

Applying the Growth Diagnostics Approach to Burundi

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Abstract

This research paper performs the growth diagnostics approach following the decision tree developed by Hausmann, Rodrik and Velasco (2005) in order to find the most binding constraints to economic growth in developing countries. The scope of the paper is limited to the Republic of Burundi, one of the poorest countries in the world that is located in the central African region and which is facing a slew of development challenges. The study finds that there exist many overlapping and complex factors that qualify as binding constraints to economic growth in Burundi. These constraints encompass the lack of access to finance, the absence of the rule of law, rampant corruption, a poor regulatory framework and macroeconomic governance, as well as the lack of physical infrastructures (most importantly roads and electricity) to support economic activities. Given this complexity of constraints and Burundi's post-conflicts status, the study finds that the business environment is the major bottleneck to economic growth that the government has to first tackle in the short-term and expand the country's private sector, a key engine for growth. The study acknowledges that other factors in the decision tree enumerated above are all constraining growth in Burundi and that releasing them will have positive impact on the economy and citizens' wellbeing. However, reforming the regulatory framework appears to be a strategic policy agenda as the government cannot tackle all the problems together, due presumably to the lack of sufficient governance capacities and resources.

The research paper's methods of analysis are twofold: first, the paper analyses quantitative data on economic and development indicators obtained from secondary sources, such as reports on Burundi from the World Bank, the International Monetary Fund, the United Nations, the Organization for Economic Co-operation and Development (OECD), the African Development Bank and various reports produced by the government of Burundi. Second, the paper uses the literature review comprising academic publications as well as secondary sources.

The structure of the paper is as follows. Chapter 1 presents the study's analytical framework by succinctly examining how Burundi's politics have evolved over time and their implications on the economy. Chapter 2 explains the growth diagnostics methodology as elaborated by its authors (Hausmann et al.). Chapter 3 performs the growth diagnostics approach with the aim of finding the most binding constraints to growth in Burundi.

Acknowledgement

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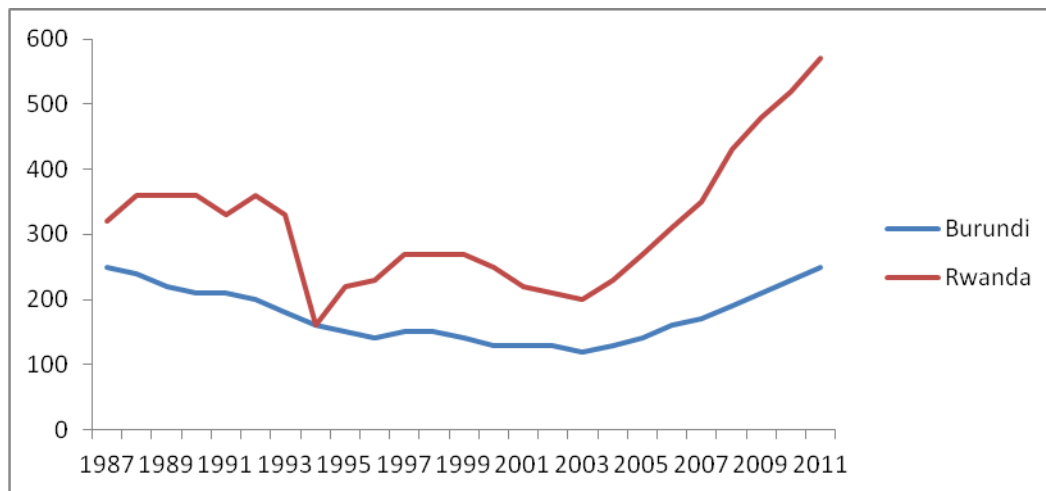
Introduction

The Republic of Burundi (hereafter Burundi) is a landlocked country in the African Great Lakes region (central Africa), spanning a total area of 27,830 sq. km (10,747 sq. miles). It is bordered by the Democratic Republic of Congo to the west, Rwanda to the north and Tanzania to the southeast (map in Annex 1). Burundi's total size is comparable to that of the State of Maryland in the United States (US State Department: Burundi country profile). Demographically, Burundi's population is estimated to be near 8.4 million (World Development Indicators, 2010), with a human density of almost 300 inhabitants per sq. km, one of the highest population densities in the world. Population growth is estimated to be 2.5 percent per year with a fertility rate of 6 children per woman. In fact, 90 percent of Burundians live in the countryside and half of them are younger than 17 years old (Burundi Vision 2025). The high population density facing the country appears to be a serious challenge for land ownership and management, particularly in rural areas. Ethnically, Burundi's population comprises three communities: the Hutu, who represent 85 percent of the population; the Tutsi who account for 14 percent; and the Batwa (singular Twa) representing the remaining 1 percent (Berahino, 2011).

Since gaining its independence in 1962 from Belgian colonial rule, Burundi has repeatedly faced political instability and violent armed conflicts triggered by ethnic hatred, with adverse consequences on its economy and the well-being of citizens. For instance, as shown in Chart No. 1 below, its GNI per capita (current US\$, Atlas method) substantially declined from US\$ 250 in 1987 to US\$ 120 in 2003 - an estimated average decline of 52 per cent - but has more recently improved, reaching again US\$ 250 in 2011 (World Development Indicators). Despite this improvement, Burundi's GNI per capita remains one of the lowest in the world. Chart No. 1 portrays the trend of Burundi's GNI per capita compared to Rwanda's and shows

that Burundi's GNI per capita is by far lower than Rwanda's. The comparison is made with Rwanda because the two countries are neighbours and have experienced similar political instability triggered by ethnicity.

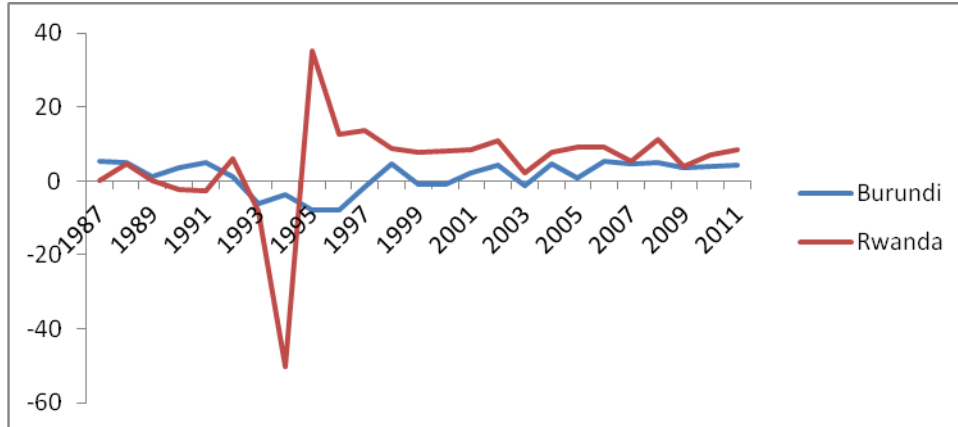
Chart No. 1. Trend of GNI/capita (Current US\$, Atlas method, 1987-2011)



Source: World Development Indicators, various years

From the economic growth perspective, as shown in Chart No.2 below, Burundi's growth performance has been very poor for several years, averaging 1.4 per cent between 1987 and 2011, particularly with negative records between 1993 (the beginning of the civil war) and 1997. For comparison purpose, the chart shows that Rwanda's growth performance outweighs Burundi's, especially after the Rwandan armed conflict that led to the genocide in 1994. Between 1987 and 2011, Rwanda's economy recorded an average growth of 4.7 per cent. Burundi's low growth record performance is presumably the consequence of recurrent political instability and armed conflicts, preventing thereby the realization of private and public investments necessary to spur the economy to faster growth.

Chart No. 2. Trend of GDP Growth (% , 1987-2010)



Source: World Development Indicators, various years

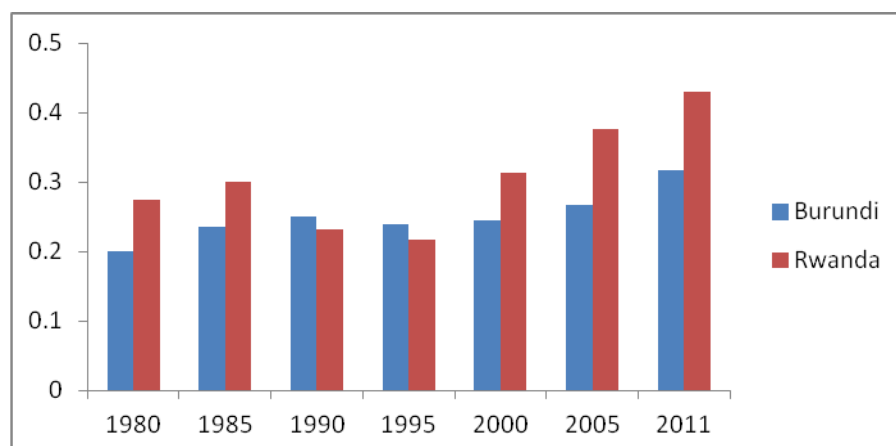
From the human development perspective, Burundi's performance is very poor as well. To illustrate, according to the United Nations Development Program's human development 2011 report, Burundi ranks 185th out of 187 countries on the Human Development Index (HDI) classification with a value of 0.316, which is comparatively lower than Rwanda's HDI of 0.429 (ranking 166th). Chart No.3 below shows the trend of the HDI in both countries. The message conveyed by the chart is that, compared to Rwanda, Burundi's performance in improving the three dimensions of life captured by the HDI (longevity of life, education, and income) is very poor and that enormous efforts must be deployed by the government to overcome the challenges of human development and thereby improve citizens' well-being.

To illustrate the numerous challenges of human development in Burundi, the following indicators are very illustrative and appalling. According to the World Bank, the poverty headcount ratio is 69 percent and adult literacy rate is 67 percent (World Development Indicator, 2011). According to the Africa Human Development Report (United Nations Development Program-UNDP, 2012), the daily calorie intake in Burundi is 1,679.7 Kcal per person, far below the required amount 2,300 Kcal. This insufficient calorie intake gives credence to the finding that

the level of food insecurity and hunger is extremely alarming in Burundi. In fact, according to the Global Hunger Index (GHI) computed by the International Food Policy Research Institute (IFPRI, 2011), more than 50 percent of Burundi's population is undernourished and the country has the second extremely alarming level of hunger in the world. It ranks 80th out of 81 countries on the GHI classification with a score of 37.9 in 2011, a significant deterioration compared to its level of 1990 when the score was 31.4. Conflict and political instability have significantly contributed to such a high level of hunger in Burundi (IFPRI, 2011).

Additionally, Burundi's health sector is poorly developed. For instance, life expectancy at birth is estimated to 49 years, below the average for both Rwanda and Sub-Saharan Africa. Both infant and under-five mortality rates are also very high and exceed the Rwandan and Sub-Saharan African averages. The most striking indicator is the maternal mortality rate: it is extremely high (800 per 100, 000 live births) and exceeds by far the Sub-Saharan African and the neighbouring Rwandan averages. According to Burundi's authorities, the reason of such a high maternal mortality rate is "the poor screening of high-risk pregnancies and complications at birth; only one woman in four is attended to by a qualified person during delivery" (Burundi's Poverty Reduction Strategy Paper-PRSP, 2006, p. 18). Table No. 1 gives the summary of Burundi's health indicators with comparison to Rwanda and the Sub-Saharan African region.

