# ECONOMIC POLICIES FOR POST-CONFLICT RECOVERY: COMPARATIVE STUDY BETWEEN RWANDA AND BURUNDI

Master's Degree Hussein JIMALE Eskisehir, 2017

# ECONOMIC POLICIES FOR POST-CONFLICT RECOVERY: COMPARATIVE STUDY BETWEEN RWANDA AND BURUNDI

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## **MASTER'S THESIS**

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#### ÖZET

# ÇATIŞMA SONRASI İYİLEŞME İÇİN EKONOMİ POLİTİKALARI: RWANDA VE BURUNDİ ARASINDAKİ KARŞILAŞTIRMALI BİR ÇALIŞMA

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Araştırma, çatışma sonrası ekonomik canlanmada ekonomik politikaların rolünü araştırmaya çalışmıştır. Ruanda ve Burundi hükümetleri tarafından yapılan politika reformlarının ekonomik iyileşme ve gelişime katkısı karşılaştırılmıştır. Çalışmanın ana hedefleri, yeni çatışma riskini azaltmada askeri harcamaların rolünü belirlemek ve yerli yatırım, dış yardım ve doğrudan yabancı yatırımların, iki ülkenin ekonomik iyileşmeye katkısını incelemekti. Vektör hata düzeltme modelinin sonucu, yurtiçi yatırım, dış yardım, doğrudan yabancı yatırımlar ve askeri harcamaların, Burundi ve Ruanda'nın ekonomik büyümesi üzerinde uzun sürede etkisinin olduğuna işaret etmektir. Kısa dönemde, askeri harcamanın Ruanda'daki reel GSYİH üzerinde herhangi bir etkisi bulunmamakla birlikte, Burundi'de ekonomik büyüme üzerinde belirgin bir pozitif etkisi bulunmaktadır. Bunun dışında yerli yatırım, Burundi'deki ekonomik büyümeyi ve toparlanmayı desteklememektir. Ayrıca Granger Nedensellik testinin sonucunda Burundi'de; yerli yatırım Granger, reel GSYH'ye neden olmaktır. Doğrudan yabancı yatırımdan reel GSYH'ye tek yönlü etki gelmektir. Öte yandan, Ruanda iç yatırımı için Granger, reel GSYİH'ya %5 anlamlılık düzeyinde neden olur ve Ruanda'da gerçek GSYH'ya dış yardım getiren tek yönlü nedensellik var.

**Anahtar Sözcükler:** Iyileşme, Ekonomik Politikalar, Doğrudan Yabancı Yatırım, Yurtiçi Yatırım

#### ABSTRACT

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The research tried to investigate the role of economic policies in post-conflict economic recovery. The contribution of the policy reforms made by the governments of Rwanda and Burundi to their economic recovery and development are compared. The main objectives of the study were to identify the role of military expenditure in reducing the risk of new conflict and examine the contribution of domestic investment, foreign aid and FDI to the economic recovery of the two countries. The result from VECM model indicates that domestic investment, foreign aid, foreign direct investment and military expenditure have long run significant effect on economic growth of Burundi and Rwanda. In the short run military expenditure has no any effect on the real GDP in Rwanda but it has significant positive effect on economic growth in Burundi. Also domestic investment does not promote the economic growth and recovery in Burundi. Also the result from Granger Causality test shows that in Burundi; domestic investment Granger causes real GDP. there is unidirectional effect coming from foreign direct investment to real GDP. On the other hand, for Rwanda domestic investment Granger causes real GDP at 5% significance level and there is unidirectional causality coming foreign aid to real GDP in Rwanda.

**Keywords:** Recovery, Economic Policies, Foreign Direct Investment, Domestic Investment

# STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES

I hereby truthfully declare that this thesis is an original work prepared by me; that I have behaved in accordance with the scientific ethical principles and rules throughout the stages of preparation, data collection, analysis and presentation of my work; that I have cited the sources of all the data and information that could be obtained within the scope of this study, and included these sources in the references section; and that this study has been scanned for plagiarism with "scientific plagiarism detection program"used by AnadoluUniversity, and that "it does not have any plagiarism" whatsoever.I also declare that, if a case contrary to my declaration is detected in my workat any time, I hereby express my consent to all the ethical and legal consequences that are involved.

Hussein JIMALE

# TABLE OF CONTENT

FINAL APPROVAL FOR THESIS	ii
ÖZET	iii
ABSTRACT	iv
STATEMENT OF COMPLIANCE WITH ETHICAL PRINCIPLES AND RULES	v
TABLE OF CONTENT	vi
TABLES	ix
FIGURES	x
SYMBOLS AND ABBREVIATIONS	xi
CHAPTER ONE	1
1.1. Problem Statement	1
1.2. Objectives of the Study	3
1.3. The Significance of The Study	3
1.4. The Purpose of the Study	5
1.5. Assumptions	5
1.6. Limitations	5
1.7. Definitions	6
CHAPTER TWO	7
2. LITERATURE REVIEW	7
2.1. Definition of Recovery	7
2.2. Major Reasons of Conflict	8
2.2.1. Competition for power and resources	
2.2.2. Extractive institutions	11
2.2.3. Colonial legacy	12
2.2.4. Poor economic performance	
2.3. Economic Policy Priorities for Post-Conflict Recovery	14
2.3.1. The Role of military spending in reducing the risk of new conflict	15
2.3.2. The role of domestic investment in promoting the economic growth	18

2.3.3. The effect of foreign aid on real GDP in post-conflict countries	22
2.3.4. Foreign direct investment and the real GDP	25
CHAPTER THREE	28
3. RESEARCH METHODOLOGY	28
3.1. The Model	28
3.2. Stationarity Test	29
3.2.1. Augmented Dickey-Fuller test	30
3.3. Testing of Cointegration	30
3.3.1. Johansen cointegration test	30
3.4. Vector Error Correction Model (VECM)	31
CHAPTER FOUR	33
4. RESULTS AND INTERPRETATION	33
4.1. Graphical Analysis	33
4.2. Stationarity Test Results	37
4.2.1. Augmented Dickey-Fuller test	37
4.3. Cointegration Testing	39
4.3.1. Johansen cointegration (Rwanda)	39
4.3.2. Johansen cointegration (Burundi)	40
4.4. Lag Length Determination of The Model	41
4.5. Vector Error Correction Model (VECM)	42
4.5.1. VECM (Vector Error Correction Model) for Rwanda	42
4.5.2. VECM (Vector error correction model) Burundi	43
4.6. Granger Causality Test	44
4.6.1. Granger causality test for Rwanda series	44
4.6.2. Granger causality test for Burundi series	45
4.7. Checking Serial Correlation	45
4.7.1. Serial correlation detection for Burundi	46
4.7.2. Serial correlation detection for Rwanda	46
4.8. Checking Heteroskedasticity	46
4.8.1. Checking heteroskedasticity for Rwanda	46

4.8.2. Checking heteroskedasticity for Burundi	. <b>4</b> 7
4.9. Cusum Test	47
4.10. Impulse Response	48
4.10.1. The results of impulse response for the series of Rwanda	48
4.10.2. The results of impulse response for the series of Burundi	50
CHAPTER FIVE	54
5. FINDINGS, DISCUSSIONS AND RECOMMENDATIONS	54
5.1. Findings	54
5.2. Discussions	55
5.3. Conclusion	57
5.4. Recommendations	58
5.4.1. Recommendations for change	58
5.4.2. Recommendations for further study	60
REFERENCES	61
Curriculum Vitae	64

# **TABLES**

<b>Table 4.1.</b> Unit Root Test for the series of Rwanda based on ADF test	<u>Sayfa</u> 47
Table 4.2. Unit root test for the series of Burundi based on ADF test	48
<b>Table 4.3.</b> Johansen Cointegration test for the series of Rwanda	49
Table 4.4. Johansen Cointegration test for the series of Burundi	50
Table 4.5. Var Lag Order Selection Criteria	51
Table 4.6. Vector Error Correction Model for Rwanda	52
Table 4.7. VECM for the time series of Burundi	53
Table 4.8. Granger Causality for Rwanda	54
Table 4.9. Granger Causality for the series of Burundi	55
Table 4.10. Breusch-Godfrey Serial Correlation LM Test Burundi	56
Table 4.11. Breusch-Godfrey Serial Correlation LM Test Rwanda	56
Table 4.12. Heteroskedasticity Test: Breusch-Pagan-Godfrey for Rwanda	57
Table 4.12. Heteroskedasticity Test: Breusch-Pagan-Godfrey for Burundi	57

# **FIGURES**

<u>Pa</u>	ıge
Figure 4.1. Real Gross Domestic Product (RGDP)	.42
Figure 4.2. Domestic Investment (DI)	.43
Figure 4.3 Foreign Direct Investments (FDI)	.43
Figure 4.4. Foreign aid	.45
Figure 4.5. Military Expenditure	46
Figure 4.6. Checking stability of the model using Cusum test	.58
Figure 4.7. Impulse of Real GDP to changes in Domestic investment in Rwanda	.58
Figure 4.8. Response of Real GDP to change in foreign aid in Rwanda	.59
Figure 4.9. Impulse of Real GDP to one standard shock in FDI in Rwanda	.60
Figure 4.10. Response of Real GDP to changes in military expenditures in Burundi	60
Figure 4.11. Impulse of Real GDP to changes in domestic investment in Burundi	.61
Figure 4.12. Response of Real GDP to change in foreign aid in Burundi	62
Figure 4.13. Impulse of Real GDP to one standard shock in FDI in Burundi	62
Figure 4.14. Response of Real GDP to changes in military expenditures in Burundi	63

# SYMBOLS AND ABBREVIATIONS

**RPF** : Rwandan Patriotic Front

**VECM**: Vector Error Correction Model

**ADF** : Augmented Dickey-Fuller Test

**FDI** : Foreign Direct Investment

**DDR** : Disarmament, Demobilization and Reintegration

#### **CHAPTER ONE**

#### 1. INTRODUCTION

#### 1.1. Problem Statement

The risk of conflict renewal is very high in post-conflict situation since there are many economic and political problems that may lead to another conflict. After the internal conflict, per capita income falls dramatically, there are different armed groups and high percentage of unemployed youth can be hired by rebel groups. Post-conflict government must set economic policy priorities for reducing the risk of new conflict and tackling the economic problems because according to African-Bank (2008, p. 46), post-conflict countries face a high risk of conflict renewal. Governments will therefore rightly be concerned, not only with economic recovery as an end in itself, but with adopting economic policies that help reduce the risk of conflict. After the civil war, the biggest challenge is to identify where to start the peace building process and how the various political parts can be included in the rebuilding process. The capacity is very limited because the war destroys the physical and human capital and all government institutions, so setting economic policy priorities are very necessary because at that time everything seems to have priority. According to Phelps (2008, p.31) post-conflict countries have devastated or at least severely distorted economies. Both human capital and physical infrastructure are often in a shambles and characterized by a lack of transparency, poor governance, corrupt legal, judicial, and police systems, inadequate protection of property rights, incompetent central banks, weak tax and customs administrations, and non-credible public expenditure management and they are also highly dependent on official aid flows.

In the early 1990s civil wars broke up in many African countries for different reasons but after internal and external efforts most of those conflicts came to an end and now there are many post-conflict cases in Africa. The reduction in poverty rate, the booming of tourism industry and the huge foreign investment are the results of macroeconomic policy reforms made by several post-conflict governments. Rwanda is considered one of the countries that have successful stories in setting economic policy priorities for achieving recovery and development. Rwanda shot to global prominence 20 years ago with an ethnic conflict and genocide in which almost one tenth of its population died. In recent years Rwanda has acquired a very different reputation, of remarkable economic

reform which has generated enviably fast growth. After shrinking by half during the conflict of 1993 and 1994, Rwanda's economy has grown fivefold over the last twenty years, at an average rate of 9% per year. GDP per person, a proxy for national wealth and prosperity, has more than tripled. Rwanda's economic reforms have achieved remarkable success in a deep damaged society. It stands as a model of post-war reconstruction and reconciliation. The growth rate of Rwanda was very high after the genocide because the government set new economic policies and made many reforms to increase the economic performance of the country.

On the other hand, some African countries still have high risk of new conflict because of exclusive political institutions and bad economic conditions. Dictatorship system dominated in many post-conflict countries and few individuals exploit the public resources while the majority of the citizens are suffering from a high poverty rate. Burundi (which is one of the post-conflict countries) that is similar to Rwanda for many aspects did not achieve economic recovery yet because "economic recovery is not yet being treated as a peace building priority in Burundi. This includes the current lack of comprehensive strategy development and clear priority-setting for key economic areas. As a result, current economic recovery efforts in Burundi consists of a variety of smallscale programs that are mainly of a standard development nature, rather than being designed to contribute to peace building efforts" (Specker, Briscoe, & Gasana, 2010, p. 1). The international community works to develop policies to rebuild war ravaged countries and inject large amounts of aid for emergency and development purposes but most of the post-conflict nations still remain fragile, mainly dependent on foreign aid and unable to provide public goods to the people. According to Ehrenreich (2012, p. 1161) they cannot ensure economic growth or any reasonable distribution of social goods: They are often characterized by massive economic inequities, warlordism, and violent competition for resources. Recent examples of failed states are familiar to us all, from the total collapse of state institutions in Somalia and the disintegration of the former Yugoslavia to the varied crises in Rwanda, Haiti, Liberia, Congo, Sierra Leone, and Afghanistan.

This study investigates the economic policies which are necessary for post-conflict recovery and how the government can prioritize the activities of peace building process. Also the challenges and potential opportunities of post-conflict government are discussed in this study. In this study, it is tried to present how a government and donors

can develop policy coordination for peace building process and also how the government can take a leading role in sutainable peace and development. So ultimately turn the peace project to a local owned one.

