United Nations Development Organization: Economic Development in Africa, Fostering Industrial Development in Africa in the New Global environment Report 2011
- United Nations Industrial Development Organization, Development Policy, Statistics and Research Branch, Working Paper 3/2012 : Diversification vs. specialization as alternative strategies for economic development: Can we settle a debate by looking at the empirical evidence?, 2012, p.4
- United Nations Development Program; human development report, New York Oxford, Oxford University Press, P.10, 1998
- United Nations Economic Commission for Africa & African Development Bank, African economic outlook, special theme "Structural transformation and natural resources"; United Nations Development Programme, 2013
- United Nations Economic Commission for Africa Rapport économique sur l'Afrique, Cameroun, communiqué de presse, « le Cameroun se lance dans la diversification dans le cadre de sa stratégie pour devenir une économie émergente », 2013,
- United Nations Economic Commission for Africa, "Economic Transformation for Africa's development" Macroeconomic Policy division, C-10 Meeting April, 2013; Washington D.C
- United Nations Economic Commission for Africa; Accelerating Africa's development through diversification; African Union, 2007,
- United Nations Environment Program; Human well-being and livelihoods in Africa, the Encyclopedia of Earth, David Casagrande, Food, Health and Sustainable development, 2007
- World Bank, <http://www.worldbank.org/en/news/press-release/2014/09/18/congo-republic-first-economic-update>
- World Bank, Africa's pulse "an analysis of issues shaping Africa's future economic growth", Vol.8; 2013

- World Bank, Africa's pulse "an analysis of issues shaping Africa's future economic growth", Vol.8; 2013
- World Bank, Ease of Doing Business; Doing business in a more transparent world, World Bank and International Finance Corporation, 2012
- World Bank, Ease of Doing Business, country profile: "Republic of Congo", 12th edition, 2015. <http://www.doingbusiness.org/data/exploreeconomies/congo-rep>
- World Bank, Global economic prospects, chapter 2: Sub-Saharan Africa, P.2, 2015,
- World Bank, Little Data book 3: quick reference to the world development indicators CD-ROM and World Bank atlas, 2003.
- World Bank, Republic of Congo, Investment climate policy Note, Draft report, p.19 June, 2009.
- World Bank, Enterprise surveys, country profile "Republic of Congo", p.6, 2009 <http://www.enterprisesurveys.org/~media/GIAWB/EnterpriseSurveys/Documents/Profiles/English/Congo-Rep-2009.pdf>
- World Bank, Doing Business, Republic of Cameroon, <http://www.doingbusiness.org/data/exploreeconomies/cameroon/>, 2013
- World Economic Forum: De la croissance économique à la transformation économique, 2012
- World Factbook; "export partners", country profile, Republic of Congo, available at <https://www.cia.gov/library/publications/the-world-factbook/geos/cf.html>
- World Population Review, continents: "Africa's population", <http://worldpopulationreview.com/continents/africa-population/>, 2014
- World statistics, country profile "the Republic of Congo"; population estimate 2014, http://www.statistiques-mondiales.com/congo_brazzaville.htm
- Woodward. D; "Debt, Adjustment, and Poverty in developing countries", Vol. 1, p.31, 1992

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