Chart No. 3. Trend of Human Development Index (1980-2011).



Source: UNDP, Human Development Index Trends (1980-2011)

Table No. 1. Comparing Burundi's Health Sector.

Indicators	Burundi			Rwanda			Sub-Sahara Africa Region (average)
	2008	2009	2010	2008	2009	2010	
Life Expectancy at birth	48	48	49	53	53	54	52.5
Maternal mortality (per 100,000 live births)	nd	nd	800	nd	nd	340	646
Infant mortality(per 1,000 birth)	90	89	88	66	63	59	81
Under-five mortality (per 1,000 birth)	145	143	142	104	98	91	130

Source: World Development Indicators (various reports) and Africa Development Indicators (2011)

Based upon the evidence presented in the background above, this paper aims to perform the growth diagnostic approach for Burundi, following the Hausmann, Rodrik, and Velasco (2005) methodology (herein HRV) which consists of identifying the most binding constraints to economic growth in least developed countries (LDCs). More specifically, the HRV growth diagnostic assesses, through the decision tree (Figure 1 below), whether low levels of private investment in poor countries are the consequence of lack of access to finance (domestically and

internationally), low return to economic activities resulting from either low social returns (due to bad geography, lack of infrastructure or low human capital), or low degree of appropriability of investment (due to government failures and/or market failures). Following this methodology, the principal research question that this paper seeks to address consists of identifying the most binding constraints to economic growth in Burundi. Several studies have been conducted for various countries based on the growth diagnostics approach, but it appears that Burundi has not been covered, yet. The contribution of this paper is to fill that gap. Given the importance of economic growth in improving the living standards of a country's population, the findings of this research will lead to recommendations that policy makers in Burundi may find pertinent, insofar as they are concerned with economic growth and poverty reduction.

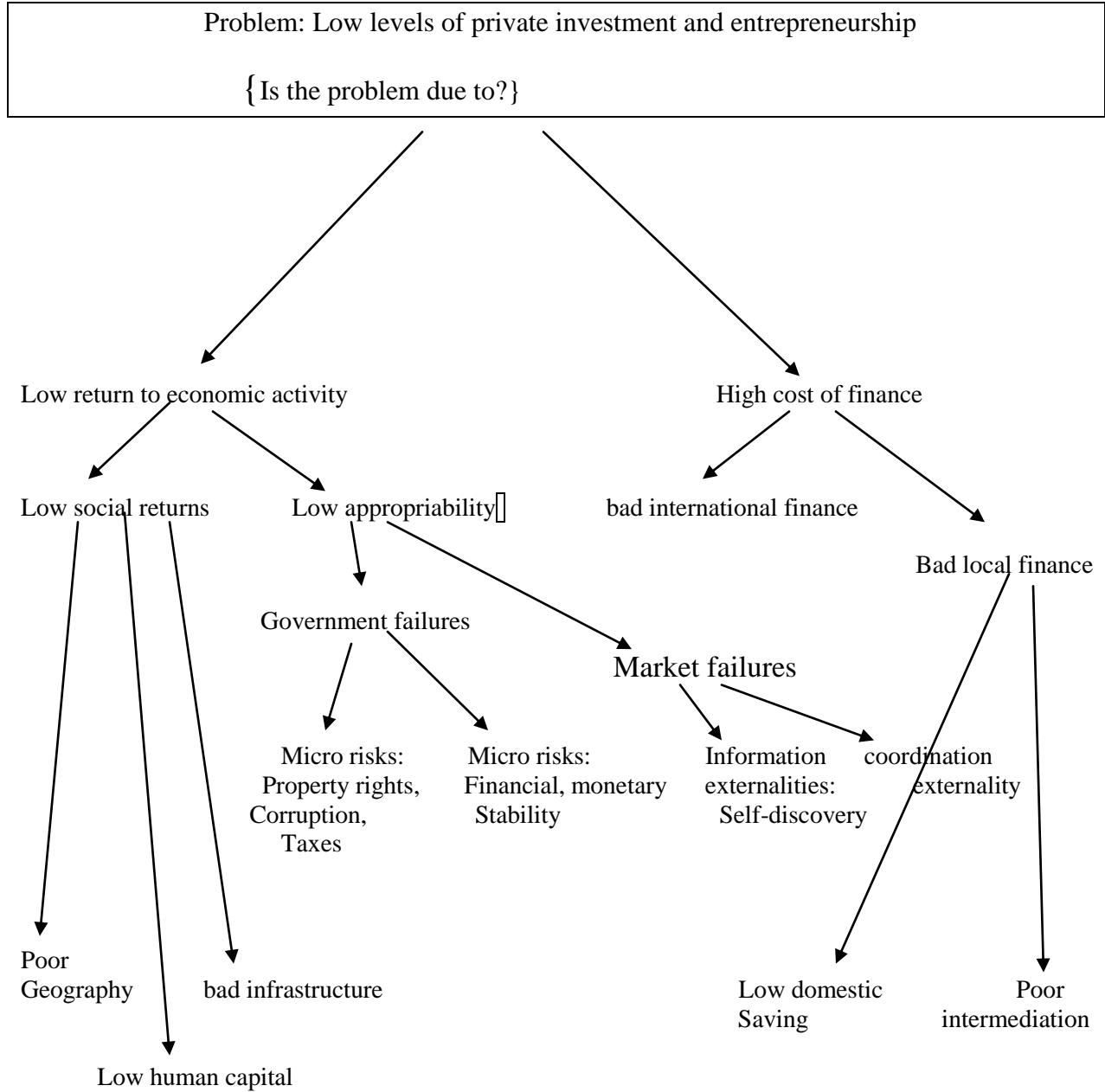
Given the situation of ethnic conflicts and political instability Burundi has faced over years, the geographic position of the country (landlocked), and based on the HRV approach, the hypothesis of the paper is that there exist numerous and complex binding constraints to economic growth in Burundi. These constraints encompass the lack of access to finance, the absence of the rule of law, rampant corruption, poor regulatory framework and macroeconomic governance, as well as the lack of physical infrastructure (roads and electricity) to support economic activities. Thus, the main argument of the paper is that, since Burundi is as a post-conflict country facing a slew of development challenges, the government has first to promote a friendly business environment by reforming its regulatory framework in relation to doing business in Burundi. This line of reasoning is consistent with the findings of Basdevant (2009) who argues that the government's capacity to increase the level and efficiency of investment (public and private) is the most important requirement for Burundi's economic growth.

The research's methods of analysis are twofold: firstly, the paper quantitatively analyses economic and development indicators obtained from secondary sources, such as reports on Burundi from the World Bank, the International Monetary Fund, the United Nations, the Organization for Economic Co-operation and Development (OECD), the African Development Bank, and several other institutions. Additionally, various reports produced by the government of Burundi through its ministries and central bank, including country briefs, the Poverty Reduction Paper, and the Millennium Development Goals progress report, were consulted in gathering economic and development indicators. Secondly, the paper uses the literature review comprising academic publications as well as secondary sources, since several scholars have investigated Burundi's political and economic situations.

In addition to this introduction and the conclusion, the paper is structured as follows. Chapter 1 presents the study's analytical framework. The objective of this chapter is to provide readers with a thorough, yet concise, understanding of Burundi's political development from its independence to present. Examining the political development enables the understanding of different political phases Burundi has undergone and their potential challenges to economic development. Chapter 2 presents the Hausmann, Rodrik and Velasco growth diagnostics framework. The aim of this chapter is to offer a complete understanding of the HRV approach for finding, in the short-run, the most binding constraints for economic growth. Understanding such an approach is crucial because it is conceived as an important tool for policy analysis and strategic prioritization for economic prosperity in poor countries. The framework is relevant for public policy since its design fosters a well-defined economic analysis for critical policy reforms and public interventions, rather than promoting a long-list of macroeconomic policies to spur economic growth. The contribution of this chapter to the research paper consists of laying the

ground for the application of the growth diagnostics analysis for Burundi. Chapter 3, the core of this research paper, applies the growth diagnostics approach to Burundi by examining different factors in the decision tree, and the potential constraints they may represent to growth through limitations to private investment and entrepreneurship. The aim of this chapter is to identify the most binding constraint to Burundi's economic growth. More specifically, the chapter assesses in more details, following the nodes of the decision tree, whether low levels of private investment and entrepreneurship in Burundi are the consequence of lack of access to international and/or local finance (the right branch of the tree) or to low return on economic activities resulting from low social returns or low appropriability (the left branch of the tree). The contribution of this chapter to the research is to validate or reject the research's hypothesis by determining what really constitutes the most binding constraint to private investment in Burundi.

Figure 1. Decision Tree for the Growth Diagnostics¹



¹ Adapted from Hausmann et al. (2005)

Chapter 1. Analytical Framework

The objective of this chapter is twofold. First, it aims to introduce Burundi to the readers by providing a concise, yet clear, presentation of the country's political development process. The second objective of the chapter is to set the connection between Burundi's politics and economy by demonstrating how politics have adversely impacted the country's economy through multiple conflicts that have marked Burundi's post-independence history, impeding thereby economic growth.

1.1. Burundi's Political Development

Broadly, Burundi's politics, from independence to present day, has been punctuated by political assassinations, military coups, murders, interethnic conflicts, and civil wars (Melady, 1974; Nyankanzi, 1998; Oud-Abdallah, 2000; Watt, 2008, and Berahino, 2011). I will illustrate this political development in three different political phases as follows.

➤ Political Phase 1: Post-Independence and Ethnicity (1962-1976)

During this phase, Burundi's politics were marked by tragic political assassinations that sowed the seeds of the political instability the country has experienced. According to findings gathered by Oud-Abdallah (2000), Burundi's first assassination was of the designated Hutu prime minister Rwagasore in October 1961, allegedly by a gunman paid for by Tutsi elite. Rwagasore was the leader of the UPRONA (Union Pour le Progres National) which had won the first democratic elections held the same year, before the country gained independence in 1962. Four years later, prime minister Pierre Ngendandumwe (Hutu) was killed along with many of his supporters in October 1965. These two assassinations of Hutu leaders aggravated the ethnic divide between the Hutu and the Tutsi. According to Leonce Ndikumana (2005), Burundi's ethnic divide is a legacy of colonial politics, as Belgian colonizers orchestrated the domination of

the Tutsi minority group through their access to education, the public administration, and most importantly the army, at the expense of the Hutu population. This exclusionary and divisive policy is perceived as the main source of Hutu-Tutsi tensions that have evolved over time, as it created unequal access to economic and political power between the two ethnic groups.