### 1.2. Objectives of the Study

This study tries to investigate the role of economic policies in achieving economic recovery for post-conflict countries. This research paper investigates the role of military expenditure in reducing the risk of new conflict in post-conflict countries since there is a high possibility of new conflict after the civil war and the study is based on the cases of Burundi and Rwanda. It also examines the effect of domestic investment on the economic recovery in post-conflict situations. Finally, the study examines the role of FDI and foreign aid in the economic growth of post-conflict countries. The research is based on comparative time series study between Rwanda and Burundi; and looks at the role of the economic policies in the economic performance of these two countries, taking the real gross domestic product as the measurement of their economic recovery. Pre-conflict economic conditions of the two countries, the reasons behind the conflict and the economic policies that developed by both governments after the civil war were investigated in detail.

## 1.3. The Significance of The Study

The study is important for post-conflict governments and international community or donors. It is important for the post-conflict government because high risks of new conflict caused by economic factors such as high unemployment, high inflation rate and poverty; so economic policies are necessary in post-conflict times. Also the study tried to examine economic policies and reforms made by post-conflict countries and how these policies contributed to the economic growth and recovery after the war time.

It is also important for the donors since they want to help nations emerging from wars in terms of developing policy priorities and providing humanitarian aid and development assistance; so this study explains the ways that the role of the international community can be very useful for the peace-building process and recovery of post-conflict countries. This research paper closely examines the effect of foreign aid on economic recovery in post-war situations and the contribution of aid in an institutional

building, job creation, the rehabilitation of infrastructure and achieving sustainable economic growth and development.

Due to ethnic tensions, Rwanda and Burundi had experienced severe conflicts and genocides in 1994 that devastated the physical and human capital in both countries. In 1994, an estimated 800,000 to one million Tutsis and some Hutus were killed in Rwandan genocide and an estimated 300,000 people were massacred in Burundian genocide at the same year. The civil war lasted from 1993 up to 2006 in Burundi and in 2006; the warring sides have signed a peace agreement at Dares-Salaam, Tanzania, that ended the Burundian civil war. Similarly the Rwandan civil war began 1990 and ended with an RPF victory on July 18, 1994. There is a political stability in Rwanda since 1994 and inclusive government institutions were formed; two presidential elections were held in the country that the current president Paul Kagame has won both of them. Rwanda set its long term development goal that is defined in a strategy known as "vision 2020" that targets to transform the country from agriculture-based economy to an industrialized and knowledge-based economy. In 2016 GDP (PPP) of Rwanda is \$21.97 billion and its growth rate is 6% and tha main sectors that contribute to the economic growth are: Agriculture 34%, industry 15.1% and services 50.3%. Rwanda has great economic success story after many economic reforms and policy that enabled the country to achieve growth and recovery within two decades.

The main challenge for Rwandan economy is its dependency on foreign aid while high percentage of government expenditures are financed from foreign aid and the government tries to develop the private sector in order to play major role in ensuring economic growth. The government tries to develop policies to attract foreign direct investment to create job opportunities, help in the skill transfer and promote the export of the country. Burundi has maintained relative political stability since 2006 but political crisis have erupted again in 2015 after coup attempt against the current president failed. Although Burundi has its own development goal, it has no economic transformation like Rwanda because high percentage of Burundians live under the poverty-line and there are large budget deficits over the past years and estimations forecast that the public debt ratio is expected to exceed the real gross domestic product. In 2016 estimates GDP (PPP) of Burundi is \$7.9 billion and the growth rate is -0.5% and tha major contributor to the real GDP are agriculture 45.8%, industry 17.1% and services 37.1%. So this study extensively investigates economic policies and reforms

made by the governments of Rwanda and Burundi after the conflict and it also examines the role of these policies in the economic growth and recovery in these two countries.

#### 1.4. The Purpose of the Study

The purpose of this study is to explain the importance of economic policies for achieving post-conflict recovery. In the early 1990s civil wars started in many African countries for several reasons, but at the middle and the end of 1990s peace agreements were reached and many post-conflict situations emerged in many parts of the continent. The civil war lasted more than one or two decades in some countries like Burundi and Somalia, and now other civil wars are still going-on in certain countries like the civil wars in Libya and Congo.

This study will deeply investigate the economic policies developed by the governments of Rwanda and Burundi and how these policy reforms contributed to the economic recovery and development of these countries. The role of international community in the peace building process in the countries, which are emerging from a conflict, will be examined extensively. Also comparison analysis between Rwanda and Burundi in terms of reducing the risk of new conflict, by increasing the real GDP through domestic investment and benefiting from FDI and foreign aid flows will be the main body that this research work will concentrate.

### 1.5. Assumptions of The Study

The study assumes that domestic investment has a positive effect on real gross domestic product in post-conflict countries. Also it assumes that foreign aid and foreign direct investment have a positive effect on economic growth since these financial flows are expected to increase real gross domestic product in post-conflict situations. Finally, the study assumes that increasing military expenditure promotes economic growth by reducing the risk of new conflict in post-conflict situations.

## 1.6. Limitations of The Study

One of the limitations of the study that some variables which may explain economic growth are not included in the model because of lack of time series data. Human capital, corruption index and political stability are some of the variables that may affect

economic growth in post-conflict countries but the time series of these variables are not available for the countries taken as case study.

#### 1.7. Definitions of Terms

Economic recovery: In this study, economic recovery is not referred only to the stage of the business cycle following a recession, but recovery has a broader definition. It is related to reforming in security sector, forming inclusive political and economic institutions and achieving sustainable economic growth and development.

Post-conflict: it is the situation after the conflict which an open warfare has ended but still there is a high risk of new conflict and this situation may last more than a decade.

Domestic investment consists of public and private investment. Public investments are the money spent on public goods such as roads and education. Private investment is the purchase of capital asset with the aim of making profit. Capital assets include land, building and equipment.

#### **CHAPTER TWO**

#### 2. LITERATURE REVIEW

#### 2.1. Definition of Recovery

The countries emerging from a prolonged conflict are struggling to restore peace and stability and achieve recovery. Also the international community develop policies, arrange reconciliation conferences and offer humanitarian and development aid to wartorn countries to achieve post-conflict recovery. In order to measure the performance and the success of the countries coming from the conflict we need to understand or agree on what recovery really means in post-conflict peace-building process. When many researchers and organizations define recovery; they refer it to returning to the status que before the conflict, for instance, Ohiorhenuan (2011, p.3) quotes from Flores and Noorudin that recovery has different names such as reconstruction, rebuilding and recovery and all suggest a return to the condition before the conflict. They indicate that after the conflict, recovery means a return to the economic growth and employment rates before the war. On the other hand, other researchers view recovery as a return to the highest level of GDP per capita attained during the five years preceding the conflict. Regarding to the above definition a post-conflict government has achieved economic recovery if the country attains a growth rate which is equal to the pre-conflict period. Some of the countries that experienced war see the recovery as the process of rebuilding physical capital that the war has destroyed during the conflict such as roads, ports and government buildings and they take certain measurements for the recovery. They often compare their accomplishments with the governments before the conflict. These governments view recovery as an economic issue only and that is why they try to get an economic welfare before political reconciliation. They strive to create job opportunities, reduce inflation rate and get national output that is equal to pre-conflict period. For post-conflict recovery, the policy makers attempt to lead the country to the normal condition that existed before the eruption of chaos and develop economic policy for getting self-sustaining approach of economic system.

On the other hand, many researchers contend that recovery is not only about a return to pre-conflict condition and it is not just related to economic dimensions but it has broader concept and definition. It concerns to both politics and socio-economic issues such as reducing unemployment rate, lowering crime level and combating high

inflation as Ohiorhenuan (2011,p .3) tells that recovery is not confined to the return to pre-conflict economic and institutional framework/arrangements. It relates to socioeconomic transformation and it needs combinations of reforms in legal, institutional and economic policy that enable war-ravaged nations to achieve self-sustaining development. That means establishing a new political economy system and building back differently and in better way.

In this study, post-conflict recovery is not considered a return to pre-conflict economic conditions only, but recovery has a broader definition. It is related to reforming in security sector, forming inclusive political and economic institutions and achieving sustainable economic growth and development as Mill (2005, p.1) defines post-conflict recovery being complex process to simultaneously improve military (restoration of law and order), political (governance), economic (rehabilitation and development) and social conditions (justice and reconciliation). Post-conflict economic reconstruction involves distribution of relief assistance, rebuilding physical infrastructure and facilities, reestablishment of social services, creating good environment for private sector development, and carrying out important structural reforms for macroeconomic stability and sustainable growth. In this study, we used real gross domestic product as a measurement of economic recovery because the improvement in the key sectors mentioned in the definition of recovery accelerate the economic growth of post-conflict countries and generally real GDP is used as gauge for the economic performance of countries whether they are at peace or war times.

#### 2.2. Major Reasons of Conflict

In this section we try to discuss the major factors that cause armed conflicts in Africa, because identifying the reasons of the conflict is important for the peace-building process and achieving sustainable recovery.

## 2.2.1. Competition for power and resources

The major reason of conflict in Africa revolves around competition of power and resources among different groups because resources are associated with power, those are in power have the privilege and full access to the public resources. The conflict arises because some individuals want to get more resources at the expense of the majority of the people. The countries of Rwanda and Burundi which the study takes as a case study have experienced severe conflicts that caused the genocide of many people

and destroyed huge physical capital. In this research work, the root causes of the conflict in those two countries were investigated because it helps us to understand the nature of the conflict and facilitate finding solutions to the problem. In explaining the conflict in Burundi, Hatungimana (2011, p.13) indicates that in Burundi similar to all the poorest countries, the major source of wealth is from power. Everyone thinks losing power means going back to the state of poverty and no one accepts to leave the power but they do whatever possible to remain in the power. Most of them, their personal interest comes before the public interest.

Africa is a continent with sufficient economic resources but there is no equal distribution of resources among the people since only the government officials and foreign companies gain from the natural resources of Africa and the people suffer from poverty, unemployment and various diseases. The competition for the power and resource is either between the elites or between different ethnic groups and these kinds of competition damaged the economy of Rwanda and Burundi, as Ndikumana (2001, p.2) tells that the ethnic based conflict in Burundi and Rwanda have tremendously reduced the economy and worsened the structural situation of these two countries. The revenue of the government from the taxes has decreased due to the low tax base and management capability of the tax system. These governments diverted many important resources from productive sectors and social development projects to military and security expenditures.

The conflict is not only between ethnic groups but some time it may erupt between various clans within the same ethnic group as the Somalia case, despite they have the same ethnicity but similarly to Burundi; competition of resource and power between clans and sub-clans was one of the major factors caused the conflict as Elmi & Barise (2010, p.33) contend that the clans in Somalia were fighting for resources such as water, livestock and grazing before Somalia get its independence and after the independence they compete for state control to get nation's resources and recruit civil servants and manage foreign aid and these new resources replaced the control of water wells and access to grazing land in the countryside. Politics is considered to be one of the most profitable businesses in Africa where many people invest large amount of money in getting governmental post to finance their costs and make huge profits from the public resources. The leaders mobilize their ethnic group or clan for involving the political process and promise them that they will get additional benefits from the

government if they get their support. So there is a constant clashes between the society because of an ending competition like the situation in Somalia since "many Somalis see the state as an instrument of accumulation and domination, enriching and empowering those who control it and exploiting and harassing the rest of the population" (World Bank, 2005, p. 18).

Sometimes the same clans face contention for power and resources and the fighting turns to a sub clan one as they clash over the fortune accumulated from the other clans. So the main contributing factor for African conflicts is competition of power and resources between different ethnic groups or between different clans and sub clans. The extent and possibility of the conflict can be associated with the level of the resources available in specific regions; several African countries have more natural resources while there are insufficient natural resources in some regions of Africa. Some researchers contend that the rate of internal conflict is high in states having fewer natural resources because the people fight over the scarce resources and everyone tries to survive by taking the large share of it. On the other hand, some writers argue that in general, resource-rich countries have high rate of civil unrest because many behave in greedy way in accumulating wealth as much as possible.

The different clans fight over resources since the resources are scarce during and after the conflict and competitions to control profitable cash crops caused disputes among clans and sub clans. For example, according to World Bank (2005, p.7) in the valleys of the two rivers of south-central Somalia, some clans displaced others to get land and benefit from the cultivation of high profitable crops particularly bananas and other cash crops. Sometimes, the powerful clans have forced the people into labor along the rivers. It is normal for the clan or an ethnic group to commit crimes and do every unlawful actions in the process of power struggle and resource accumulation, they may attack other clans or organize a coup against legitimate government as Oyeniyi & Media (2011, p.3) assert that many factors cause military coups such as ethnic and personal rivalry (like Idi Amin's coup in Uganda in 1971). Also military coups caused by interethnic rivalry among leading army officers and by ethnic discontents against the civil head of state. Almost all tribal and ethnic conflicts caused by competition over scarce resources of wealth and power.

African governments and international community must seek ways to get solutions to the competition of power and resources between various ethnic groups and different clans or sub-clans. Since the countries that have low per capita income and high poverty rate face an internal conflict; so only sharing power and resources equally between various ethnic groups reduces the risk of conflict and contributes to the peace of post-conflict areas. According to Brown & Stewart (2015, p.13) an evidence from econometric studies indicates the incidence of the conflict is high in countries with low per capita income, economic growth and life expectancy. For the ending of civil war, what matters is sharing all types of resources among the communities. The risk of conflict falls when poverty and underdevelopment are equally shared by the society but the incidence of the conflict is very high, if some groups accumulate a disproportionate share of resources where the majority of the society is poor.

#### 2.2.2. Extractive institutions

Conflict emerges when certain groups rule the country and exploit the public resources at the expense of the majority of the people and many social and economic problems in Africa are attributed to dictatorship in the continent. The people are paying the prices of long term dictatorship that made Africa the poorest continent in the world. In explaining the causes of conflict in the political history of Burundi, Hatungimana (2011, p.6) notifies that small group mainly Tutsi abused the power and ranked against the majority of Hutu and the remaining groups. The colonizers gave the Tutsi minority superiority over the Hutu and Twa. An ethnic based conflict happened because of the inequality of opportunities on the standard that was part of the divisive policy of "divide and rule" of the colonizer. The small group has been ruling the country since its independency from 1962 until 1993 at the first time, a president was democratically elected.

The extractive institutions or the dictatorship leaders enrich their own ethnic groups or families and they are familiar with such nepotism, for instance dictatorship president nominates most of the cabinet and high government positions for his relatives to rule the country throughout his life. So those who control the state have many political and economic privileges compared to the majority of the normal citizens and that is how Tutsi behaved during their rule. According Golooba Mutebi (2008, p. 3) the monopoly of Tutsi over government institutions offered disproportionate access to education and training opportunities, as most of the students studying at public and church schools and training institutions were Tutsi. Also after the graduation, Tutsis had high access to

job opportunities than their Hutu fellows because of their connections in the government. This widely increased the inequality and the sense of grievance among Hutu.

In Africa, some dictators rule their countries more than two decades and they have done every kind of human violation and accumulation of large resources and wealth from the poor people in their own countries. So the inequality between the society increased the possibility of violence in Africa because Brown & Stewart (2015, p. 8) found an evidence indicates that horizontal inequalities in economic and social issues leads to dissatisfaction among the people and, consequently, increases the possibilities of political mobilization. But political exclusion brings conflict by giving group leaders a powerful motivation for organizing to get support. The extractive institutions benefit from the public and do whatever they can in order to stay in power but their actions lead to revolution and violence.

Elmi & Barise (2010, p. 36) argue the second major cause of Somali conflict was the repression from the state. Somali people suffered 21 years of a repressive military government from 1969 up to 1991. The government did not allow the existence of opposition parts, let alone to have a voice in important issues. The military state did not give the people the opportunity to participate in the politics and the opposition groups resorted to violence because the state denied all other means to be part of the regime. The opposition leader attacked Somalia from Ethiopia crossing the border between the two countries and the state's repression, violence and excessive force against the people were the main justifications for the war.

#### 2.2.3. Colonial legacy

European colonizers devastated Africa in many ways and they are the root causes of most African conflicts. Africans lived under a colony for a long time and they did not get the opportunity to govern their countries. There are two bad legacies from the colony that drive the clashes and conflicts in Africa and they are: the curse of colonial borders in Africa and introducing ethnic-based conflicts in it. They have drawn controversial borders between Africa and their aim was against the unity of Africa and creating everlasting conflict in the continent. The first colonial legacy is the borders between Africa as Oyeniyi & Media (2011, p. 3) confirms that all most all these borders were inherited from the colony, and are the result of talks and agreements between the

colonial powers, decided in Europe to form poor maps to Africa while there was little attention from the African people.

In some parts, they formed borders that created disputes between the countries and even led to great wars between the countries in Africa, for example, the 1977 war between Somalia and Ethiopia was due to the border dispute and similarly the hostility between Somalia and Kenya was because of the strategies of colonizers. According to Elmi & Barise (2010, p. 36) the colonial legacy is one of the root causes of the civil war in Somalia. European colonizers namely Britain, Italy and France divided the greater Somalia into five parts. British took two parts, Italy one and France one. The European powers gave the Somali region of Ogaden to Ethiopia. The effect of the partition has been haunting the Somali people since and now two Somali territories remain under the control of Ethiopia and Kenya. Also several reasons of the civil war in continent came from European colony who created opposition groups and supported to continue the war, for instance Mozambique engulfed by civil war after only few years of its independence and some European governments were backing the fighting groups in Mozambique and they based in Rhodesia to support Mozambican national resistance group that was struggling to oust the Mozambique liberation front which was the ruling party since its independence.

Europeans has taken the strategy to rule Africa by dividing them into different ethnic groups and clans and took the advantage of their difference. They used the policy of "divide and rule" and promoted some ethnic groups over others to create ethnic violence for example in Burundi and Rwanda as Golooba Mutebi (2008, p. 2) says that one of the first measures that the Europeans took in their stat-building process was to exclude the Hutu (whom they termed to less intelligent than the Tutsi and unable to lead the country) from the chieftainship. They nominated Tutsi chiefs in areas where, prior to the colonial role, Hutu chiefs had been ruling.

Also they had a big role in Rwandan genocide in 1994 because post-colonial leaders pursued a system similar to colony and maintained the negative colonial legacy of ethnic division for all most three decades. Also they systematically practiced a strategy of exclusion and repression that placed the country's long-term stability under threat, gradually led to civil war and caused the genocide of 1994.

#### 2.2.4. Poor economic performance

Many African countries faced internal conflicts because of the poor economic performance; the per capita income has fallen, unemployment rate has risen and the price of consumer goods has increased and these factors made the people angry and worry about their lives. Africa is a youthful continent because high percentage of its population consists of youth between the age of 15-30 and most of them have no opportunity to get education and jobs. So the youth are likely to prefer war over peace as long as the government does not offer them an alternative means for better life. Bad economic conditions have leaded to civil war for most of the countries that experienced conflict in Africa including Rwanda and Burundi as Oyeniyi & Media (2011, p. 4) emphasize that poor economic performance brought a more and long-term conflict in many African countries, coupled with the debt problem, poor flows of private capital and inefficient foreign aid programs.

On the other hand, many researchers label poor economic performance as contributing factor to the conflict but they do not consider it as the root cause of the conflict. They have listed many contributing factors that lead to internal conflicts such as the culture that promote violence, foreign intervention that intends to create tensions between the people and the rate of youth unemployment that is possible to resort to conflict. Poor economic performance is regarded as one of the root causes of internal conflict in Sub-Saharan African countries and many authors support this view for instance the conflict in Somalia is referred to the bad economic situation that Somalis lives under the dictatorship government of Siyad Bare because "before the civil war in 1991, Somalia was one of the poorest countries in the world with a high level of dependence on foreign aid. Its gross national product (GNP) per capita was US\$170 and its life expectancy only 47 years" World Bank (2005, p. 23).

## 2.3. Economic Policy Priorities for Post-Conflict Recovery

In this section, economic policy priorities for post-conflict recovery are discussed since everything seems to have priority in the reconstruction and development process of post-conflict situations. The study investigates the role of four factors in the peace-building process and in the economic growth and recovery of post-conflict countries. These variables are: military expenditures, domestic investment, foreign aid and FDI.

### 2.3.1. The Role of military spending in reducing the risk of new conflict

The risk of new conflict is very high in post-conflict situations because when a country emerges from a conflict it is likely to face another conflict because there is great mistrust between the people. Post-conflict government must consider its condition and develop policies to reduce the risk of conflict renewal because "post-conflict societies face a heightened risk of conflict reversion. Governments will therefore rightly be concerned, not only with economic recovery as an end in itself, But with adopting economic policies that help reduce the risk of conflict" (African-Bank, 2008, p. 46). The governments in post-conflict countries try to develop policies to minimize the risks and avoid any thing that can become reason for provoking violence and conflict but most of the policies of the governments do not work. Also the role of international community in helping post-conflict countries to set its policy priority is not effective; developing better policies, the risk of peace collapse after the civil war in Africa can be minimized. As we discussed before one of the main factors that contribute to the conflict are economic ones, so the government must try to achieve an inclusive economic growth and reduce the inequality in the distribution of national income.

There are many factors that can cause new conflicts in post-conflict situations but the two major factors are the risks coming from the rebel groups and unemployed youth. First, we discuss how post-conflict government can reduce risk of new conflict through military spending. Second, we talk about the role of youth unemployment in the conflict level. One of the policies that the government can reduce the risk of new conflict is to restore the law and order by increasing the military spending but some researchers argue that high military expenditure does not promote peace and recovery but may cause new conflict and they propose reducing the money spent on military because "high military spending by the government in post-conflict societies is counterproductive. It significantly and substantially increases the risk of further conflict. We find that a policy of deep cuts would reduce the risk from around 39% to around 24%. It is not hypothetical: this was precisely the strategy of the post-conflict government of Mozambique. Not only has Mozambique remained at peace, but it has had very fast growth (Collier, 2006, p. 4).

The negative effect of military spending on economic growth and the risk level can be explained by the feeling of worry and uncertainty from rebel groups who signed peace-

agreement with the government because those groups may retake arms and start a new conflict since the increase in the military spending sends a message or the intention of the government to disarm the rebels and not to fulfill the conditions of peace agreements. Also some researchers contend that high military spending causes decrease in public investment in social services and infrastructure because "the buildup of the military/security apparatus is economically and politically costly. Higher military expenditures are associated with depressed social services and underinvestment in public infrastructure" (Collier, 2006, p. 3). According to this view post-conflict government must decrease the level of military spending if its objective is to reduce the risk rate during the peace talks as well as after the peace agreement. Some governments focus on political issue and others try to tackle the economic problems but there is a trade-off between policies that promote growth and those promote peace but economy recovery helps bring risks down in the long-run.

Despite many researchers indicate that low military spending contributes to the economic growth of post-conflict countries, most do not tell the channel through which military expenditure affect the growth rate. But few explain the channel, such Collier (2006, p.4), who states that resources come from reduction in military expenditure can be used to increase growth rates and therefore effectively decrease the risk of internal conflict. He considers development as the best strategy for a safer society.

After the conflict, there are more troops who have no any other skills except military means to get the livelihood and prefer war over peace, so the government must have a plan towards ex-combatants. Some post-conflict countries had successfully implemented DDR (disarmament, demobilizing and reintegration) programs while others still have so many challenges and difficulties in implementing it. For example Rwanda has a success story in its DDR program As Lötscher (2014) indicates that Rwanda's approach to DDR and reconciliation including its applied programs are widely praised for their uniqueness and effectiveness. The peace building processes in Rwanda have been arguably the most successful in Sub-Saharan Africa, and Rwandans today live together in peace and harmony without visible tensions. Therefore, Rwanda can be seen as a positive role model for other post-conflict states that develop and manage peace building processes.

On the other hand, the civil war in Burundi continued for more than 10 years and the international community has helped the government to develop policies to disarm and

reintegrate the ex-combatants. Although Burundi has no high economic transformation like Rwanda but it had successfully implemented the DDR program. Douma & Gasana (2008, p. 6) indicate that the reintegration of ex-combatants started in Burundi at the end of 2004 and was financed largely by the Multi-country Demobilization and Reintegration Program (MDRP). The operation was supervised by the World Bank representing the contributing donor countries. Under the MDRP programs 26000 soldiers and ex-rebels were finally demobilized. The ex-combatants had five options that were to: 1) return to their former jobs; 2) go back to formal education school; 3) engage in vocational training; 4) receive support to start new business and 5) receive income-generating activities (AGA) support. The vast majority of the ex-combatants reintegrated receiving income-generating activities.

So the DDR program is very important for every country coming from years of internal conflict and intends to achieve recovery and sustained development. It is necessary for restoring peace and stability after the conflict and the government must give great considerations in the early times. The failure in this program may cause reversion into new conflict because the ex-combatants must be directed and get livelihood projects that enable them to go back to their normal lives. For example in Mozambique the DDR contributed to the peace building process since "programs provided demobilized soldiers with 18 months of subsidies in the form of cash disbursements and provided a reasonable assurance of financial support for an extended period. During this 18-month period it was hoped that the former combatants would find employment and integrate into the local community. The RSS program also provided vocational kits that consisted of agricultural tools, seeds, and food rations for up to three months" (Edloe, 2007, p. 20).

The second factor that represents a threat to the peace-building process of post-conflict countries is the high youth unemployment rate because the percentage of youth in Africa is very high and over 50% of Rwandan population is under 20 years old. Most of the youth are unemployed ones who have no job opportunities. In general youth unemployment is associated with the conflict level because the unemployed youth can be easily recruited by the rebels in the war during post-conflict situations. According to Azeng et al (2013, p. 4) youth unemployment is significantly associated with an increase of the risk of political instability. They suggest that exceptionally large youth

unemployment rate, associated with socioeconomic inequalities and corruption, make countries more susceptible to political instability and national insecurity.

The international donors and the government should set strategy to create employment opportunities for the youth and all the classes of the society, because when more jobs are created, the expectations of the people will change dramatically. More strategies to surmount youth unemployment are necessary because if unskilled young men can be employed, the rebels do not get the opportunity to recruit them into violence. Indeed, economic growth brings down the risks through offering job opportunities to young men and women. On the other hand, some scholars contend that youth unemployment is not the reason for the conflict and that there are others factors induce the youth to the violence. Amarasuriya et al (2009, p. 6) rejects the concept that youth unemployment caused armed conflict and they argue that such concept can not reflect many factors increasing young people's frustrations and grievances in conflict contexts; and the multiple barriers young people face in entering the job market. It also ignores the fact that youth is highly heterogeneous group with different class, gender, political and geographic lines. Many emphases is needed on country-specific study of the links between youth unemployment and other socio-economic and political factors that contribute to marginalization and discrimination that cause conflict and violence at a more structural level.

#### 2.3.2. The role of domestic investment in promoting the economic growth

Domestic investment is very important for the economic growth of post-conflict countries and the governments should try to increase the share of domestic investment in real gross domestic product. The government of Rwanda developed policies to induce domestic saving and domestic investment to contribute to economic recovery and development of the country. Ocaya et al (2012, p. 79) analyzed the dynamic relationship between GDP and DI using time series data of Rwanda and in the ADF test they found that GDP and DI are non-stationary at level but their first difference is stationary which means that they are integrated at order one. Also they found that GDP and DI are cointegrated which means they have long run relationship. The error correction model establishes that DI adjusts to GDP with a lag. Approximately 0.1528 percent of the discrepancy between long-term and short-term DI is corrected within the year. They found an analysis indicating a unidirectional causality from GDP to DI for

the first two lags with no evidence of causality from DI to GDP. The unidirectional causality suggests that policies initiated towards GDP provide important information for predicting DI in Rwanda.