As the ethnic tension deepened, Tutsi elite plotted a military coup in November 1966 led by former president Melchior Micombero (a Tutsi army Captain), overthrowing King Mwambutsa IV and his monarchy, declaring Burundi a republic (Merahino, 2011). Following the military coup, the new leader banned political activities and instituted UPRONA as the one state-party. Disenchanted with the Tutsi-led government, Hutu leaders plotted military coups in 1969 and April 1972 to oust Micombero, followed by massive killings of Tutsi in the country. Unfortunately, both attempted coups failed, leading in reprisal to massive killings of Hutu throughout the country. For instance, Melady (1974) documents that the army's bloodiest reprisal against Hutu between May and August of 1972 caused the death of roughly 3,500 Hutu of all categories (farmers, teachers, women, children, army officers and soldiers, etc.) and an influx of Hutu refugees into the Congo, Tanzania, and Rwanda. Melady explains that Micombero and his Tutsi government feared that Hutu were planning a "wholesale killing of Tutsi" (p.12), a tragic situation that occurred in Rwanda in 1959; and that the government had to prevent such a possibility.

➤ **Political phase 2: Military Coups and Dictatorships (1976-1993)**

During Micombero's regime (1966 to 1976), interethnic conflicts, mass killings, exclusion, and general instability were the hallmarks of Burundi's politics. Micombero was later overthrown by a bloodless military coup in 1976 under the lead of Colonel Jean Baptiste Bagaza (a Tutsi) who reigned from 1976 to 1987. The reason the coup occurred is ascribed to internal

leadership conflict in the inner circle of the Tutsi-led army. Bagaza's policies were worse toward the Hutu population and violated human rights principles, as he banned the freedom of speech and assembly (Watt, 2008). For instance, Watt reveals that under Bagaza's reign, the Hutu population was prevented from attending schools, or those who were in schools were deliberately prevented from succeeding by receiving poor marks on exams. Moreover, qualified Hutu were denied entry into the public administration, a policy aimed at promoting the ascendancy of the minority Tutsi. Furthermore, according to Watt, former president Bagaza banned both Protestant and Catholic radio and newspapers, nationalized schools run by religious organizations, imprisoned priests and closed seminaries, and temporarily suspended the activities of 87 churches. Bagaza was antagonistic to the churches, especially the Catholic Church, because he thought that they constituted a threat to his regime and to stability (Oud-Abdallah, 2000). Finally, he strengthened the control of the state via the one-party UPRONA, in which membership was an obligation for those who sought jobs with the government, the main employer in the country.

However, Bagaza introduced presidential and legislative elections in 1982 and initiated development projects, such as the construction of roads, drinking water wells, and housing, and electrification (Nyankanzi, 1998). Furthermore, he is credited for having reformed the public administration as well as the tax system, introduced anti-corruption measures in the public sector, and developed modern industries for coffee, tea, and cotton (Oud-Abdallah, 2000 and Watt, 2008). While attending a Francophonie summit in Montreal, Canada, Bagaza was toppled by a military coup led by Major Pierre Buyoya (a Tutsi) in September of 1987 (Nyankanzi, 1998). According to Oud-Abdallah (2000), the hardliners in the Tutsi dominated army decided to overthrow Bagaza to express their frustration with the reforms he intended to implement within

the army. For instance, he proposed a ten-year period limit for army service and the abolition of soldiers' rights to free electricity when living outside military camps. These proposed reforms infuriated soldiers who perceived that their social benefits were jeopardized, and thus ousting Bagaza was the best way to secure their advantages.

Given the changing international political landscape induced by the fall of the Berlin Wall in the early 1990s, most African countries had to embrace democracy and end dictatorships. In this context, Buyoya's regime came under intense pressure to ameliorate human rights in the country, and to promote national unity, and most importantly democracy. As Watt (2008) reveals, Buyoya reacted proactively in three steps: first he appointed a Hutu leader as his prime minister, then instituted the Commission of National Unity which culminated in the Charter of Unity being massively adopted by referendum in 1991, and finally opened the political landscape for multiparty, leading to general elections.

➤ **Political Phase 3: Short-Lived Democracy, Civil War and Peace Process**

Following the organization of general elections in June 1993, Buyoya lost power to late president Melchior Ndadaye (Hutu) who became the first democratically elected president. Also, Ndadaye's party (Front pour la Démocratie au Burundi-FRODEBU) won the majority in the new parliament. According to Nyankanzi (1998), Ndadaye and his party won the elections on ethnic lines, as many Hutu saw in the elections the opportunity to express their frustrations against the killings and marginalization of Hutu by both the Tutsi dominated army and successive governments. Unfortunately, the movement of democracy launched by the elections was a short experiment, as the elected president Ndadaye was killed by the military in a failed coup on October 21, 1993, just four months after being sworn in.

Prior to his assassination, Ndadaye initiated some policy reforms aiming to strengthen national unity and a real reconciliation process (Nyankanzi, 1998; Oud-Abdallah, 2000; and Watt, 2008). For instance, he initiated policies for proportional representation in schools, the army, and the public administration, and granted amnesty to political prisoners. Moreover, following his campaign promises, he supported the return of all refugees with full ownership rights on the land owned prior to their fleeing the country. This trend of policies is seen as the main cause of his assassination by the Tutsi dominated army in the morning of October 21, 1993. The Tutsi elite saw Ndadaye's move as dangerous, especially the rights to land of returning refugees whose lands Tutsi had occupied in the countryside. Tutsi leaders perceived that Ndadaye's policies would thus lead to the loss of their state dominance, social benefits, and Hutu retaliation (Oud-Abdallah, 2000 and Merahino, 2011).

Ndadaye's assassination sparked massive inter-ethnic violence and massacres throughout the country, as Hutu embarked on bloody attacks against Tutsi civilians to avenge the death of Ndadaye, and the Tutsi-led army retaliated by killing Hutu under the pretence of restoring public order. Oud-Abdallah (2000) points out that more than 50,000 Hutu were killed by the army, 800,000 more fled into Rwanda, Congo, or Tanzania, and nearly 400,000 Hutu and Tutsi were uprooted from their homes, becoming internally displaced. With the death of the president, the government became headless, as most cabinet members sought refuge in Western embassies. The country was left under the control of the military, which failed to appoint a new government, consequently creating a power vacuum that had to be filled. In response to the escalation of violence, the United Nations responded in mid-November of the same year (1993) by appointing Oud-Abdallah as the Special Representative of the UN Secretary General to Burundi with the mandate of: "restoring democratic institutions overthrown by the military coup of October 21;

facilitating dialogue between the parties to the crisis; establishing a commission of inquiry into the events of October and the ensuing massacres; and working with the African Union” (Oud-Abdallah, 2000, p. 38). According to Oud-Abdalla’s description of his mission, the negotiations gradually led to:

- i) The restoration, at the end of December 1993, of the national assembly presided over by Sylvestre Ntibantunganya (Hutu) and Christian Sendegaya (Tutsi), respectively as the speaker and deputy speaker.
- ii) The election of a new president, namely Cyprien Ntaryamira (Hutu-from the FRODEBU) and the formation of a new government headed by Anatole Kanyenkilo (Tutsi-from UPRONA); all this in early February, 1994; after a constitutional amendment that allowed for the indirect election of the president by the national assembly. The new government had to be in power until June 1998, a term mandate stemming from the elections of June 1993.

These two accomplishments could have been seen as the beginning of political stability in Burundi. Unfortunately, the situation fell far short of that goal as a new fatal event awaited Burundi and its entire population: On April 6, 1994, the newly selected Burundian president (Ntaryamirar) died in the crash of the plane of his colleague and former Rwandan president Habryarimana over the Kigali airport in Rwanda. The two dead presidents were returning from a Rwandan peace summit in Arusha, Tanzania. As has been documented, Habyarimana’s death ignited the Rwandan genocide that took the lives of more than 800,000 Rwandan Tutsi and unknown numbers of Hutu as well. With the death of president Ntaryamira of Burundi less than a year since the death of his predecessor, the question of succession posed a new political challenge that needed a quick solution. The fear was that the genocide occurring in Rwanda

following the presidential plane crash could have spilled over into Burundi, a country with similar ethnic demographic configuration (Hutu majority versus a Tutsi minority) and a deep ethnic divide between the two main communities. As Oud-Abdallah describes (2000), to fill the gap left by the deceased president, a new government was formed after the speaker of the national assembly (Ntibantunganya) was elected president in late September 1994. The formation of the new government comprising the leaders of the two main ethnic groups prevented the genocide that was occurring in Rwanda at that time from happening in Burundi.

However, despite the formation of the new government, a civil war erupted in the country in early 1995, disturbing thereby the nascent peace and stability process. In fact, two main rebel movements, namely the National Council for the Defense of Democracy (CNDD) with its armed branch the Forces for the Defense of Democracy (Forces pour la Defense de la Démocratie - FDD) and the Front National de Liberation (FNL) launched military attacks against the national army. As a consequence of such rebellions, violence escalated throughout the country with mass murders, kidnapping, and fighting between the army and the rebels. Given the large scale of violence and the inability of the government to control the situation, the military staged a coup and nominated former president Buyoya as the new president on July 25, 1996 (Watt, 2008). This new development drew intense condemnation from the international community (the United Nations and the African Union) that initiated and supported the peace process with the aim of ending violence and bringing stability in Burundi.

The peace process was gradual as not all parties to the conflict, government and rebel movements alike, were not willing to negotiate and relinquish their respective political interests for the benefit of the entire society (Watt, 2008; Ayebare, 2010 and Merahino, 2011). A first agreement, called the Arusha cease-fire, was signed in August 2000 in Tanzania under the

auspices of Nelson Mandela between the government and the opposition, without the participation of the two main rebellions (CNDD-FDD and FNL). The agreement led to power-sharing in a transitional government for a period of 36 months equally divided between the presidency of the then incumbent Buyoya (Tutsi) and Ndayizeye (Hutu), the leader of the opposition.

Further negotiations ensued to bring a complete end to the crisis. In October 2003 in Pretoria, the government signed a cease-fire with the CNDD-FDD that accepted to join the transitional process under the conditions of equal composition of the army and police by Hutu and Tutsi (50-50 per cent), the reintegration of its forces into the army, and provisional immunity to its leaders and combatants (Watt, 2008). Within the framework of the new agreement, a new constitution was adopted by the Parliament in October 2004 and voted by referendum in February 2005. The implementation of the newly adopted constitution was seen as a major milestone in Burundi's politics as general elections were held in 2005. Unsurprisingly, the CNDD-FDD (ex-rebel movement) won the legislative and municipal elections, leading to its majority in the national assembly and the Senate. Its leader Pierre Nkuruziza was elected Burundi's new president for a renewable five-year term. The government formed in the aftermath of the election succeeded to negotiate a cease-fire with the remaining active rebellion, notably the National Front for Liberation (Front National de Liberation-FNL), which accepted to transform into a political party and abandon armed fighting. Burundi organized its second general elections in 2010, sanctioned by the victory of the incumbent Nkuruziza and its CNDD-FDD party at all levels: national assembly, Senate, and municipal. Future general elections are due in 2015, if no major conflict occurs that may disturb the ongoing stability momentum. It is now worth of examining the economic implications of the

political crises as described in the preceding paragraphs. The next sub-section will succinctly deal with this question.