After the civil war, Rwanda government tried to increase the public and private investment in different sectors such as agriculture, industry and tourism and domestic investment played a major role in the economic growth of Rwanda as result of the government's policies to increase the share of domestic investment in real GDP. Ruranga et al (2014, p. 40) explained this relationship with graphical analysis which has shown that GDP and DI have increased; annual growth of GDP remained high at around 8% in average. The DI as share of GDP has also increased from 7.18% in 1970 to 22.7% in 2011. The target set by the Rwandan Government in achieving an increase of 30% of GDP in 2020 seems achievable although, it may require more effort.

Domestic investment is considered to be crucial factor for the economic growth and recovery of post-conflict countries and the governments must implement policies of capital accumulation and lowering the amount of capital flight. Domestic investment consist public and private investment and both of them are important for enhancing the real gross domestic product. Public investment is the expenditure of the government on public goods such as the construction of infrastructure, education, health, etc. and this investment is necessary for the private investment and the recovery of the countries coming from the civil wars. For instance, infrastructure rehabilitation plays major role in the economic growth of post-conflict countries because "from an economic perspective, infrastructure facilitates economic activity by lowering unit costs, enlarging markets and facilitating trade. In post-conflict settings, infrastructure rehabilitation projects can provide much-needed employment and economic opportunities, with substantial multiplier effects on local communities and the aggregate economy if materials and labor are sourced locally" (J. Ohiorhenuan & Stewart, 2008, p. 51)

The government of Rwanda implemented infrastructure and rehabilitation projects especially in water supply, electricity supply and transport infrastructure. In the year 2000, small percentage of Rwandans could find clean water but the government allocated large portion of its budget in water supply development projects. The number of people who have access to safe water increased because of government efforts, along

with donor support and in 2015 more than 70% of the population had access to water and in 2017, the government plans to increase the percentage to 100%. Also the government spent large amount of money on sanitations since the roads and public places were full of garbage.

In Rwanda electricity supply was generated from power stations on lakes until the early 2000s. The electricity supply from power stations decreased because the two lakes' water level has fallen in 2004 and this came when the demand for electricity was increasing as the economy started to grow and the business and industry sector was very in need for high electricity supply. The government established diesel generators that increased the supply of electricity but the diesel generators were very costly. Also the government rehabilitated certain power stations on lakes to solve the problem of electricity. In 2009, an estimated 28% of the people had access to electricity but in 2017 the government targets 70% of households to get electricity.

The government of Rwanda implemented transport infrastructure projects getting development assistance from donors. It rehabilitated the roads between the capital and other major cities and also built new roads in the country. Rwanda is a landlocked country that is member of East African Community and it is linked by road to these countries. The most important trade route is the road to Mombasa via Kampala and Nairobi and most imported goods come through this road. Also the government implemented the reconstruction of an international airport at Kigali.

One of the early jobs of policy makers is to reduce capital outflows because that resources are essential for the contribution of the economy and "capital flight is a blight that has seriously undermined growth and development in the sub-Saharan region. Reduction of capital flight is essential to increase the resources available in sub-Saharan countries for both consumption and investment, public and private" (Weeks, 2012, p. 14). Reforms in policy and business regulations are needed for minimizing the capital flight as well as attracting more capitals. So the priority of the government must be the repatriation of capitals.

The government must try to prepare the necessary institutional and physical infrastructure to rebuild the financial systems, reduce capital flight and increase capital repatriation, and develop policies that encourage the international community to give and maintain large amounts of aid which is the main source of funding of the reconstruction process in the short to medium term following a civil war.

Also the African Diaspora can contribute more to the peace-building process in their countries if the government and the donors help them participate in the reconstruction and development process. This is absolutely necessary if the objective is to mobilize the financial resources and the human capabilities of the sizeable number of African Diaspora living in the western countries for peace promotion and stabilizing the countries they came from. The government can also increase capital inflows by creating business-friendly environment and encourage the people to invest the country. The private sector investment is very essential for the recovery of post-conflict country. According to Mills & Fan (2006, p. 10), although creating good climate for investment is important in any developing country, it has special importance in post-conflict times for three reasons. First, the private sector generates sustainable employment because job opportunities are very necessary for demobilized ex-combatants, giving them a stake in the peace building process. Second, the private sector takes major role in filling the gap left by the reduced capacity of governments to offer public goods and services in the post-conflict period. Third, these three factors are essential for solving some of the principal 'greed' and 'grievance' issues which increase the probability of reversion to new conflict.

Sources of domestic investment in both Rwanda and Burundi are domestic saving, remittances and government revenues from taxes and foreign aid. Domestic savings are small in Burundi since it is a largely agriculture based country where most people work on subsistence farming and there is no developed banking system that can give credit to the small farmers but the saving performance has been improving since the peace agreement was signed in 2005. Also remittance contribute to the domestic investment because large number of Burundian and Rwandan Diaspora send money back to their families for consumption and investment in small private enterprises and the remittance is one of the main financial flows that these countries finance their trade deficit. Small and vulnerable economy as that of Burundi, remittances represents a very significant part of foreign exchange earnings and it is ranked as the second financial factor for development after official development assistance.

Rwandan government initiated programs encouraging the people to change the saving culture and invested more in financial systems including the banking and capital market system. The people started to save their money in the banks rather than their homes and the banking sector is expending throughout the country. The people who live in urban

areas save more than those who live in rural areas and domestic savings is expected to reach 20% in 2020 while now the rate of saving is about 11%.

## 2.3.3. The effect of foreign aid on real GDP in post-conflict countries

The foreign aid is necessary for post-conflict societies because the war destroys the public and private properties and the life of the people deteriorates after the conflict. Foreign aid is an important financial flow that any post-conflict government in coordination with international donors must set policies to make it effective and efficient for the reconstruction and the development process. The foreign aid mainly comes into two forms which are: humanitarian aid and official development assistance. Although humanitarian aid is required after the war time to save the lives and alleviate the rate of people suffering from man-made disaster but what post-conflict government needs more is official development assistance to restore peace and stability and achieve economic recovery.

Donors can support post-conflict government in restoring law and order, an institutional building and reconstruction of infrastructure. Foreign aid contributed to the economic growth of many post-conflict countries, Mozambique is a prominent example.

Mozambique is clearly a success story in terms of growth and poverty reduction since 1992. We have demonstrated that aid has played a determinant role in making this possible. Without sustained aid at a high level there is no way in which Mozambique would have been able to: (i) establish peace so smoothly; (ii) manage the challenge of postwar stabilization; and (iii) carry out widespread reconstruction. As a result, Mozambique is now in a much stronger position than at independence. Based on the growth accounting carried out in this paper, we conclude that aid-financed government investment in public goods, particularly public infrastructure, education and health; have been fundamental channels through which aid has contributed to development outcomes. Intended outcomes of aid have been largely achieved although its potential contribution to agricultural transformation and development is yet to materialize (Moreira, 2005, p. 1).

There is a debate about the effect of foreign aid on economic growth in Sub-Saharan African countries. Many researchers advocate the role of foreign aid in promoting economic growth but others contend that foreign aid has a negative effect on economic growth and each has reasons to justify. Some studies emphasize the positive impact of aid on growth indicating that "foreign aid has a positive and significant effect on economic activity for each country in the sample. A policy implication which may be

drawn from the study is that foreign capital flows can have a favorable effect on real income by supplementing domestic savings" (Hatemi-J & Irandoust, 2005, p. 71).

Foreign aid has positive effect on growth because it develops both of physical and human capital of many countries. Many schools are funded by aid agencies and these schools provide educated people who supply the labor market and also some aid organizations have vocational training schools and run several health centers. Development aid promotes growth through rehabilitation of infrastructure, budgetary support and institutional building of post-conflict countries and aid has long run relationship with growth, for example Appiah-Konadu et al (2016, p. 248) using the ARDL approach to cointegration (bounds test) to examine both the long run and short run relationships between aid and economic growth. Their results of the bounds test showed that there is cointegration between foreign aid and economic growth in Ghana. This was further confirmed by the error correction term which was very significant and correctly signed. The error correction term showed that the speed of convergence to long run equilibrium is moderate.

On the other hand, the findings of many researchers indicate the existence of negative long run relationship between foreign aid and real gross domestic product, for instance by using cointegration analysis, Mallik (2008, p. 251) have found that a long run relationship exists between per-capita real GDP, aid as a percentage of GDP, investment as a percentage of GDP and openness. However, the long run effect of aid on growth was found to be negative for most of these countries. Post-conflict governments attract aid during the first decade but there are no more success stories of foreign aid in promoting post-conflict economic recovery in Africa. The ineffectiveness of aid in Africa can be attributed to many factors like corruption, mismanagement and lack of incentives from the leaders of those countries. When the leaders have incentives to use the aid properly, development aid plays essential rule for the recovery of their countries since "aid fosters development between 1960 and 1999 when donors disburse aid to a recipient mainly for development and when the recipient lacks access to natural resources. In this scenario, recipients face strong incentives to use the aid productively. In contrast, when a donor disburses aid to achieve a geostrategic goal, or when the recipient has access to alternative income derived from natural resources, the recipient uses aid poorly and development goals remain unmet" (Girod, 2009, p. 1).

Developing new policies and reforming the former fiscal and monetary policy is important for the efficiency and effectiveness of foreign aid because without good policies and strategic plan the foreign aid will not be spent on productive sectors such as rebuilding the infrastructure as Boakye (2008, p. 6) finds that the impact of foreign aid on economic growth in Ghana is significantly negative, and among numerous policy recommendations, he suggested policies which aimed at properly formulating and implementing good monetary and fiscal policies, as aid works effectively in good macroeconomic environment.

Rwanda has many accomplishments in its recovery from the civil war and promoting peace and economic growth and development. Foreign aid has contributed more to the peace-building process in Rwanda since the amount of foreign aid increased significantly because the government started rebuilding the country after the genocide in 1994 and high percentage of government budget comes from foreign aid. Foreign aid came in the form of humanitarian aid during the first five years but after a time the government set development strategy which focus on accelerating economic while benefiting from development assistance. The economy of Rwanda is very sensitive and vulnerable to changes in foreign aid and the growth rate decreased to 4.7% when some donors stopped the aid over allegations that the government backs the rebels DR Congo.

In Burundi, foreign aid has improved the life condition of many people and some aid organizations established microfinance institutions that give support to families in farming activities and starting small business. Also the country received development assistance but due to the poor policies and the governance system, Burundi has not achieved a growth rate that is similar to Rwanda. Structural political reform is necessary before economic reforms in Burundi because low economic growth rate and ineffective foreign aid are associated with the government system that is based on exclusive political institutions. The amount of foreign aid whether it is humanitarian or development assistance has fallen over allegations of human right violations by the government and the cut of foreign aid adversely affected the economic growth of the country.

## 2.3.4. Foreign direct investment and the real GDP

The government must seek other financial flows such as foreign direct investment because domestic investment is not sufficient to promote economic growth in post-conflict situations. Pos-conflict government has to consider the determinants of foreign direct investment such as the risk level, competitiveness in the market, foreign direct investment policies and all the other factors. FDI is one of the main contributor to growth in Sub-Saharan Africa as Todaro & Smith (2013, p. 1) suggest that FDI is an important element in explaining economic performance of Sub Saharan African countries, though to a lesser extent as compared to the other types of capital. Moreover in their study, they confirm the presence of important endogeneity in FDI-growth relationship as FDI is not only seen to lead growth but to follow growth as well.

Although Sub-Saharan African countries receive large amount of financial flows in different forms, still their growth rate is low and they have high unemployment and poverty rate. FDI is one of the financial flows that is attracted by the region but its effect on per capita income is relatively low and many researchers suggest reforming in policies towards FDI Michałowski (2012, p. 687) indicates that FDI inflows into Sub-Saharan Africa spread unevenly across the region showing a high degree of concentration in a few countries. There is mixed evidence regarding FDI impact on economic growth in Sub-Saharan Africa. The Sub-Saharan African countries should strengthen their efforts not only to attract more FDI but also to direct it into more diversified and higher value-added activities.

The production in post-conflict society is traditional one and they have not the necessary capital to increase the level of output; so they need capital inflows from overseas such as foreign direct investments since it contributes to the economic growth. Many researchers found that foreign direct investment to be the important factor in enhancing economic growth of Sub-Saharan African countries. Foreign direct investment has positive effect on economic growth through resource mobilization and skill transfer as Johnson (2006, p. 2) argues that FDI must have a positive effect on economic growth as a result of physical capital and technology inflows. After running both cross-section and panel data analysis on a sample covering 90 countries during the

period 1980 to 2002, the empirical evidence found that FDI inflows promotes economic growth in developing economies but not in developed economies.

In general, foreign direct investment is a very important factor for the economic growth of developing countries and for the post-conflict countries particularly. For that reason fragile states have set policies and reforms to attract FDI, for instance Rwanda had succeeded to attract FDI to enhance its level of production as Malunda (2012, p. 8) incentives for FDI including export processing zones and industrial parks were seen as an important element of the strategy. Partnership of FDIs with Rwandan companies was to be encouraged and stimulating domestic investment was also seen as integral element of the policy. It suggests that investment, including FDI, should enable the diversification of exports and markets, build local processing industries that add value to exports especially in agriculture but also in manufacturing and services. Also investment should provide opportunities for employment in rural areas.