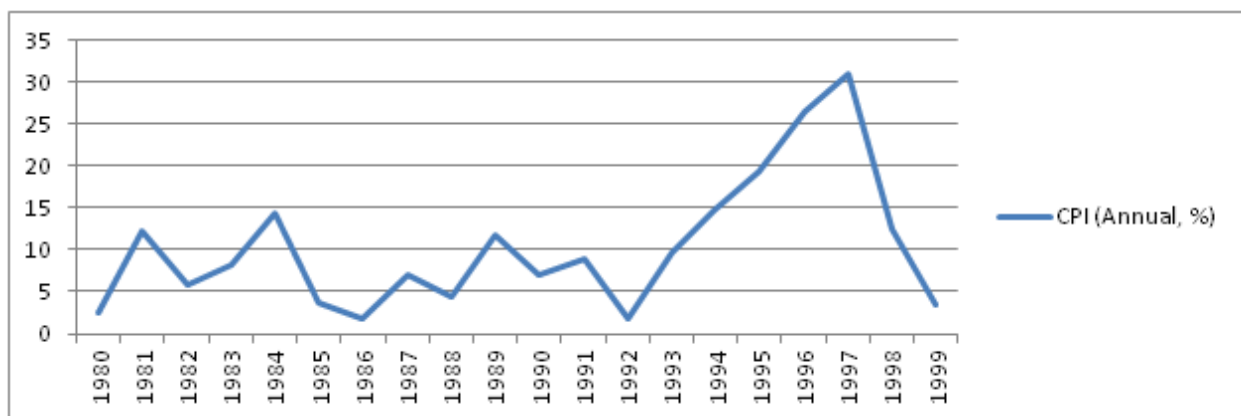
1.2. Economic Consequences of Burundi's Tragic Politics

In addition to the human cost (high number of refugees and loss of human lives) of successive political crises of Burundi's post-independence era, the country has suffered enormous economic consequences. A comparison of the trend of major economic variables, such as the inflation rate, GDP growth and GNI per capita, between the 1980s and 1990s can help to illustrate the economic effects of Burundi's politics.

Chart No.4 shows that in the 1990s, the average inflation rate (consumer price index, annual) was 14 percent, with a pick of 31.1 percent in 1997. This rate was the double of the average rate of the 1980s (7 percent). This increase in the inflation rate caused distortions in resources allocations and depreciation of households and private entrepreneurs' assets. Additionally, it can be observed from Chart No.5 that GDP growth declined on average from 4.3 percent in the 1980s to -1.4 percent in the 1990s, with severe drop during the height of the civil war, between 1993 and 1998. The GNI per capita (Atlas methods) also witnessed a significant decline during the period of conflict. In the 1990s, it averaged \$169, down from an average of \$233 in the 1980s (Chart No.6). The deterioration of economic conditions observed here is strongly associated with the political instability caused by the armed conflicts. In an instable political environment fraught with violence, the regime's survival appears to be the primary concern of the government, not promoting economic growth. In this context, national resources are diverted away from economic development to political interests.

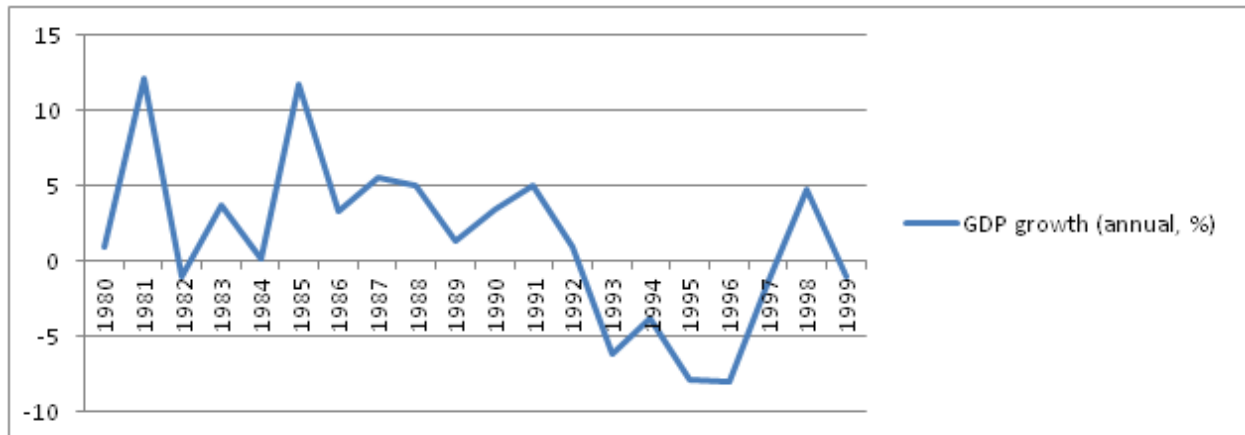
To summarize this chapter, two important points emerge. First, it is observed that since gaining its independence in 1962 from Belgium, Burundi has repeatedly experienced political instability triggered by interethnic conflicts between the Hutu and the Tutsi with adverse consequences on the country's economy, social unity, and human development. The recurrent conflicts examined have strongly hampered Burundi's economic growth by limiting investment opportunities, diminishing governance capacities, and diverting national resources away from development. Secondly, the restoration of the peace process has engaged the country on the ladder of political stability and national unity. However, to render this process sustainable and long-lasting, promoting economic growth and poverty reduction must now be Burundi's primary goal of its policy agenda. Achieving this goal entails institutional reforms and mechanisms to correct the legacy of interethnic conflicts and inequality in access to both political and economic power (Ndikumana, 2005). Following this background on Burundi's political development, the next chapter will explain the growth diagnostics approach used by Hausmann, Rodrik and Velasco (2005).

Chart No. 4. Trend of Burundi's Inflation Rate, 1980 – 1999



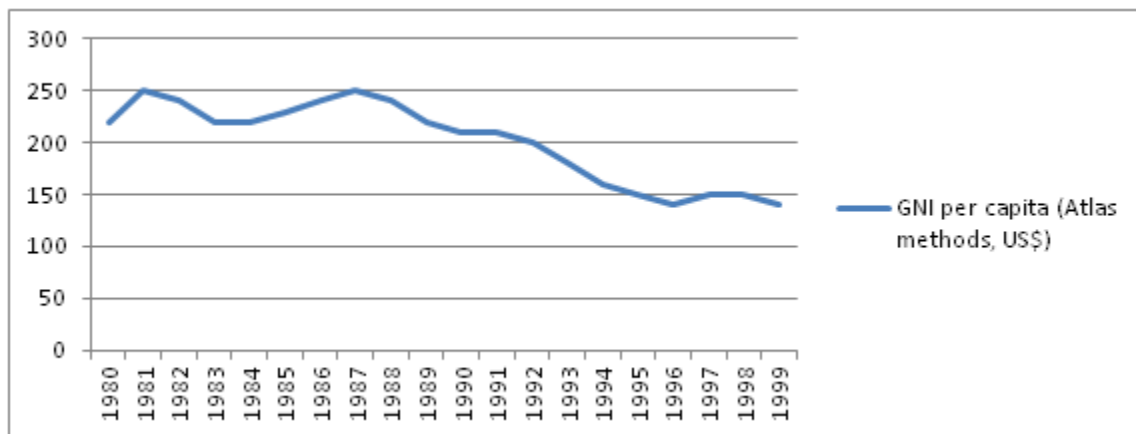
Source: World Development Indicators

Chart No.5. Trend of Burundi's GDP Growth, 1980 - 1999



Source: World Development Indicators

Chart No.6. Trend of Burundi's GNI per capita (Atlas methods, US\$, 1980-1999)



Source: World Development Indicators

Chapter 2. The Hausmann, Rodrik, and Velasco Growth Diagnostics Framework

The ultimate goal of the growth diagnostic analysis is to determine the most binding constraints to economic growth in a particular poor country. The objective of this chapter is twofold. First, it aims to offer a complete understanding of the Hausmann, Rodrik and Velasco (2005, hereafter HRV) growth diagnostics framework for finding the most binding constraints to economic growth. Understanding such an approach is crucial because it is conceived as an important tool for policy analysis and strategic prioritization for economic prosperity in poor countries, at least in the short-term. The description of the growth diagnostics is primarily based on both the HRV main paper (2005) and the steps and methods set in Hausmann, Klinger and Wagner (2008, henceforth HKW) for the conduct of a thorough growth diagnostic. The second objective of the chapter is to examine criticisms of the approach by other scholars of economic growth. By doing so, the paper seeks to show the shortcomings of the HRV approach and how it can be supplemented by other methodologies. Section 1 will summarize the main property of the growth model simplified through the decision tree. Section 2 will examine in more details the decision tree, as well as the critiques to the approach. The overall contribution of this chapter to the research consists of laying the ground for the application of the growth diagnostics analysis.

2.1. The Model's Property

The principal property of the HRV growth model is that in a balanced growth path, the rate of economic growth depends on: i) the rate of returns to asset accumulation; ii) private appropriability of returns, and iii) the financing costs of accumulation. Therefore, “the greater the gap between the expected returns to asset accumulation and acquisition costs, the greater the

investment effort” (HKW, 2008, p.21). In other words, the investment is worth undertaking if the stream of profit outweighs the cost of investing.

Equations (1) and (2) below reflect the model’s property²:

$$g = \frac{\dot{c}_t}{c_t} = \frac{\dot{k}_t}{k_t} = \sigma[r(1 - \tau) - \rho]. \quad \text{Equation (1)}$$

Where: g denotes the rate of growth of the economy; the dot over a variable indicates the rate of change over time; and:

- ✓ c = consumption
- ✓ k = capital
- ✓ ρ = the world rate of interest
- ✓ r = the rate of return on private capital
- ✓ τ = the tax rate on capital, actual or expected, formal or informal
- ✓ σ = intertemporal elasticity in consumption
- ✓ $(1-\tau)$ is the proportion of r that is privately appropriable and ρ is the opportunity cost of funds. A greater gap between the two variables means a bigger incentive for capital accumulation and a higher growth rate.