During the first decade, Rwanda was unable to attract more foreign capitals because of the political instability and lack of rules and regulations regarding to FDI. But later the Government has reformed the macroeconomic policies and considered FDI as one of the important potential contributor to the economic growth. It applied low tax on foreign capitals and announced free business registration. Foreign direct investment helped to increase exports as investors started commercial farming and promoted agriculture industry while many people get employment opportunities and they get necessary skills for improving their productivity and production. But some countries could not attract more FDI for many reasons, for example Burundi did not attract more FDI because of the poor governance system and its political and economic instability. According to Ndoricimpa (2014, p. 2031) FDI and exports are not engines of economic growth in Burundi and sources of growth in Burundi are therefore to be searched in other places. Burundian economy is small, so if Burundi wants to attract more foreign direct investment, it must try to improve its governance, political and economic conditions to attract some other type of FDI such as resource-seeking FDI and efficiency-seeking FDI.

Attracting FDI is one of the development strategy of Burundi and the geographical location of the country and its membership in East African Community (EAC) represents an additional benefit for attracting foreign capitals but there are more risks related to investments in Burundi such as high risks of another conflict because the

government is still fragile and poverty rate still remains very high. Additionally, the country experienced political unrest in 2015 after coup attempt failed and many people were killed during the protests against the current president who extended his office term and intends to change the constitution for running third term.

#### CHAPTER THREE

#### 3. RESEARCH METHODOLOGY

#### 3.1. The Model

The model has five variables which hypothesizes that real gross domestic product is a function of domestic investment, foreign aid, foreign direct investment and military expenditure.

$$GDP_t = F(DI_t, Aid_t, FDI_t, MX_t)$$
 (1)

GDP<sub>t</sub> stands for the total monetary value of all goods and services produced within a country's borders in a specific period of time. Data are in constant 2010 U.S. dollars which means the study considers the data of real GDP. Also DI<sub>t</sub> stands for domestic investment that is the amount of public and private capital which is invested in domestic production either through the purchase of fixed property or inventory. In this study gross capital formation is taken as a proxy for domestic investment. Gross capital formation composes of expenditures on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements, plant, machinery, and equipment purchases. Also the building of new roads and railways are included in the fixed assets. Data are in constant 2010 U.S. dollars

Aid<sub>t</sub> stands for foreign aid that is the international transfer of capital, goods, or services in the form of loans or grants from a country or international organization to promote economic development and welfare of the recipient country. Data are in constant 2012 U.S. Dollars. FDI<sub>t</sub> stands for foreign direct investment that refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings, and other capitals. Data are in current U.S. dollars. MX<sub>t</sub> stands for military expenditure that is the total amount of money spent on the military by the government or donors. The data are in constant 2014 U.S. dollars.

The sample consists of 28 observations of annual time series data from 1988 up to 2015. We have considered this time period because it enables us to examine the pre and post-conflict economic conditions of both Rwanda and Burundi; since the genocide in both countries had happened in 1994. The data of domestic investment, foreign aid and foreign direct investment was taken from the World Development Indicators (World Bank). The data of the military spending was taken from the Stockholm International Peace Research Institute (SIPR).

#### 3.2. Stationarity Test

"In short, if a time series is stationary, its mean, variance, and autocovariance (at various lags) remain the same no matter at what point we measure them; that is they are time invariant" (Gujarati & Porter, 2003, p. 798). Testing the stationary of time series data is necessary because it may affect its behavior. If the series of variables are non-stationary, we can study its behavior only for the time period under consideration. It is not possible to generalize it to other time periods. Therefore, for the purpose of forecasting, such (non-stationary) time series may be of little practical value.

If we estimate x and y series that are non-stationary random process, it will generate a spurious regression.

$$Y_t = a + bX_t + u_t \tag{2}$$

Spurious regression provides misleading statistical evidence of a linear relationship between independent non-stationary variables.

There are three conditions for stationarity:

$$E[X_t] = \mu \tag{3}$$

$$Var [X_t] = \sigma^2$$
 (4)

$$Cov (X_t, X_{t+h}) = f(h)$$
(5)

So time series is stationary when its mean and variance are constant over time. We take the difference of the series to make it stationary. Differencing the series generates new set of observations such as the first-differenced variables, the second-differenced variables and so on.

$$X$$
 level  $X_t$ 
 $X$  1<sup>st</sup>-differenced value  $X_{t-1}X_{t-1}$ 
 $X$  2<sup>nd</sup>- difference value  $X_{t-1}X_{t-2}$ 

A series that is stationary at level without differencing it is termed I (0), or integrated of order zero (0). Also a series that is stationary after taking the first difference is designated I (1), or integrated of order one (1). And a series that became stationary after taking the second difference is known I (2), or integrated of order two (2).

Different methods are used to test the stationarity of the variables but Augmented Dickey-Fuller test is used in this study.

#### 3.2.1. Augmented Dickey-Fuller test

Augmented Dickey-Fuller test (ADF) is used to test the null hypothesis of a unit root presence in a time series sample. The alternative hypothesis is that the series are stationary.

The null hypothesis  $H_0 = \delta = 0$ 

The alternative hypothesis  $H_1 = \delta < 0$ 

The ADF test is composed of estimating the following regression:

$$\Delta Y_t = \beta_1 + \beta_{2t} + \delta Y_{t-1} + \sum_{i=1}^{m} \alpha_i \Delta Y_{t-i} + u_t$$
(6)

Where  $\mathbf{u}_t$  is a pure white noise error term and where

$$\Delta Y_{t-1} = (Y_{t-1} - Y_{t-2}), \ \Delta Y_{t-2} = (Y_{t-12} - \Delta Y_{t-3})$$
 (7)

So if a time series has a unit root, the first difference of such time series are stationary. Therefore, the solution here is to take the first difference of the time series.

## 3.3. Testing of Cointegration

Cointegration test is needed because standard regression analysis fails when dealing with non-stationary variables and leads to spurious regression which suggests relationship even where there is no relationship. In non-stationary variables, it is often found high R-squared and low p-values when OLS method is used even though there is no relationship between the non-stationary variables.

In principle, testing for a cointegration is similar to testing the linear regression residuals  $(u_t)$  for stationarity. So, to establish a cointegration relationship, you would run first an OLS regression model for your variables and test the residuals for stationarity.

#### 3.3.1. Johansen cointegration test

The Johansen test deals with testing a cointegration by examining the number of independent linear combination (k) for an M time series variables set that produces a stationary process.

There are two forms of Johansen test: the trace test and the Maximum Eigen value test. Both tests address the Cointegration presence hypothesis, but each asks very different questions.

#### 3.3.1..1. Trace test

The trace test examines the number of linear combinations (i.e. K) to be equal to a given value ( $K_0$ ), and the alternative hypothesis for K to be greater than K0

$$H_0: K = K_0$$

$$H_0: K > K_0$$

To test for the existence of Cointegration using the trace test, we set K0=0 (no cointegration), and examine whether the null hypothesis can be rejected. If we reject the null hypothesis, then it means there is at least one cointegration relationship so we need to reject the null hypothesis to establish the presence of Cointegration between variables.

#### 3.3.1.2. Maximum Eigen-value test

With the Maximum Eigen Value test, as Trace test the same central question is asked but the difference comes from the alternative hypothesis:

$$H_0$$
:  $K = K_0$ 

$$H_0: K = K_{0+1}$$

So, starting with K0 = 0 and rejecting the null hypothesis implies that there is only one possible combination of the non-stationary variables to produce a stationary process.

A special case for using the Maximum Eigen Value test is when K0 = m-1, where rejecting the null hypothesis implies the existence of m possible linear combinations. This is impossible, unless all input time series variables are stationary (I (0)) to start with.

### 3.4. Vector Error Correction Model (VECM)

Vector error correction model (VECM) is used in multiple time series when the variables under consideration are cointegrated. The model is important for estimating both short-term and long-term effects of one time series on another. The error term estimate the speed at which a dependent variable returns to equilibrium after a change in other variables.

When all the variables are stationary at first difference and a cointegration between them is found that means the existence of a long-term equilibrium relationship between the series. In this case, VECM is used to examine the short and long run relationship between the variables.

The regression equation for our VECM will be as follows:

$$\Delta Y_{t} = \delta_{0} + \Sigma^{p}_{i=0} \, \delta_{1} \Delta X_{t\text{-}1} + \Sigma^{k}_{j=1} \, \beta_{1} \Delta Y_{t\text{-}1} - \lambda (Y_{t\text{-}1} - \alpha_{1} - \beta_{1} \, X_{t\text{-}1}) + u_{t} \eqno(8)$$

In this model the cointegration rank shows the number of cointegrating variables. For example, the rank of four indicates that four linearly independent combinations of the non-stationary variables will become stationary. A negative and significant coefficient of the equation means that any short-term fluctuations between the dependent variable and explanatory variables will cause to a stable long run equilibrium relationship between the variables.

#### CHAPTER FOUR

#### 4. RESULTS AND INTERPRETATION

## 4.1. Graphical Analysis

First we do graphical analysis to examine the trends in our variables and try to discuss the reasons behind the trends in the series of the variables in Rwanda and Burundi. Also graphical analysis enables us to compare the economic performance of both countries.

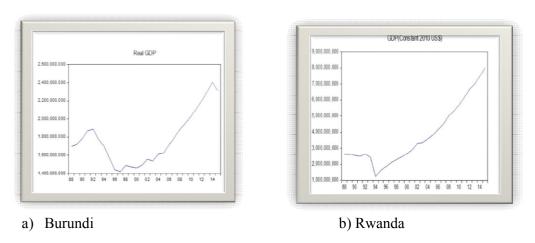


Figure 4.1. Real Gross Domestic Product (RGDP)

According to the figure 4.1. after 1992 the real gross domestic product has sharply fallen in both countries, while Rwanda had experienced its lowest growth rate in 1994 which is the year of genocide. Similarly, Burundi had very low growth rate in 1996 after two years of the genocide. In Rwanda, the real GDP started to rise infinitely after 1994 because at that time the civil war ended with the victory of the RPF (Rwanda Patriotic Front) party led by the current president Paul Kagame and after political reconciliations; they developed policy reforms for economic transformation. After two decades, Rwanda achieved high economic growth because in 1995 the growth rate was 3.5% but in 2010 the growth became 7%.

In Burundi, since 1997 the real GDP has been increasing but at decreasing rate until 2005 because the civil war lasted up to 2005. After 2005, the growth rate started to increase extensively because the country maintained relative political stability but again growth rate has fallen in 2015 because of political instability since a coup attempt failed and the country is experiencing a political unrest.

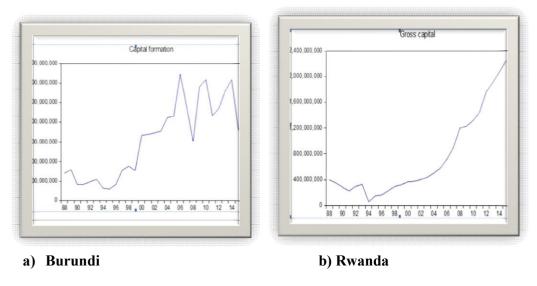


Figure 4.2. Domestic Investment (DI)

For Burundi, domestic investment has been fluctuating since 1990s. From the years 1988 up to 2000, domestic investment rate was low but it began to increase after the year 2000 reaching its maximum level in 2006. After the peace agreement in 2005 the government and the donors implemented useful development projects such as infrastructure rehabilitation and institutional building. In 2008 the rate of domestic investment decreased and it can be associated with the economic recession in 2008 that badly affected the economy of European countries since the source of some of these capitals was from the financial support of European Union. Also after 2014, domestic investment started to fall because of the political turmoil in the country.

In Rwanda, in 1994 domestic investment recorded its lowest rate because of a severe conflict and genocide in that year but after this year the country maintained high political stability and domestic investment has been increasing extensively.

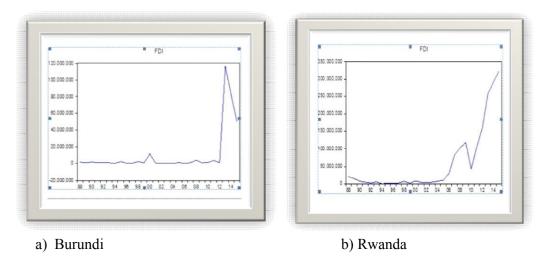


Figure 4.3 Foreign Direct Investments (FDI)

In Burundi, foreign direct investment was very low from 1988 up to 2012; the country could not attract more foreign capitals because of its long term internal conflict and poor governance system but the FDI had risen in the period between 2012 and 2014. We see 99% increase in FDI in 2013 but in 2014 FDI recorded 29% decrease and the fall in FDI is attributed to the violence started in the country at late 2014 and the coup attempt in 2015.

For Rwanda, foreign direct investment was close to zero from 1991 up to 2005 but FDI has risen after 2005 where FDI has increased 14% which was a high percentage in 2009. In 2010 FDI again decreased to 6% but after that it has been increasing significantly.

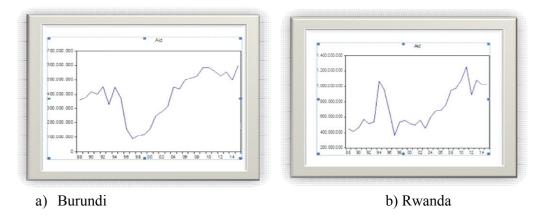


Figure 4.4. Foreign aid

The figure shows that foreign aid has recorded low rate between 1997 and 2000 and then large amount of aid was given to Burundi and mostly the foreign aid in Burundi was in the form of humanitarian. In Rwanda, the figure shows fluctuations in the amounts of foreign aid, in 1994 the amount of foreign aid has reached its maximum level because at this year the civil war ended and donors started to give more humanitarian aid and development assistance to Rwanda.

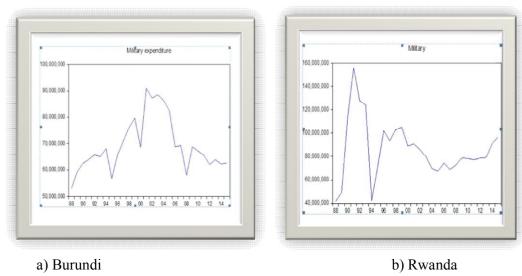


Figure 4.5. Military Expenditure

The figure 4.5 shows that there was a high military expenditure in Rwanda between the years of 1988 and 1994 because Rwanda experienced its civil war during that time period and the military variable has been fluctuating from 1994 to 2004 with decreasing rate and then military expenditure has low steady-state level.

In Burundi, despite the military expenditure variable has been fluctuating all over the time, the figure shows that the government increased its military spending between 1995 up to 2008 because the civil war period lasted from 1990s up to the 2005. So the government allocated large amount of money to military expenditures but after that the level of military expenditure has been reduced.

### 4.2. Stationarity Test Results

The stationarity of the variables is checked to know if the series have the same mean and variance over time. Several tests are used for checking the stationarity of the time series but in this study ADF (Augmented Dickey-Fuller) test is used for unit root test.

## 4.2.1. Augmented Dickey-Fuller test

Table 4.1 below shows that at level the null hypothesis that all variables have a unit root can not be rejected since the p value is greater than 5% and this means they are non-stationary at level. After taking the first difference, all variables become stationary since the p value is less than 5%. The lag length is zero for real GDP, foreign aid, foreign direct investment and for gross capital formation but the lag length is three for military expenditure.

**Table 4.1.** Unit Root Test for the series of Rwanda based on Augmented Dickey-Fuller test and Lag Length Base on Schwartz Bayesian Information Criterion.

Variable	Level I(0)	First difference I(1)	Lag length
Real GDP	1.825868	-5.390170	I(1)
	(0.9995)	(0.0009)	0
Aid	-1.779428	-5.657787	I(1)
	(0.3821)	(0.0001)	0
Cross capital	3.496026	-3.764662	I(1)
	(1.0000)	(0.0088)	0
FDI	3.313691	-3.346802	I(1)
	(1.0000)	(0.0029)	0
Military	-0.642825	-6.131917	I(1)
expenditure	(0.4286)	(0.0000)	3

Table 4.2. shows at the level I (0) the null hypothesis that all variables have unit root can not be rejected since the p value is greater than 5 percent but all of the variables become stationary after taking the first difference I (1). The lag length is zero for real GDP, foreign aid, foreign direct investment and for military expenditure but the lag length is one for gross capital formation.

**Table 4.2.** Unit root test for the series of Burundi based on Augmented Dickey-Fuller test and Lag Length Based on Schwartz Bayesian Information Criterion.

Variable	Level I(0)	First difference I(1)	Lag length
Real GDP	-1.197581	-2.394534	I(1)
	(0.6597)	(0.0188)	0
Aid	-0.881498	-4.742465	I(1)
	(0.7785)	(0.0008)	0
Cross capital	-0.700020	-7.284928	I(1)
	(0.8291)	(0.0000)	1
FDI	-2.309430	-6.023868	I(1)
	(0.1763)	(0.0000)	0
Military	-2.123618	-6.589416	I(1)
expenditure	(0.2375)	(0.0000)	0

## 4.3. Cointegration Testing

Cointegration test is conducted to examine the long term equilibrium relationship between the variables.

# 4.3.1. Johansen cointegration (Rwanda)

This study adopted Johansen Cointegration test and as in the table 4.3 both Trace and Maximum Eigen Value test indicate the null hypothesis that there is no long term relationship among variables can be rejected since the P value is less 5%. In contrast, both Trace and maximum Eigen Value test show that at most four variables are cointegrated since their P value are greater than 5%. So all the variables are co integrated and have equilibrium relationship in the long run.

Table 4.3. Johansen Cointegration test for the series of Rwanda

Hypothized		Trace	0.05	
No. Cointegration	Eigen value	Statistics	Critical value	Prob.
None	0.791881	82.19397	69.81889	0.0037
At Most 1	0.608772	41.38318	47.85613	0.1768
At Most 2	0.355357	16.98309	29.79707	0.6413
At Most 3	0.147129	5.567572	15.49471	0.7459
At Most 4	0.053506	1.429762	3.841466	0.2318
Unrestri	cted Cointegration	n Rank Test (Maxi	mum Eigenvalue)	
Uzmothizad		`	,	
Hypothized		Maximum-Eigen	0.05	D., . 1.
Hypothized No. Cointegration	Eigen value	`	,	Prob.
V 1		Maximum-Eigen	0.05 Critical	Prob. 0.0064
No. Cointegration	Eigen value	Maximum-Eigen Statistics	0.05 Critical value	
No. Cointegration  None	Eigen value 0.791881	Maximum-Eigen Statistics 40.81079	0.05 Critical value 33.87687	0.0064
No. Cointegration  None  At Most 1	Eigen value  0.791881  0.608772	Maximum-Eigen Statistics 40.81079 24.40008	0.05 Critical value 33.87687 27.58434	0.0064 0.1214

### 4.3.2. Johansen cointegration (Burundi)

Cointegration test is conducted to examine if the variables have long term equilibrium relationship. As the table 4.4 shows this study adopted Johansen test and according to the trace and Maximum Eigen Value test we can reject the null hypothesis that there is no long term relationship among variables since the P value is less 5%. In contrast we found that at most four variables are cointegrated since the P value is greater than 5% in both trace and maximum Eigen-value test. So all the variables are cointegrated and have long term equilibrium relationship.

Table 4.4. Johansen Cointegration test for the series of Burundi

	Unrestricted	Cointegration Ran	k Test (Trace)	
Hypothized		Trace	0.05	
No. Cointegration	Eigen value	Statistic	Critical Value	Prob.
None	0.833465	113.8595	88.80380	0.0003
At most 1	0.682476	67.25317	63.87610	0.2253
At most 2	0.472488	37.42590	42.91525	0.1589
At most 3	0.420430	20.79671	25.87211	0.1882
At most 4	0.224622	6.614510	12.51798	0.3864
TT .1: 1		1. f ·	0.05	
Un	restricted Cointeg	gration Rank Test (	Maximum Eigenva	lue)
Hypothized		Maximum-Eeigen	0.05	
Hypothized  No. Cointegration	Eigen value	Maximum-Eeigen Statistic	0.05 Critical Value	Prob.
No. Cointegration	Eigen value 0.791881	Ţ.		Prob. 0.0064
No. Cointegration  None		Statistic	Critical Value	
No. Cointegration  None  At most 1	0.791881	Statistic 40.81079	Critical Value 40.81079	0.0064
	0.791881	Statistic 40.81079 24.40008	Critical Value 40.81079 27.58434	0.0064

## 4.4. Lag Length Determination of The Model

Var lag order selection criteria is used to determine optimal lags in the Vector Error Correction Model (VECM). Var lag order selection criteria shows the maximum lags by comparing different criteria such as Akaike information critera and Schwarz information criterion. The table shows that one lag is optimal for the Vector Error Correction model since four criterions selected one lag. So the study uses one lag for the Vector Error Correction Model.

Table 4.5. Var Lag Order Selection Criteria

	Rwanda		
	Lag		
	0	1	2
LogL	-2587.742	-2498.883	-2471.464
LR	NA	136.7066*	31.63782
FPE	2.85e+80	2.18e+78*	2.31e+78
AIC	199.4417	194.5295	194.3434*
SC	199.6837	195.9811*	197.0047
НС	199.5114	199.5114	195.1097
	Burundi		
	Lag		
	0	1	2
LogL	2502.476	-2430.041	-2403.886
LR	NA	111.4383*	30.17909
FPE	4.03e+77	1.09e+76*	1.27e+76
AIC	192.8828	189.2340	189.1451*
SC	193.1247	190.6856*	191.8065
НС	192.9525	189.6520*	189.9115

<sup>\*</sup>indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

### 4.5. Vector Error Correction Model (VECM)

Since the variables are integrated at order I (1) and all the series are cointegrated; a Vector Error Correction model is used to look at the short run and short run relationship between the variables.

#### 4.5.1. VECM (Vector Error Correction Model) for Rwanda

VECM equation composses of two parts: the first part deals with the long run causality while the second part is about the short run causality and the C(1) is the error correction term, also it is known as the speed of adjustment towards equilibrium and it is the coefficient of cointegrating model.

The coefficient of the cointegrating model C(1) is negative and statistically significant because the p value is less than 5 percent (5%) and this means that there is a long-run causality running from gross domestic investment, foreign direct investment, foreign aid and military expenditure to real gross domestic product.

According to the short run relationship: the table 4.6 shows that the coefficients of gross capital formation, foreign direct investment and foreign aid have significant positive effect on real gross product and we can say that there is a short run causality running from those three variables to real gross domestic product. They have significant effect because their p values are less than 5% which is the critical value for rejecting the null hypothesis.

Also the table 4.6 shows that the coefficient of military expenditure has no significant effect on the real GDP, we cannot reject the null-hypothesis since its p value is great than 5% level. So there is no short run causality running from military expenditure to real GDP in Rwanda

Table 4.6. Vector Error Correction Model for Rwanda

		Coefficient	St	td. Error	t-S	Statistic	Prob.
C(1)		-0.084406	(	0.148030	-(	.570195	0.0052
C(2)		0.890990	(	0.444478	2	.004575	0.0095
C(3)		1.552513	,	1.334217	-1	.163614	0.0310
C(4)		2.433944	2	2.592696	C	.938769	0.0216
C(5)		0.667870	(	0.485674	1	.375141	0.0051
C(6)		-3.259489	(	3.474168	-(	.938207	0.3599
C(7)		-3.259489	8	4347238	1	.259180	0.2232
R-squared	•	0.875	511	Me	an		2.07E+08
				de	pendent var		
Sum squared	d resid	2.19E	+18		hwarz terion	4	42.68596
F-statistic		1.204	229		rbin- atson stat	2	2.167350
Prob(F-statis	itic)	0.346	514		aike info terion	4	42.34724

# 4.5.2. VECM (Vector error correction model) Burundi

There is a long-run causality running gross capital formation, FDI, foreign aid and military expenditure to real gross domestic product since the coefficient of cointegrating model is negative and significant.

For the short run relationship: there is a short run causality running from foreign direct investment, foreign aid and military expenditure to real gross domestic product but there is no short causality coming from capital formation to real GDP since the coefficient of capital formation is statistically insignificant.

Table 4.7. VECM for the time series of Burundi

		Coefficient	St	td. Error	t-	Statistic	Prob.
C(1)		-0.254547	(	0.058011		4.387888	0.0003
C(2)		0.687714	(	0.154383	4	4.454607	0.0003
C(3)		-0.079232	(	0.097463	-(	0.812949	0.4263
C(4)		1.351869	(	0.430972	;	3.136793	0.0054
C(5)		-0.338734	(	0.154489	T	2.192608	0.0410
C(6)		3.727633	•	1.399006		2.664488	0.0153
C(7)		1747320	1	0531169		0.165919	0.8700
R-squared		0.689	111		an pendent va		22636949
Sum squared	d resid	4.52E	+16		hwarz terion	;	38.46731
F-statistic		7.019	187		rbin- atson stat	:	2.123456
Prob(F-statis	itic)	0.000	472		aike info terion	,	42.34724

## 4.6. Granger Causality Test

Granger Causality test is used to know the direction of the causality because Vector Error Correction model does not show the direction of the effect. Granger Causality test gives the direction of the effect and whether there is a unidirectional or bidirectional effect.

# 4.6.1. Granger causality test for Rwanda series

According to Granger causality test in Rwanda: Domestic investment Granger causes real GDP at 5% significance level and there is unidirectional causality coming foreign aid to real gross domestic product in Rwanda. Also there is unidirectional effect coming from real GDP to foreign aid and foreign direct investment. For explanatory variables, domestic investment Granger causes foreign aid and foreign direct investment.

**Table 4.8.** Granger Causality for Rwanda

Null Hypothesis	F-Statistic	Prob.
Domestic investment does not Granger Cause GDP	0.00707	0.0337
GDP does not Granger Cause Domestic investment	2.34224	0.1390
AID does not Granger Cause GDP	3.03590	0.0042
GDP does not Granger Cause AID	5.01571	0.0346
FDI does not Granger Cause GDP	0.00412	0.9494
GDP does not Granger Cause FDI	7.38559	0.0120
Military does not Granger Cause GDP	3.95617	0.0582
GDP does not Granger Cause Military	0.38683	0.5398
AID does not Granger Cause Domestic Investment	3.04027	0.0940
Domestic investment does not Granger Cause AID	5.51899	0.0940
FDI does not Granger Cause Domestic Investment	0.50111	0.4858
Domestic investment does not Granger Cause FDI	10.1357	0.0040
Military does not Granger Cause domestic investment	0.84522	0.3671
Domestic investment does not Granger Cause Military	0.25594	0.6175
FDI does not Granger Cause AID	1.98515	0.1717
AID does not Granger FDI	1.22609	0.2791
Military does not Granger Cause AID	0.11723	0.7350
AID does not Granger Cause Military	0.12760	0.7241
Military does not Granger Cause FDI	0.15257	0.6995
FDI does not Granger Cause Military	0.00050	0.9823

## 4.6.2. Granger causality test for Burundi series

The table show that GDP granger cause foreign direct investment and military expenditure. Domestic investment granger cause real gross domestic product and military expenditure since their p-values are less than 5% level.

Also foreign aid granger cause military expenditure and its p-value is less than 5% critical level. On the other variables, all other variables does not Granger Cause the remaining ones since their p-values are greater than 5% level so we can not reject the null-hypothesis.