The rate of return on private capital r is given by: $r = r(\alpha, \theta, x)$ Equation (2)

Where:

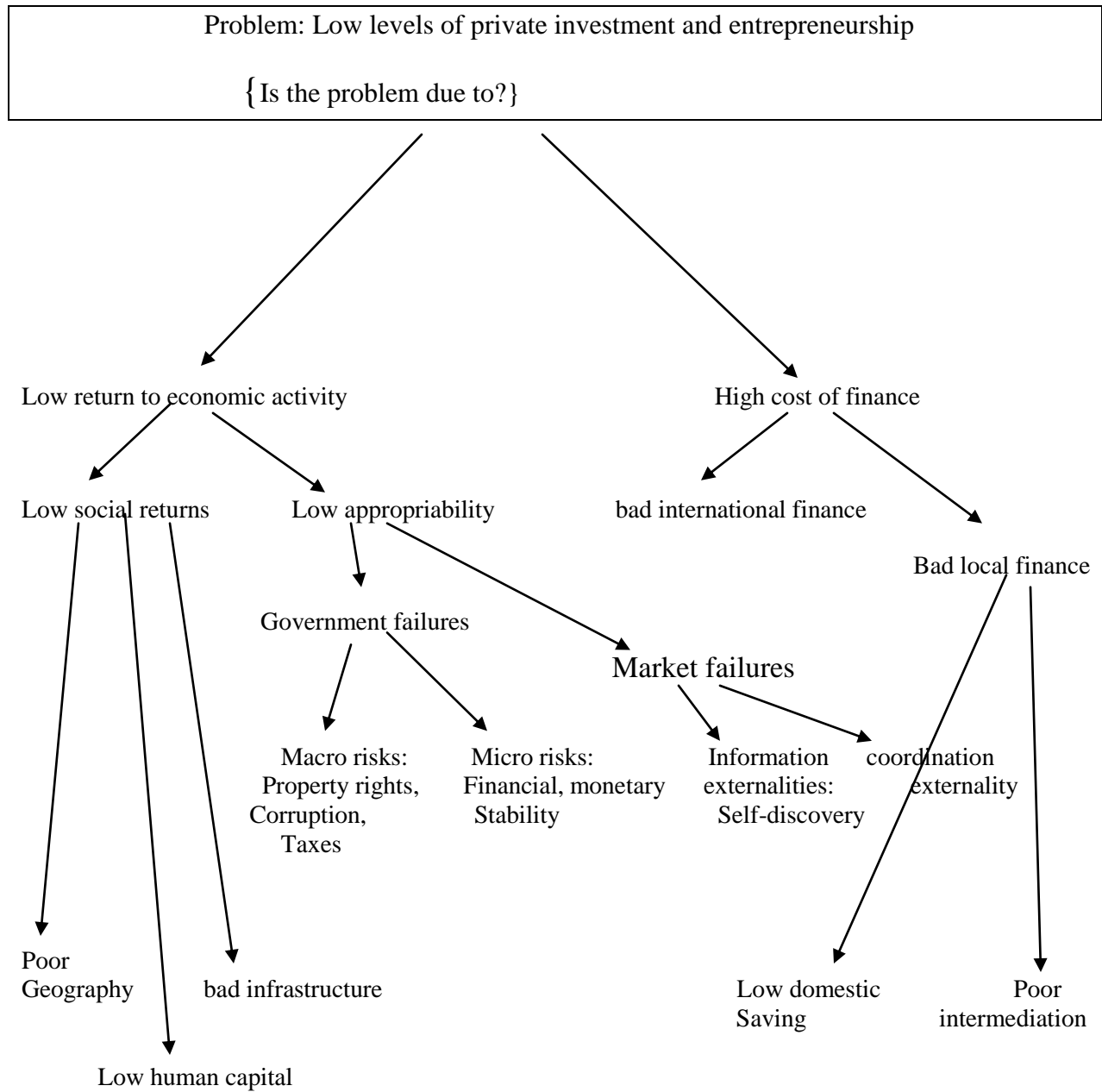
- α = indicator of total factor productivity
- θ = index of externality (a higher value indicates a larger distortion)
- x = availability of complementary factors of production (infrastructures or human capital).

² Formulas and variables explanation taken from HRV (p.8) and HKW (p.21).

2.2. Understanding the Framework: The Decision Tree

The HRV framework identifies the constraints to economic growth following a decision tree (figure below) which enables the determination of, through the elimination-by-iteration process, the most binding bottlenecks challenging economic prosperity in a given country at a specific time period. Specifically, the main question the decision tree strives to address is what factors keep the levels of private investment and entrepreneurship in poor countries at low levels. The tree (figure 1 repeated below) then examines whether the problems stem from a low return to economic activity, as a result of low social return and/or low appropriability (left branch), or from high costs of finance resulting from inadequate access to international or local finance (right branch).

Figure 1. The Decision Tree for the Growth Diagnostics



2.2.1. The Left Branch: Low Return to Private Investment

In order to determine whether a low level of economic growth is caused by low return to private investment, it is worth examining whether the problem results from either a low social return (1) or a low appropriability of private investment (2). These two factors combined or

individually can explain the minimal level of return to economic activity, which implies a low demand for investment and consequently a low rate of economic growth in a particular setting.

2.2.1. 1. Low Appropriability

Investors are interested in making profit and enjoying the benefits or yields of their undertaking. Anything that may prevent them from maximizing the benefits of their activities limits their propensity to engage in profitable activities, consequently limiting opportunities for growth. They thus need an environment conducive to profit maximization. The problems of low appropriability generally are caused by either market failures or government failures.

With regard to market failures, the belief of mainstream economists is that competitive markets constitute the most efficient mechanism for resource allocation. Market failures arise when the market is unable to produce efficient and socially desirable outcomes. In such circumstances there is a need for government's interventions for corrective measures. Very briefly, in general, there are six conditions under which market failures can arise (Dollery and Wallis, 2003): i) the absence of competition in the industry resulting from the presence of a monopoly or an oligopoly (causing limitations to entry into the market); ii) the presence of externalities (positive or negative); iii) the presence of public goods, which are non-rival and non-excludable in consumption to the extent that private firms do not have incentives to produce them; iv) the problem of asymmetry of information (leading to either moral hazard or adverse selection) or lack of coordination mechanisms for efficient allocation of resources; v) economic business cycles (booms or downturns) which create economic disequilibrium requiring the government's corrective measures; and vi) the tragedy of commons, which arise when common resources are used without taking into account the needs of future generations (cases of fisheries consumption or forest exploitation leading to resource depletion in the long run). When such

conditions occur, the government is likely to intervene (not always) so as to address the failure and maximize social welfare; even though its own intervention can fail to produce the socially efficient outcome.

Within the HRV framework, government failures can be the results of either poor microeconomic or macroeconomic conditions. Microeconomic conditions encompass problems such as: high level of corruption, a poor legal and judicial framework to protect private property rights and enforce contracts, or high taxes. When these problems are widespread, they can hinder economic prosperity. To illustrate, when corruption is rampant, businesses are likely to pay bribes to public servants in exchange of administrative documents. The bribes paid constitute extra costs to firms that may increase the prices of products at the market. When contracts are poorly enforced, firms do not have the right incentives to invest in such an environment. Poor macroeconomic conditions can be due to financial, monetary or fiscal instability. For instance, poor macroeconomic conditions arise when a government embarks on inflationary policies or poor governance of the financial sector that causes a banking crisis.

The problem with government failures (both micro and macro risks) is that they reflect uncertainty (lack of predictability) in the social returns of private investments and/or high risk of expropriation of private capital. When these risks are high, the demand for private investment is likely to be low, thus causing a low level of economic growth.

2.2.1.2. Low Social Return

Three other factors must be examined in order to assess whether a low social return is the most binding constraint: i) The country's geography, ii) the level of human capital, and iii) the quality of infrastructures.

- a) **Geography**: studies by scholars have revealed that a country's geography may constitute an impediment to its economic prosperity. For instance, Collier (2006) concludes that, in most African countries, physical geography (being landlocked and resources-scare) is the main source of poor economic performance. The point is that landlocked countries record low growth because they face high costs in accessing global markets and have poor infrastructures that limit the development of their export-led activities.
- b) **Human capital**: there exists an extensive literature demonstrating that human capital, as captured by the quality or type of adults' formal education, is an important determinant of economic growth. Savvides and Stengos (2009) summarize such a literature on the nexus between human capital and economic growth and conclude that economies that are human capital intensive grow faster than economies with poor levels of human capital accumulation. It must be understood here that the concept of human capital is broad as it encompasses the quality of education possessed by adults, the health conditions of the working population, and various types of job training received by workers. However, emphasis is put mostly on the quantity of education of the working age population in order to determine the level of human capital accumulation. The reason is that it is the easiest variable (through number of year of schooling) to measure. The bottom line on the human capital issue is that education enhances individual productive capacities and that the supply of workers with the rights skills promotes the business environment. Investors are constantly in need of workers with the adequate skills necessary to increase productivity. In an environment where there is a shortage of such workers or where it is expensive to hire them, the level of expected returns is likely to be low.

c) **Infrastructures** (mostly physical: roads, power generation, water, and telecommunication): it is obvious that their availability and good conditions are conducive to economic development since they facilitate the conduct of business activities by lowering production and transaction costs. The literature on economic development reveals that countries endowed with adequate physical infrastructures grow faster than countries lacking such infrastructures (Kassides, 1993; Canning and Pedroni, 2004; and OECD, 2007). In analyzing the challenges of African economies, the World Bank (2011) highlights that the lack of basic infrastructures, such as paved roads, railways, electricity, and telecommunication means (telephones) impede economic development in most of the continent. Consequently, investment in physical infrastructures is a pre-requisite for economic prosperity in developing countries.

2.2.2. The Right Branch: High Cost of Financing

If the analysis proves that a low return on private investment is not the problem preventing the country's economy to prosper, then the question is whether private investment opportunities are constrained by the lack of access to finance. If finance is the constraint, then the question is to examine whether it is due to inadequate local finance or international finance.

2.2.2.1. Poor domestic finance: Two issues must be examined: limited domestic saving and a low level of financial intermediation. On the one hand, low domestic saving may result from low interest rates which are unattractive to potential savers. Government may also limit savings opportunities through measures of financial repression, such as coercions of bank deposits at a low interest rate, or credit rationing to some sectors of the economy (Easterly, 2002; Montiel, 2011; Barth, Caprio, and Levine, 2006). Macroeconomic theories teach that high interest rates give a strong incentive to savers as they increase their earning and consequently increase the

level of investment in the economy. Levine and Renelt (1992) as well as Mankiw, Romer and Weil (1992) found that countries with higher saving rates grow faster than countries with poor savings. However, this relationship between savings and growth can be bi-directional as higher growth rates increase the level of savings (Carroll and Weil, 1994). On the other hand, low domestic saving may be a consequence of poor financial intermediation. For instance, borrowers may lack necessary collaterals to access loans from the banking sectors. The domestic government may repress the financial sector to the extent that available funds are diverted away from their most productive uses.

2.2.2.2. Inadequate access to international finance: the problem may result from the country's inability to borrow from foreign creditors due to: i) government's restrictions on capital movements (inflows and outflows); ii) the country's macroeconomic instability (poor monetary and fiscal management) which may increase financial risks, making conditions for foreign direct investments unattractive; or iii) a country's high foreign debt accumulation (which raises concerns over the country's ability or willingness to pay its foreign creditors). Creditors are reluctant to lend money to a country with a high debt burden as its risk of default become also high. A country's sovereign risk or credit rating may shed light on the country's ability to access foreign finance. The literature shows that well-developed financial systems promote long-run economic growth as they influence saving rates, investment decisions, and technological innovations (Demirgüç-Kunt, 2006). The second point above overlaps with macro risks in the left branch of the tree in the sense that a high inflation rate, or a high fiscal deficit contributes to macroeconomic instability that can impede economic growth.

2.3. Criticisms to the HRV Model

Three important points pertaining to criticisms of the HRV diagnostic approach are worth highlighting. First, as Dixit (2007) mentions, it is not a real decision tree because of interconnections between multiple economic constraints (distortions) in a particular country, thus making the analysis complex. Therefore, the HRV should not treat economic distortions as mutually exclusive (when moving from one node of the tree to another one), but as interlinked. In response to this criticism, HKW contends that the HRV recognizes that constraints may overlap and be interdependent. However, its importance lies in simplifying the analysis as the objective is to uncover the most crucial constraint that can have a bigger impact on growth, once it is relaxed. Focusing on the most important constraint is a matter of prioritization of actions in the short-term, but does not neglect the existence of other constraints to the economy.