**Table 4.9.** Granger Causality for the series of Burundi

Null Hypothesis	F-Statistic	Prob.
Domestic investment does not Granger Cause GDP	9.02195	0.0062
GDP does not Granger Cause Domestic investment	0.37548	0.5458
AID does not Granger Cause GDP	1.04312	0.3173
GDP does not Granger Cause AID	1.01626	0.3235
FDI does not Granger Cause GDP	0.19243	0.6648
GDP does not Granger Cause FDI	5.71326	0.0250
Military does not Granger Cause GDP	1.20188	0.2838
GDP does not Granger Cause Military	4.72642	0.0398
AID does not Granger Cause Domestic Investment	0.00940	0.9236
Domestic investment does not Granger Cause AID	5.25913	0.0309
FDI does not Granger Cause Domestic Investment	0.11878	0.7334
Domestic investment does not Granger Cause FDI	0.94524	0.3406
Military does not Granger Cause domestic investment	1.12840	0.2987
Domestic investment does not Granger Cause Military	0.48547	0.4927
FDI does not Granger Cause AID	0.07195	0.7908
AID does not Granger FDI	0.99982	0.3273
Military does not Granger Cause AID	1.72636	0.2013
AID does not Granger Cause Military	8.14887	0.0087
Military does not Granger Cause FDI	0.42939	0.5185
FDI does not Granger Cause Military	0.14745	0.7044

# 4.7. Checking Serial Correlation

Serial correlation is detected to examine the relationship between the independent variables and the stated hypothesis that there is no serial correlation between the explanatory variables.

#### 4.7.1. Serial correlation detection for Burundi

Serial correlation is checked using Breusch-Godfrey Serial Correlation LM Test to look if there is serial correlation between the variables and we cannot reject the null hypothesis that there is no serial correlation between variable.

Table 4.10. Breusch-Godfrey Serial Correlation LM Test for the variables of Burundi

F-statistic	0.305129	Prob. F(1,18)	0.5875
Ob*R-squared	0.433395	Prob. Chi-Square(1)	0.5103

#### 4.7.2. Serial correlation detection for Rwanda

Serial correlation is also checked by using Breusch-Godfrey Serial Correlation LM Test to look if there is serial correlation between the variables and the table shows that the null hypothesis cannot be rejected which means there is no serial correlation between the variables.

Table 4.11. Breusch-Godfrey Serial Correlation LM Test for the variables of Rwanda

F-statistic	0.960664	Prob. F(1,18)	0.3400
Ob*R-squared	1.317320	Prob. Chi-Square(1)	0.2511

# 4.8. Checking Heteroskedasticity

# 4.8.1. Checking heteroskedasticity for Rwanda

Hetroskedasticity (which means differenent variance) is checked using Heteroskedasticity Test: Breusch-Pagan-Godfrey. The null hypothesis is that there is no hetroskedasticity and the alternative hypothesis is that at least one variable has hetroskedasticity problem. The table shows that the null hypothesis can not be rejected since the probality value is greater than 5% level. So the Vector Error Correction Model used in this study has no hetroskedasticity problem.

Table 4.12. Heteroskedasticity Test: Breusch-Pagan-Godfrey for Rwanda

F-statistic	0.731344	Prob. F(10,15)	0.6864
Ob*R-squared	8.521741	Prob. Chi-Square(10)	0.5780
Scaled explained SS	17.37577	Prob. Chi-Square(10)	0.0665

### 4.8.2. Checking heteroskedasticity for Burundi

 Table 4.13. Heteroskedasticity Test: Breusch-Pagan-Godfrey for Burundi

F-statistic	0.275524	Prob. F(10,15)	0.9774
Ob*R-squared	4.034652	Prob. Chi-Square(10)	0.9458
Scaled explained SS	1.269878	Prob. Chi-Square(10)	0.9995

Also for the time series of Burundi, heteroskedasticity is detected using Heteroskedasticity Test: Breusch-Pagan-Godfrey. The null hypothesis can not be rejected since the probality value of the chi-square is greater than 5% level. So the VECM model used in this study has the same variance over time and there is no hetroskedasticity problem.

### 4.9. Cusum Test

The stability of the model is checked using Cusum test and as the figure shows the model is stable since the blue line which represents the dependent variable is between the two red-lines

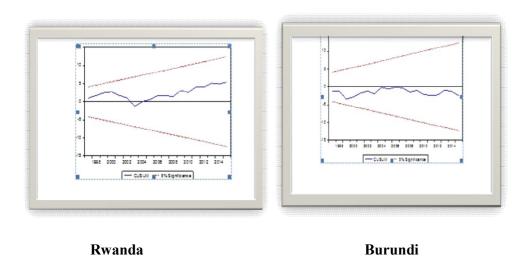


Figure 4.6. Checking stability of the model using Cusum test

## 4.10. Impulse Response

Impulse Response is used to know the change in the dependent variables when one standard shock is given to one of the explanatory variables.

# 4.10.1. The results of impulse response for the series of Rwanda

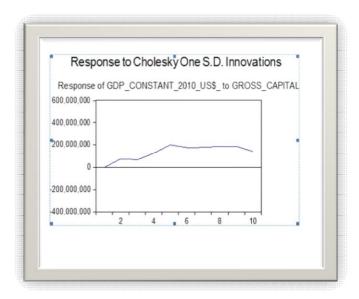


Figure 4.7. Impulse response of Real GDP to changes in Domestic investment in Rwanda

Interpretation of impulse response:

For real GDP, first response of real GDP to gross capital formation, where a shock is given, Gross capital formation is affecting real GDP in the future starting from origin to 10 years, at first, it has positive impact reaching maximum at 5 years then falling after that.

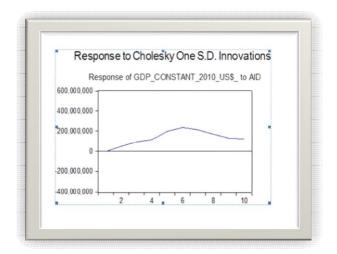


Figure 4.8. Impulse response of Real GDP to change in foreign aid

If we look the response of real gross domestic product to foreign aid in Rwanda, where there is a shock is given, the effect of foreign aid to real GDP extends to the future up to 10 years. At first real GDP rises and at the sixth year reaches the maximum level then falls gradually.

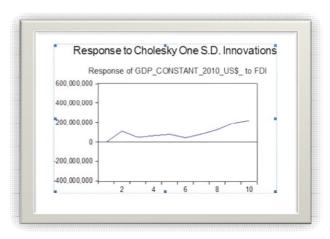
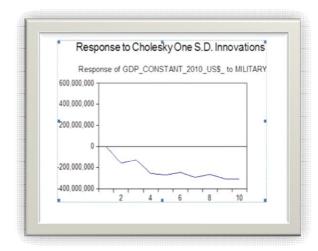


Figure 4.9. Impulse response of Real GDP to one standard shock in FDI in Rwanda

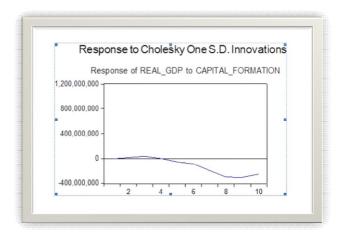
When we examine the response of real gross domestic product to foreign direct investment, after one standard deviation shock is given to FDI, the length of FDI's effect in the future is up to 10 years. The reaction in real GDP to the change in FDI is rising at the beginning but at 2<sup>nd</sup> year falls then continues at the steady state but after the sixth year it rises again indefinitely.



**Figure 4.10.** Impulse response of Real GDP to changes in Military expenditures in Rwanda

If we examine the response of real GDP to military expenditure, when there is one standard deviation shock is given, the impact of military spending on real GDP extends up to 10 years and real GDP negatively responses to the change in military spending throughout the time period. This finding agrees with the findings of many researches that contend instead of allocating public resources to growth accelerating activities, many post-conflict governments allocate high percentage of its budget to military expenditure.

### 4.10.2. The results of impulse response for the series of Burundi



**Figure 4.11.** Impulse response of Real GDP to changes in Domestic investment in Burund

In Burundi, when we look at the response of real gross domestic product to gross capital formation, after one standard deviation shock is given to gross capital formation, gross capital formation is affecting real GDP in the future starting from zero up to 10 years period. The reaction in real GDP to the change in gross capital formation is slightly rising at the beginning but falls within short time period and at 3<sup>rd</sup> year reaches zero then falls below zero level indicating negative effect throughout the time period.

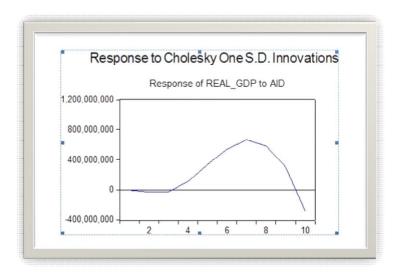


Figure 4.12. Impulse response of Real GDP to change in foreign aid in Burundi

The impulse response of real GDP to foreign aid: figure 4.12 shows the response of real gross domestic product to change in foreign aid, when one standard deviation shock is given. Foreign aid affects real gross domestic product in the future and initially the response of real GDP to foreign aid is negative but at the third year the effect of foreign aid on real GDP increases while it reaches its maximum level at seventh year then starts to fall for the following years indicating negative effect.

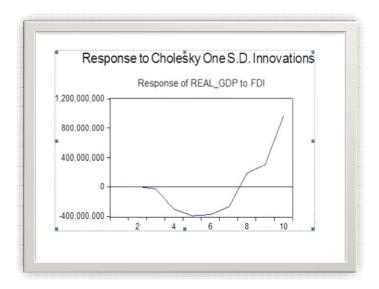
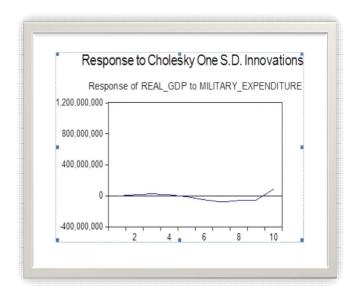


Figure 4.13. Impulse response of Real GDP to one standard shock in FDI in Burundi

The response of real GDP to shock in foreign direct investment (FDI) is negative and falls up to the fifth year but it starts to rise gradually till it becomes zero and after that the effect of foreign direct investment on real GDP in Burundi increases significantly.



**Figure 4.14.** Impulse response of Real GDP to changes in Military expenditures in Burundi

When we look at the response of real GDP to military spending, when one standard deviation shock is given, the effect of military spending on real GDP is almost is zero and even becomes negative after the fifth year but it again becomes zero. So military spending has no major effect on real GDP in Burundi throughout the ten years period.

#### **CHAPTER FIVE**

#### 5. FINDINGS, DISCUSSIONS AND RECOMMENDATIONS

#### 5.1. Findings

The stationarity of the variables are checked for Rwanda using Augmented Dickey-fuller test and all the series became stationary after taking the first difference which means that variables are integrated at order one or I (1), similarly the stationarity of the series is tested for Burundi and all the variables became stationary after taking their first differences I (1). Also the cointegration of the variables is checked using Johansen cointegration test for the series of Rwanda and Burundi to look at the long term relationship between the variables. It is found that at most four variables are cointegrated since the null-hypothesis cannot be rejected.

Vector Error Correction Model is used to look at the long run and short run relationship between the variables since the series are stationary at I (1) and they are all cointegrated. According to the results of VECM model, in Rwanda, it is found that there is a long term causality running from domestic investment, foreign aid, foreign direct investment and military expenditure to real gross domestic product. Also in the short run, it is found that there is a short term positive effect coming from domestic investment, foreign aid and foreign direct investment to real gross domestic product and the coefficients of those three variables were statistically significant since their p values were less than 5% level. On the other hand, the study found that military expenditure has no significant effect on economic recovery in the short run.

In Burundi, there is a long term relationship between economic recovery and the explanatory variables namely domestic investment, foreign aid, foreign direct investment and military expenditure. Also there is a short run causality coming from foreign aid, foreign direct investment and military expenditure to economic growth but there is no short term relationship between domestic investment and real gross domestic product. Domestic investment contributes less to real GDP for the case of Burundi because of the political instability, poor infrastructure and lack of effective economic policies.

According to the results of Granger Causality test, for Burundi real GDP Granger causes foreign direct investment at 5% significance level and this means that high real

GDP rate attracts more foreign direct investment since investors prefers to invest in fast growing economies.

Real GDP Granger causes military expenditure; the money spent on military spending increases whenever a country experience economic booming and achieve high real GDP. Domestic investment Granger causes real GDP because in the short run domestic investment contributed to the economic growth of Burundi and domestic investments in agriculture sector plays major role in promoting the economic growth of the country. Also there is unidirectional effect running from domestic investment to military expenditure. The government finances its military expenditures from the taxes and the taxes mainly depend on domestic product therefore military expenditures increase when the domestic investments increase. There is a unidirectional causality coming from foreign direct investment to military expenditure and the effect of FDI on military expenditure comes from the tax revenue collection.

On the other hand, for Rwanda domestic investment Granger causes real GDP at 5% significance level. The causality running from domestic investment to real GDP is not surprising result since the government of Rwanda maintained political stability and developed policies for capital accumulation and successfully created business-friendly environment. There is unidirectional causality coming foreign aid to real gross domestic product in Rwanda and this can be attributed to the development projects implemented by donors in Rwanda after the civil war and also foreign aid still offers supplementary budget to the government and contributes more to the economy. Real GDP Granger causes foreign aid and foreign direct investment in Rwanda. Finally Granger causality between the explanatory variables is tested to examine direction of the effects among them. Domestic investment Granger causes foreign aid at 5% significance level and this causality can be interpreted positive relationship between development assistance and domestic investment. Also there is unidirectional causality coming from domestic investment to foreign direct investment.