Second, Ianchovichina and Lunstrom (2009) point out that, based on the way the HRV is structured, it is: (i) almost practically impossible to estimate shadow prices of the constraints; (ii) difficult to reject other constraints as not binding because of interconnection; and that (iii) the analysis is primarily focused on the short term, but not on the long-term perspective to the extent that some other important factors to sustainable growth may be ignored. In response, HKW indicates that although it may be difficult to directly estimate shadow prices, it is “often implied by actual or implied market prices or other symptoms in the economy” (HKW, 2008, p.31). Moreover, as already mentioned, HKW states the model acknowledges the problem of interconnection between constraints and that the time horizon of the analysis is the short-term (below 5 years period). The pertinence of the HRV approach is to tackle the constraint that impedes economic growth the most. This strategic analysis gives credence to the short-term horizon focus of the HRV.

Third, following Ianchovichina and Lundstrom (2009), emphasis must be put on the inclusive growth approach which is a longer-term perspective aiming at integrating both growth diagnostics and poverty analysis in a single framework, not separately. They consider inclusive growth as the pace and pattern of economic growth, two interlinked features crucial for a rapid and sustained poverty reduction. The main line of their argument is that the “rapid pace of growth is unquestionably necessary for substantial poverty reduction, but for this growth to be sustainable in the long run, it should be broad-based across sectors, and inclusive of the large part of the country’s labor force” (p.37). They thus conclude that productive employment (or increases in opportunities for self-employed and wage workers) constitute the main instrument for sustainable and inclusive growth, while income redistribution is a short-term strategy that allows people to benefit from economic growth. In this regard, Ianchovichina and Lundstrom treat the HRV approach as the analysis of the business environment, and as such it is an integral part of the broad inclusive growth analytical methodology whose main goal is employment growth. Their reasoning focuses on both labor supply and demand sides of the economy. They argue that the analysis of inclusive growth “looks at ways to strengthen the productive *resources and capacity* of the individual on the labor supply side as well as ways to open up new *opportunities* for productive employment on the labor demand side” (Ianchovichina and Lundstrom, 2009, p.37).

I agree that inclusive growth is crucial for poverty reduction and that employment growth (more job opportunities) leads to economic growth, which in turn leads to the creation of more jobs. However, as it can be observed, the HRV approach treats the employment issue implicitly as its emphasis is, in a short-run, on how the private sector and entrepreneurship (the engine of growth) can successfully perform in an economy. The main concern is thereby cleansing the environment for private entrepreneurship (i.e eliminating economic distortions limiting the growth of the private sector).

Therefore, productive employment should not be at the top of the analytical framework as outlined by Ianchovichina and Lundstrom (p. 8) because concerns about employment are implicitly dealt with in the quest for growth through the improvement of the private business environment in a short-run, which is the HRV perspective. The reasoning is that in an environment where investment opportunities exist (as assumed by HRV line of reasoning) and that is conducive to the success of the private sector, expanding job opportunities will definitely follow as the consequence of a well-functioning private sector.

In conclusion, based on the HRV approach, this research primarily focuses on identifying the factors that hinder economic growth in Burundi. It will do so by examining in details the variables or indicators of each node of the decision tree. The analysis will take into consideration the limitations of the HRV approach as demonstrated in the critiques above. Nevertheless, the research paper does not examine the question of inclusive growth, although it recognizes that promoting economic growth is not synonymous of inclusive growth and poverty reduction. It is possible that increasing growth in a particular country is not necessarily followed by a shared benefit of that growth among all the people of the society. Thus, the paper gives credit to the authors who argue that promoting growth is a good thing, but the most important one is to make growth inclusive for the sake of poverty reduction. An emphasis is worth making here that the aim of this study is to examine the potential factors that impede economic growth in Burundi, not to discuss how to make growth pro-poor in that country. After laying down the methodological approach that this paper will follow, the next chapter will now apply the growth diagnostics in Burundi.

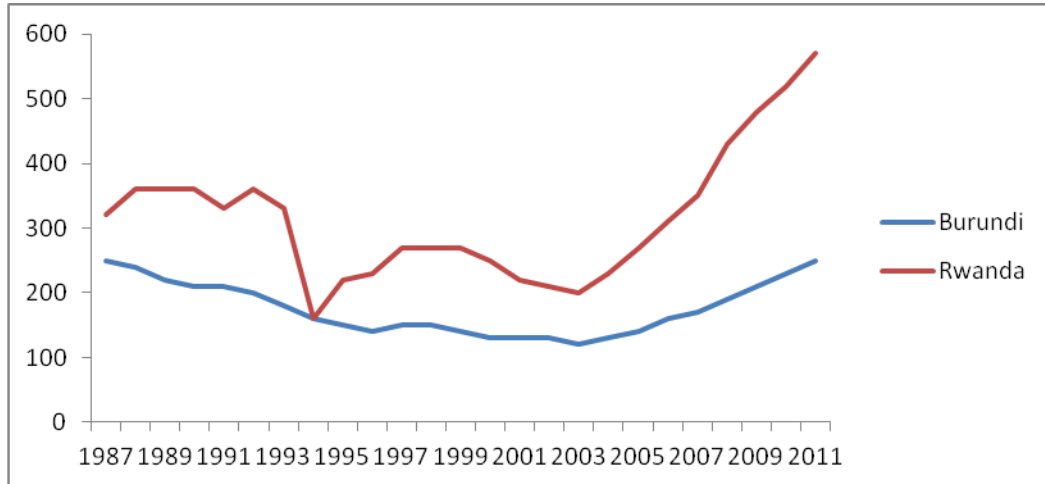
Chapter 3. Applying the Growth Diagnostics Framework

This chapter performs the HRV growth diagnostics approach. The aim is to identify the potential most binding constraints to economic growth in Burundi following the decision tree examined in Chapter 2. More specifically, the chapter assesses in more detail what keeps the level of private investment in Burundi very low, impeding economic prosperity, accordingly. Section 1 discusses whether the lack of access to finance - domestic or international (right-hand side of the tree) - is the most binding constraint; whereas Section 2 discusses whether the most binding constraint arises from low social return to private investment (left-hand side of the tree).

Before proceeding, it is important to consider at the outset the trend of Burundi's GDP growth and Gross National Income per capita. The goal is to emphasise that Burundi's economic performance has been very weak, especially at the height of armed conflicts, relative to other developing countries, such as Rwanda. The Charts No. 1 and No. 2 examined in the introduction are repeated below to enable the readers to capture Burundi's poor economic performance over time, as previously mentioned. On the one hand, until 1992 GDP growth was positive, though somewhat volatile. But between 1993 and 1997, it contracted sharply, presumably as a consequence of the armed conflicts that intensified during that period. Only from 2005 onward has the economy started to consistently register positive growth, most likely as the result of the peace process. On the other hand, GNI per capita declined steadily from 1987 to 2003, indicating that the average Burundian was significantly worse off in 2003 compared to 1987. The sharp decline from 1987 to 2003 is likely the result of political instability caused by military coups and ethnic violence that characterized that period. The slight improvement noticed in the chart from 2003 to date is presumably the consequence of the peace process launched in early 2000s, with the signing of peace-agreements and cease-fires leading to the organization of democratic

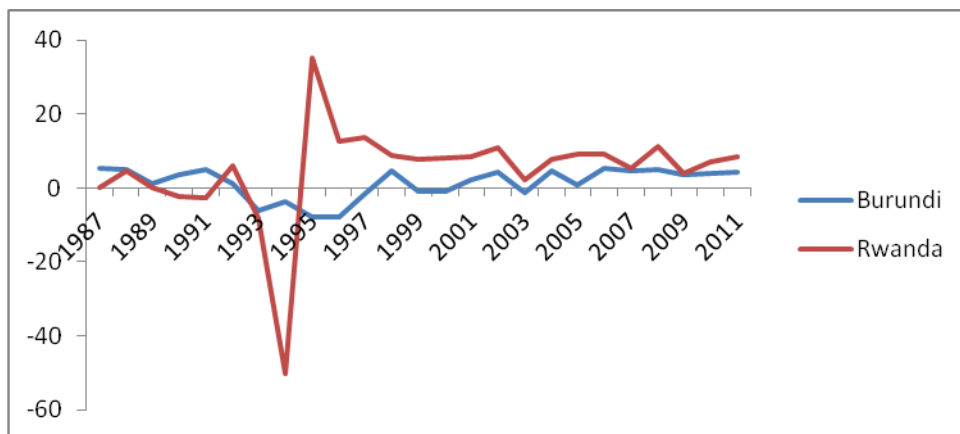
elections in 2005 and 2010. This cursory look at GDP growth and GNI per capita suggests that there must be serious challenges impeding economic growth in Burundi. The next sections will strive to identify the most important bottlenecks to investment and economic prosperity in Burundi by applying the HRV growth diagnostics approach.

Chart No. 1. Trend of GNI/Capita (Current US\$, Atlas method, 1987-2010)



Source: World Development Indicators

Chart No. 2. Trend of GDP Growth (%)



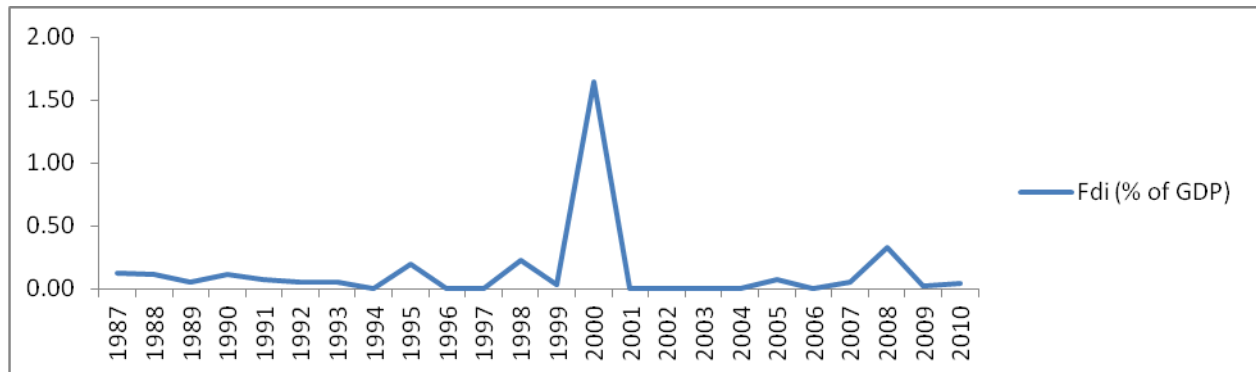
Source: World Development Indicators (WDI)

3.1. Is Lack of Access to Finance the Constraint?

3.1.1. Is it lack of access to international finance?

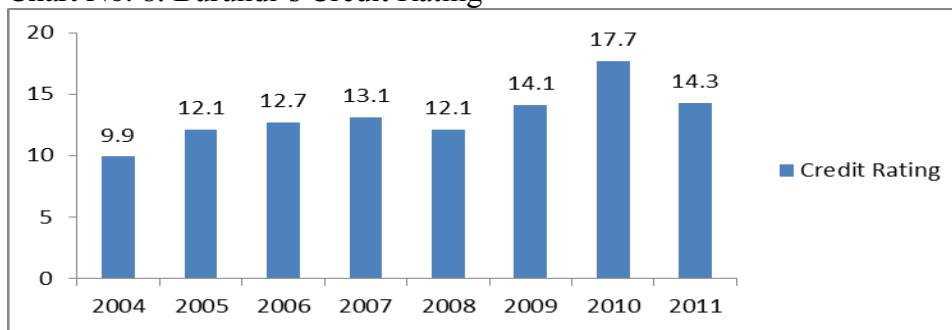
To determine whether the lack of access to international finance constitutes the constraint, the most important symptom to look at is a country's sovereign risk or credit rating (Hausmann et al., 2008). Obstfeld and Rogoff (1996) define sovereign risk "as any situation in which a government defaults on loan contracts with foreigners, expropriates foreign assets located within its borders, or prevents domestic residents from fully meeting obligations to foreign creditors" (p.349). A country's sovereign risk encompasses a set of risks associated with investing in a foreign country, such as political risk (due to political instability) and economic risk (including exchange rate volatility, high inflation rate, high taxes, foreign debt burden, etc.). A country's sovereign risk can reduce the expected returns of private investments, thus limiting the possibility of capital inflows. Also, a country with a poor credit rating is likely to pay more on its foreign borrowing because of its high risk of default. In this regard, the flow of foreign direct investment (hereafter FDI) in a particular country is indicative of the receiving country's credit rating or risk performance, where a higher credit rating typically results in larger FDI inflows. As shown in Chart No.7 below, the amount of net inflows of FDI (as a percent of GDP) has been extremely low in Burundi, varying between 0 percent and less than 2 percent during an observed period of 24 years. This low inflow of FDI is a compelling indication of the country's weak credit rating and unattractive business environment. As shown in Chart No.8 below, Burundi's credit rating on a 0-100 scale (0 being the worst and 100 the best) is very poor, indicating a high risk of private investment expropriation.

Chart No.7. Trend of FDI in Burundi (net, % of GDP)



Source: Author's calculation from World Development Indicators data

Chart No. 8. Burundi's Credit Rating



Source: World Bank, Burundi's Snap Shot

At this point in the analysis, it is not convincing to claim that the lack of access to international finance forms the binding constraint to economic growth in Burundi, because the low score of Burundi's credit rating as well as the low level of FDI inflows appear to be the consequence of domestic problems impeding investment opportunities. These may be problems such as political instability or the lack of infrastructure to support economic activities.

3.1.2. Is it the lack of access to domestic finance?

3.1.2.1. Is it low domestic saving?

As indicated in Rodrik et al. (2005) and Hausmann et al. (2008), poor domestic saving as a constraint can be observed through the following symptoms: a high share of foreign debt to

GDP (1) or a high current account deficit (2), or, alternatively, a high interest rate to depositors or bonds' holders (3). The high level of the first two indicators suggests that the country "is using or has already used up its access to foreign savings to the hilt, given the paucity of domestic savings"; whereas a high interest rate implies "a high willingness to remunerate savings" (Rodrik et al., 2005, p.12). However, due to the lack of available data on the interest rate to depositors and bonds' holders, the analysis will focus on the first two variables (foreign debt to GDP and current account deficit).

With respect to external debt burden, a study by the IMF (2008) on Burundi's debt sustainability shows that the level of its foreign debt is very high: it was estimated to be near 158 percent of GDP at the end of 2007. The amount of external debt (in millions) rose from US\$ 1,073.0 in 2001 to US\$ 1,537.5 in 2007, representing an increase of 43 percent. Table No. 3 below shows the trend of external debt indicators over the period of 2001 to 2007.

The same IMF study indicates that the ratio of the current account deficit to GDP has doubled between 1996 and 2007, rising from an average of 4.7 percent for 1996-2002 to an average of 9 percent for 2003-2007, and reached 16 percent in 2007 alone. This significant increase is ascribed to increases in investment via foreign aid associated with post-conflict reconstruction, to losses in the terms of trade, and to increases in the prices of imported foods and commodities. For instance, on average, imports of goods and service increased from 17.8 percent for 1996-2002 to 39.4 percent for 2003-2007. Nielsen and Madani (2010) demonstrate that following the signing of peace agreements in Arusha, donors resumed their assistance to Burundi and aid inflows increased substantially, reaching more than \$ 300 million in 2007, an amount representing 30 % of Burundi's GDP. Chart No. 9 below display the trend of Burundi's current account deficit and terms of trade; Chart No.10 displays the trend of the trade volume

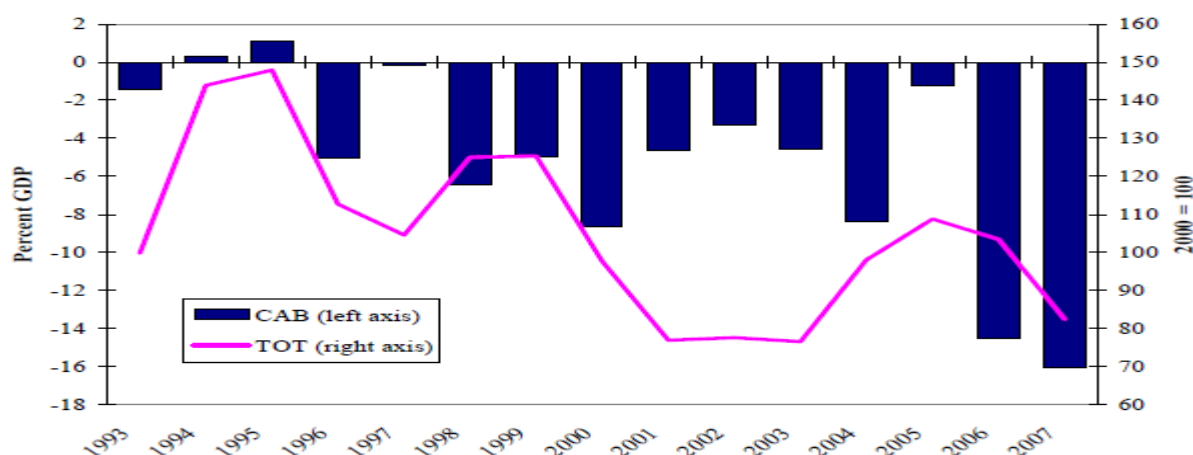
between 1993 and 2007; and Chart No. 11 shows the trend of foreign aid between 1993 and 2008. The analysis above reveals evidently that low saving could be a binding constraint to growth in Burundi as it limits the country's investment opportunities.

Table No. 2. Burundi's External Debt Indicators

Indicators	2001	2002	2003	2004	2005	2006	2007
External debt to GDP	162.0	181.6	224.6	220.1	183.0	165.1	157.9
Net Present Value of external debt to exports	nd	nd	nd	1,772.3	1,332.2	840.8	997.5
External debt (US\$ millions)	1,073.0	1,140.8	1,3336.4	1,462.8	1,465.2	1,516.1	1,537.5

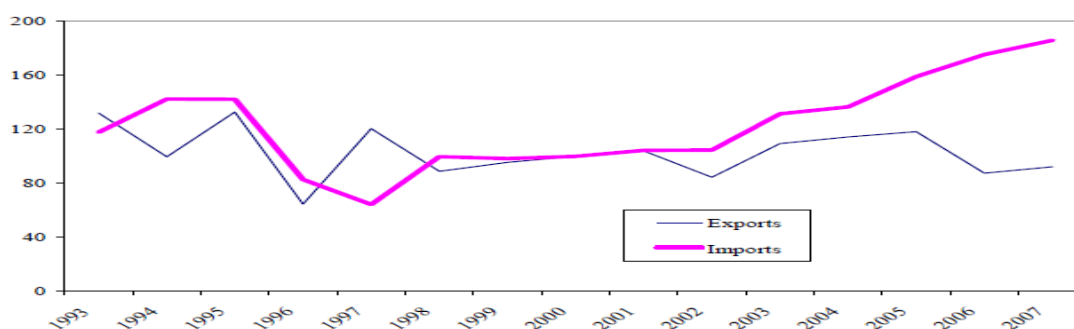
Source: IMF, Burundi: Selected Issues, Country report No.08/292, p.12

Chart No. 9. Burundi's Current Account and Terms of Trade



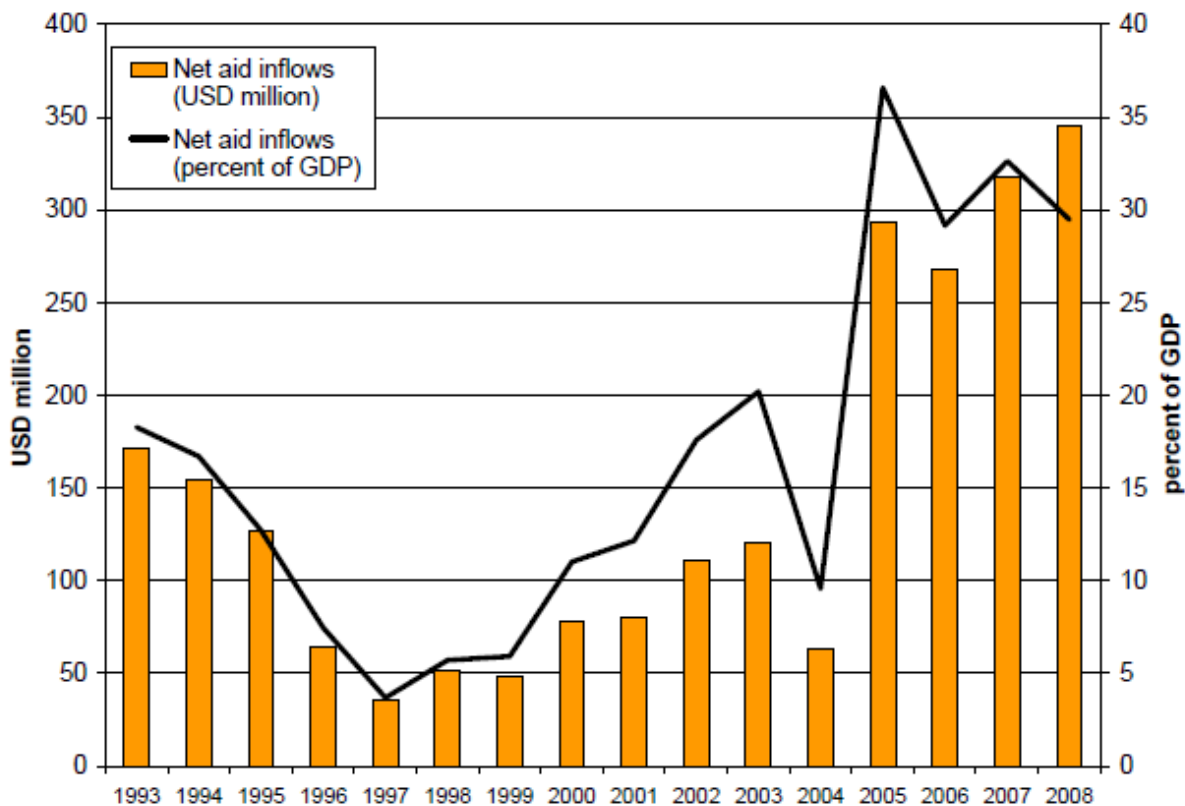
Source: IMF, Burundi: Selected Issues, Country Report No.08/292, p.26