#### 5.2. Discussions

Our first objective was how post-conflict government can reduce the risk of new conflict and there is a debate about the effect of military spending on the economic recovery in post-conflict situations. Many scholars advocate high military expenditure after the conflict period because of the high possibility of a new conflict. They suggest

that the government should increase the amount of the budget for the military in order to disarm the rebel groups and restore law and order in all over the country. In contrast, many researchers found that military spending negatively affects the economic growth in post-conflict situations because the government diverts large amount of money to the military instead of using these public resources for promoting growth and recovery. The study found that military expenditure has significant long run relationship with the real gross domestic product in Rwanda and from the impulse response, real GDP negatively responds to changes in military expenditure. Since 1994 the government of Rwanda took the policy of reducing military expenditure and lowering the unemployment level.

Collier (2006) indicates that high military expenditure is related to low social services and underinvestment in public infrastructure and he suggests reduction in military expenditure since the resources released by decreasing military spending can be used to increase growth and in turn growth will reduce the risk of internal conflict. Also African-Bank (2008) supports the negative relationship between military expenditure and recovery since their research work revealed that there is a trade-off between policies that promote growth and those that promote peace.

Domestic investment positively affects real growth domestic product and it significantly contributes to the economic growth in Rwanda. After the civil war, the government has done macroeconomic reforms including improving public infrastructure and developing private sector. The construction of new roads, improvement in electricity and water and better telecommunication services promoted the business activities across the country. Also the government created business-friendly environment through its regulations and tax system.

Rwandan government in coordination with donors set its policy priorities for post-conflict recovery and foreign aid represented the engine for economic growth and development in Rwanda. Foreign aid mainly was in the form of development assistance. The government urged huge investment in the important sectors such as infrastructure rehabilitation, institutional building and budget support. After a decade, high growth rate, improved GDP per capita and fall in unemployment rate were the results of large foreign aid offered to the fragile government of Rwanda. In other hand, Burundi was offered large amount of foreign aid that relatively contributed to the

economic growth and it facilitated the improvement in the livelihood of many people but compared to Rwanda aid didn't increase the growth rate significantly.

At the beginning, in Rwanda, foreign direct investment had little effect on economic growth because the government could not attract more FDI due to the political instability and uncertainty of volatile environment. The government has announced that the country is open for investment by reforming its business laws and giving incentives to the foreign investors such as low taxes and low business registration fees and after these reforms, more foreign investors started to invest in the agriculture and the industry sector and then more FDI came to country increasing export level. In Burundi the FDI flow is low compared to Rwanda because of many factors including political instability, poor institutions and governance and ineffective economic policies.

#### 5.3. Conclusion

This study tried to investigate the economic policies for post-conflict recovery by comparing the role of policy reforms made by the governments of Rwanda and Burundi to end the conflict and enhance the economic growth and development. A sample of 28 time series observations from 1988 up to 2015 was taken to examine the performance of the economy before and after the genocide happened in the two countries. The primary objectives of the study were to identify the role of military expenditure in reducing the risk of new conflict and promoting the economic growth and examine the contribution of internal and external financial flows to the economic recovery of the two countries.

The result from Vector Error Correction Model indicates that domestic investment, foreign aid, foreign direct investment and military expenditure have long run significant effect on economic growth of Burundi and Rwanda. In the short run military expenditure has no any effect on the real GDP in Rwanda but it has significant positive effect on economic growth in Burundi. Also domestic investment does not promote the economic growth and recovery of Burundi. Also Granger causality test is used to know the direction of the effect (whether the effect is unidirectional or bidirectional one) since the VECM model does not show the direction of the effect of the variables. For Burundi it is found that domestic investment Granger causes real GDP and military expenditure. GDP Granger causes foreign direct investment and military expenditure. Also there is unidirectional effect coming from foreign direct investment to real GDP.

On the other hand, for Rwanda domestic investment Granger causes real GDP at 5% significance level and there is unidirectional causality coming foreign aid to real gross domestic product in Rwanda. Also there is unidirectional effect coming from real GDP to foreign aid and foreign direct investment. For explanatory variables, domestic investment Granger causes foreign aid and foreign direct investment.

#### **5.4. Recommendations**

#### **5.4.1. Recommendations for change**

Policies to reduce foreign aid dependency and increase internal revenue are needed to achieve sustainable recovery and development. The economies of Rwanda and Burundi are highly vulnerable to changes in foreign aid since most of government expenditures are financed from the development assistance of donor. The governments must try to find internal financial sources that contribute to the economic growth because foreign aid flows are not reliable in the long run and also post-conflict countries do not get the aid on timely basis since international community requires certain criteria to be fulfilled to get financial support such as loans and grants. One of the ways to increase the internal revenue is reforming the tax system. For instance, the government can increase the revenue from taxes by increasing the tax rate, expanding the tax base and levying new taxes.

To reduce the risk of conflict renewal the study recommends policy makers to reduce military expenditure in Rwanda and Burundi and increase investments in human capital especially in education and skills training programs since investment in human capital will increase the labor supply and enhance the productivity. Instead of high military expenditure, investments in both physical and human capitals are necessary for increasing exports particularly tea and coffee exports because high military expenditures cause underinvestment in productive sectors and low domestic product. Also in order to reduce the risk of new conflict the study recommends creating job opportunities for youth because high percentage of the population is youth under 20 years old and youth unemployment is very high in both countries. The unemployed youth can be recruited for violence and new conflict.

The governments should develop policies to increase domestic investment because it is the only way to create sustainable economic growth and development. Public investments like building new roads, power generators, dam construction etc are necessary for encouraging domestic investment and stimulating economic growth. Business-friendly environment must be created for private sector development and laws and regulations protecting the property rights must be enacted. Saving culture must be promoted because the saving rate is very low in both countries since the majority of the people generate their incomes from subsistence agriculture. Domestic savings contribute more to the domestic investment if the people deposit their money in bank accounts instead of traditional saving methods. Depositing in banking accounts provide credit to the private business and increase domestic investment. Also the government (using its own macroeconomic policies) must protect local business from foreign companies with monopoly power and also give subsidies to the farmers. Also the governments in coordination with donors must develop policies to offer free education to the people because illiteracy is part of the problem since uneducated people prefer war over peace and peace and development come when many people get the opportunity for education.

Domestic investment is not sufficient for promoting economic growth and policies to attract external financial capitals are needed because foreign direct investment is low in Burundi and it is not in the desired level in Rwanda. So the governments of Rwanda and Burundi must set policies that encourage foreign investors such as:

- ✓ Reducing risks related to FDI such as security risk in Burundi
- ✓ Supplying skilled labor with low wage
- ✓ Drafting business laws and regulation that protect foreign property
- ✓ Reforming the tax systems and business registration procedures

# **5.4.2.** Recommendations for further study

The study suggests the following topics to be investigated in detail:

- > The role of financial management system in fighting corruption in post-conflict situations
- ➤ How inclusive political and economic institutions can be established in postconflict situations?
- ➤ How domestic product can be increased in post-conflict countries?
- > Good governance and economic recovery in post-conflict countries.

#### REFERENCES

- Amarasuriya, H., Gündüz, C., & Mayer, M. (2009). Sri Lanka: Rethinking the nexus between youth, unemployment and conflict, 38. Retrieved from http://www.international-alert.org/pdf/LEO Sri Lanka.pdf
- Appiah-Konadu, P., Junior, F. S., Eric, A., & Daniel K. Twerefou. (2016). The Effect of Foreign Aid on Economic Growth in Ghana Paul Appiah-Konadu, 46 Forster Shitsi Junior, 47 Abokyi Eric, 48 and Daniel K. Twerefou 49, *IV*(2), 248–261.
- Azeng, T. F., Yogo, T. U., Kayizzi-mugerwa, S., & John, C. (2013). Youth Unemployment and Political Instability in Selected Developing Countries. *African Development Bank Group*, (171). Retrieved from http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Working\_Pa per\_171\_\_Youth\_Unemployment\_and\_Political\_Instability\_in\_Selected\_Developing\_Countries.pdf
- Boakye, P. F. (2008). Foreign Aid and Economic Growth in Ghana. Department of Economics, Kwame Nkrumah University of Science and Technology.
- Brown, G. K., & Stewart, F. (2015). Economic and Political Causes of Conflict: An Overview and Some Policy Implications. *CRISE Working Paper No.81*, (81). Retrieved from http://www.crise.ox.ac.uk/
- Collier, P. (2006). development, *I*(1), 1–4.
- Douma, P., & Gasana, M. (2008). Reintegration in Burundi: between happy cows and lost investments, (October).
- Edloe, L. L. (2007). Best Practices for Successful Disarmament, Demobilization, and Reintegration (DDR). *New Voices in Public Policy*, *1*(Spring), 1–28.
- Ehrenreich, R. (2012). The University of Chicago Failed States, or the State as Failure?, 72(4), 1159–1196.
- Elmi, A. A., & Barise, A. (2010). The Somali Conflict: Root causes, obstacles, and peace-building strategies. *African Security Review*, *15*(1), 32–54. https://doi.org/10.1080/10246029.2006.9627386
- Girod, D. M. (2009). Fragile States and Foreign Aid: Political Origins of Economic Development After Civil War.
- Golooba Mutebi, F. (2008). Collapse, War and Reconstruction in Uganda: An analytical narrative on state-making. *Working Paper No. 27*, 1797(28), 42.
- Gujarati, D. N., & Porter, D. C. (2003). Basic econometrics Economic series McGraw-Hill international editions: Economic series. ... *Econometrics*. https://doi.org/10.2307/2344828
- Hatemi-J, A., & Irandoust, M. (2005). Foreign aid and economic growth: new evidence from panel cointegration. *Journal of Economic Development*, 30(1), 71–80. Retrieved from http://ideas.repec.org/a/jed/journl/v30y2005i1p71-80.html
- Hatungimana, J. (2011). The cause of conflict in burundi.
- Johnson, A. (2006). The effects of FDI inflows on host country economic growth. *The Royal Institute of Technology. Centre of Excellence* ..., (August), 1–57. Retrieved from http://www.infra.kth.se/cesis/documents/WP58.pdf
- Lötscher, W. (2014). Reintegration of Ex-Combatants and Reconciliation in Rwanda: A Case Study, (April).
- Mallik, G. (2008). Foreign Aid and Economic Growth: A Cointegration Analysis of the Six Poorest African Countries. *Economic Analysis and Policy*, 38(2), 251–260.

- https://doi.org/10.1016/S0313-5926(08)50020-8
- Malunda, D. (2012). Report for the African Centre for Economic Transformation (ACET) Rwanda: Case Study on Economic Transformation. *Institute of Policy Analysis and Research Rwanda (IPAR)*, (March), 1–64. Retrieved from http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Rwanda\_-
- \_Leveraging\_Capital\_Markets\_for\_Small\_and\_Medium\_Enterprise\_Financing.pdf Michałowski, T. (2012). Foreign direct investment in Sub-Saharan Africa and its effects on economic growth of the region. *Prace I Materialy Instytutu Handlu Zagranicznego Uniwersytetu Gdańskiego*, (31), 687–701.
- Mill, J. S. (2005). Post-Conflict Economic Reconstruction.
- Mills, R., & Fan, Q. (2006). The Investment Climate in Post-Conflict Situations. *World Bank Institute*. Retrieved from http://info.worldbank.org/etools/docs/library/235864/postconflict\_paper.pdf
- Moreira, S. (2005). Evaluating the Impact of Foreign Aid on Economic Growth: a Cross-Country Study. *Journal of Economic Development*, 30(2), 25–49.
- Ndoricimpa, A. (2014). Bootstrap Causality among Foreign Direct Investment, Exports and Economic Growth in Burundi. *British Journal of Economics, Management & Trade*, 4(12), 2022–2033. https://doi.org/10.9734/BJEMT/2014/12454
- Ocaya, B., Ruranga, C., & Kaberuka, W. (2012). Dynamic Relationship between Gross Domestic Product and Domestic Investment in Rwanda. *World Journal of Education*, 2(6). https://doi.org/10.5430/wje.v2n6p79
- Ohiorhenuan, J. F. E. (2011). Post conflict Recovery: Approaches, Policies and Partnerships, (4).
- Ohiorhenuan, J., & Stewart, F. (2008). Post Conflict Economic Recovery.
- Oyeniyi, A., & Media, T. (2011). Conflict and Violence in Africa: Causes, Sources and Types Conflict and Violence in Africa: Causes, Sources and Types, (February), 1–10.
- Report, T. (2008). Economic policies for post-conflict, 44–59.
- Ruranga, C., Ocaya, B., & Kaberuka, W. (2014). VAR Analysis of Economic Growth, Domestic Investment, Foreign Direct Investment, Domestic Savings and Trade in Rwanda. *Greener Journal of Economics and Accountability*, 3(2), 030–041.
- Specker, L., Briscoe, I., & Gasana, M. (2010). Early Economic Recovery in Fragile States Case study Burundi: operational challenges, (January), 1–59.
- States, R. W. (n.d.). No Title.
- Todaro, B., & Smith, A. (2013). Foreign aid and growth: new evidences from Sub-Saharan African countries. ... *Africa 2007, CSAE Conference.[Internet]* ..., 1–27. Retrieved from http://www.csae.ox.ac.uk/conferences/2007-EDiA-LaWBiDC/papers/169-Seetanah.pdf
- Weeks, J. (2012). POLITICAL ECONOMY Macroeconomic Impact of Capital Flows, (290).
- World Bank. (2005). Conflict in Somalia: Drivers and Dynamics. *World Bank*, (January), 61. Retrieved from http://siteresources.worldbank.org/INTSOMALIA/Resources/conflictinsomalia.pd f
- African Development Bank (2001). Economic Recovery for Post-conflict Recovery www.econstor.eu.

# Tez Hazırlama Kontrol Listesi

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