Chart No. 10. Burundi's Trade Volume (Index, 2000 =100)



Source: IMF, Burundi: Selected Issues, Country Report No.08/292, p.2

Chart No. 11. Net Foreign Aid Inflows (in millions of US\$, current prices, and in % of GDP)



Source: Nielsen, H. and Madani, D. Potential Benefits and Risks of Increased Aid Flows to Burundi, World Bank, Policy Research Working Paper No. 5180 (January 2010), p.8

3.1.2.2. Is it poor intermediation?

Financial services appear to be scarce in Burundi, given the small size of the banking sector. According to the Central Bank of Burundi, there are currently nine commercial banks (compared to seven in 2008), one development bank, and one housing fund in Burundi. Information gathered from Burundi's financial assessment conducted by the World Bank (2009) reveals the following features:

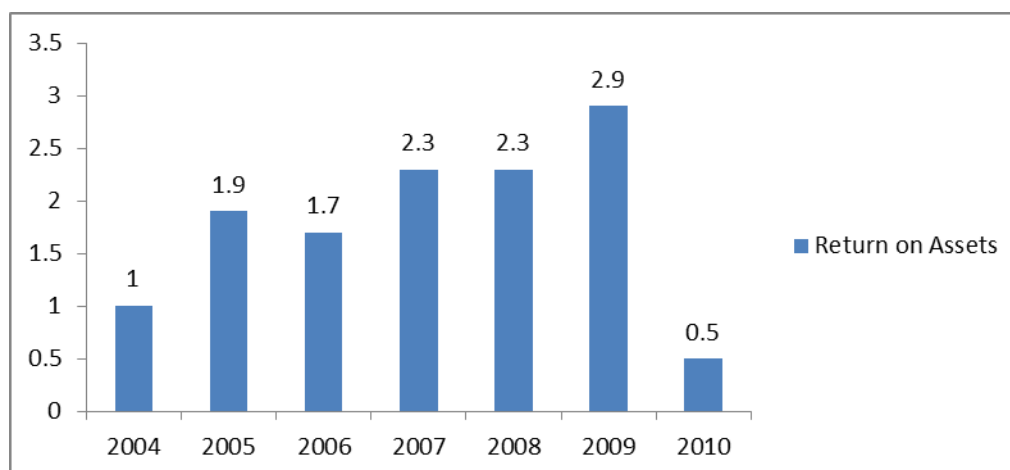
- The financial sector is primarily dominated by commercial banks, which hold about 79 percent of assets, followed by microfinance institutions and social security (5 percent of assets each). All of the commercial banks are located in Bujumbura (the capital city) and in some major urban cities of the country.

- Financial intermediation services in rural areas are mostly served by microfinance institutions. One possible explanation is that most rural inhabitants lack collateral required by commercial banks for credits, as well as the lack of reliable infrastructure and information on borrowers.
- Two main financial products are offered by banks: deposits and short-terms credits. Moreover, most of the bank credits are allocated to the commercial sector. For instance, at the end of 2008, of all banks outstanding credits, 60 percent was allocated to the commercial sector, which only accounts for 12 percent of GDP.
- The rate of return on assets of the commercial sector first increased from 1 percent in 2004 to 2.9 percent in 2009, and then declined to 0.5 percent (below its 2004 level) in 2010. This means that the asset portfolio (outstanding loans) of financial institutions is not performing well, which in turn means that more debtors default.
- Accessing financial services is a big challenge for households and small and medium enterprises: Less than two percent of the population hold bank accounts, only 0.42 percent use bank lending services, and four percent are members of microfinance institutions.
- Small and medium enterprises (SME) are not financially served by commercial banks. The most important reason of this reality is likely the lack of collateral required by banks and reliable information on borrowers. The sole financial institution providing funding to SME is Burundi's development bank (Banque Nationale pour le Development Economique), and the majority of the SME receiving funding operate in both the agricultural and livestock sectors of the economy.

Additionally, according to the World Bank's Business Environment Snapshot in Burundi (2012) and as Chart No. 13 below shows, the share of domestic credit to the private sector (both in percent of GDP and percent of total domestic credit) has been decreasing between 2003 and 2008. For instance, the ratio of domestic credit to private sector (percent of GDP) decreased from 29.3 percent in 2003 to 21.4 percent in 2008. The reason for the decline is presumably the increases in funding in favour of the public sector as the result of the reconstruction process. Furthermore, according to the World Bank's Enterprises Surveys (2006), access to finance is reported as the second major barrier to investment in Burundi (cited by more than 15 percent of surveyed firms), after the lack of access to electricity (cited by more than 40 percent of firms), and only 12.2 percent of firms use banks to finance their investment, barely below the average for Sub-Sahara Africa (14.8 percent).

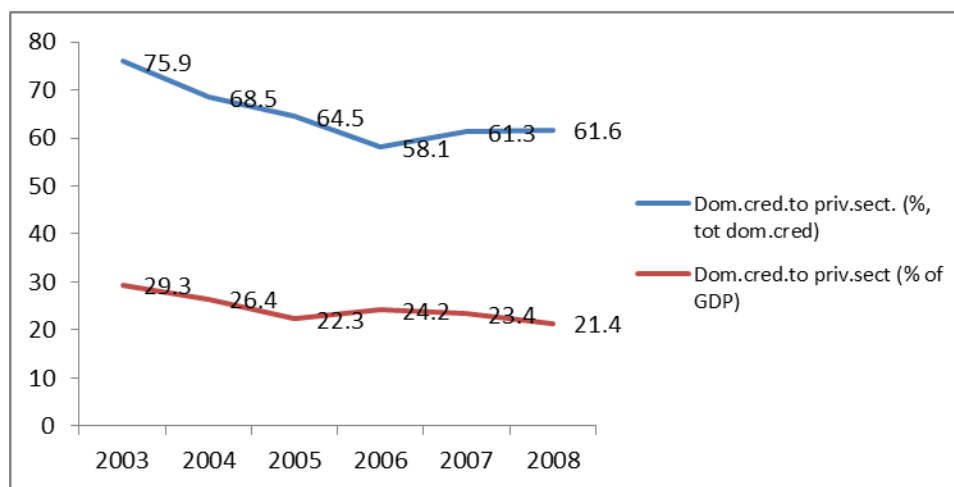
Based on the information on the financial sector above, the study shows that access to domestic finance is a constraint to private investment in Burundi as the majority of the population lacks bank accounts; access to financing is a nightmare for small and medium enterprises, and fewer firms get credits from banks to support their activities.

Chart No. 12. Commercial Banks Profitability



Source: World Bank, Burundi's Financial Sector Assessment (2009) and Business Environment Snapshot (2012)

Chart No. 13. Domestic Credit to the Private Sector (% of GDP)



Source: World Bank, Business Environment Snapshot in Burundi-2012

3.2. Is low return to economic activity the binding constraint?

This section will now examine whether low return to economic activity constitutes the binding constraint to economic growth in Burundi. If that is the case, then the causes may arise either from low social returns (through poor geography, bad infrastructure, or low human capital) or low appropriability caused by government and/or market failures.

3.2.1. Is it low social return on investment?

To assess whether low social return on private investment forms the binding constraint, the analysis must look at the country's geography, the quality of infrastructure, and the level of human capital.

3.2.1. 1. Is geography the constraint?

As mentioned previously, Burundi is a poor landlocked country that does not have access to the sea. This geographical feature impedes economic growth as it increases the transaction costs for firms. According to the World Bank's Doing Business report (2012), trading across borders is extremely expensive in Burundi: the cost to export and import a container is

respectively estimated at US\$ 2,965 and US\$ 4,855. It takes 35 days to export and 54 days to import a container. Compared to Tanzania, a country with access to the sea, the cost of exporting and importing a container is respectively US\$ 1,255 (more than two times cheaper) and US\$ 1,430 (more than three times cheaper), while it takes 18 days and 24 days respectively to export and import a container. Based on this information, it is obvious that Burundi's landlocked status is a major constraint to investment. The transaction cost is so high that it adversely affects the return to economic activity.

3.2.1.2. Is it bad infrastructure?

In addition to being landlocked, there exists a severe deficit of physical infrastructure to support economic activities in Burundi. A study conducted by the African Development Bank (2009) indicates that:

- 1) Burundi's total road network is estimated at 12,300 km, out of which only 11 percent is paved.
- 2) There is no railway in the country, a situation that makes roads the most important means of transportation.
- 3) Air traffic is made possible through one airport located in Bujumbura, the capital city.

Furthermore, the telecommunication sector is also poorly developed. According to the World Bank's annual report on African Development Indicators (2011), per 100 people, there are only 10.1 mobile subscribers in Burundi, compared with 0.4 mainline telephone subscribers and 0.8 internet users. The same report indicates that the level of telephone penetration in Burundi is far below the average of Sub-Saharan Africa (1.5 mainline telephone subscribers versus 37.3 for mobile subscribers and 8.8 Internet users per 100 people). This situation reflects the country's high level of underdevelopment and its huge challenges for communication. This situation

certainly increases the transaction costs for businesses and limits the prospect of economic development.

Moreover, according to a report produced by the IMF (February 2012), electricity shortage is seen by firms as the top challenge hindering economic growth in Burundi. The report indicates that: i) there is a huge gap between the demand and the supply for energy (estimated respectively at 52 MW and 30 MW); ii) 72 percent of businesses report that unreliable electricity supply constitutes a serious challenge to their activities; iii) less than 2 percent of households have access to electricity (with an average yearly consumption of 23 Kwh per capita); and iv) the sector has not received any investment at all since 1993. The consequence of this huge energy deficit is frequent electricity blackouts and rationing, especially in urban areas.

Based on the analysis above, it appears that the lack of infrastructure (especially roads and electricity) could be a potential binding constraint to investment in Burundi. Roads and electricity supply are key ingredients for economic growth. The situation of Burundi that arises from this analysis shows that both the infrastructure gap and the energy deficit impede the success of economic activities, and that substantial amounts of resources are required to alleviate the problem.

3.2.1.3. Is it human capital?

The best indicator of human capital as the binding constraint would be the wage premium in Burundi's labor market. However, because of the unavailability of data on that indicator, the indicators of education (literacy and school enrolment rates) can serve as proxy to assess whether human capital is the binding constraint. In this regard, the World Bank (Africa Development Indicators, 2011) estimates that the literacy rates for youth (ages 15-24 years) and adults (ages 15 and over) were 76.6 percent and 66.6 percent respectively in 2009. These indicators appear to be

barely higher than the average for the Sub-Saharan Africa region (respectively 75.2 percent and 65.5). Furthermore, as Table No. 3 below shows, school enrolment rates for both secondary and tertiary education remain very low and suggest that human capital could be a serious challenge to economic growth in Burundi as most citizens lack adequate skills required to increase productivity.

A caveat is worth pointing out here. The indicators of schooling in the table above reflect the gross ratio, not the net ratio. The reason stems from the absence of quantitative data pertaining to the net school enrolment rate in the three indicators. In the computation of the school enrolment rates, the World Bank treats the total enrolment rate in primary or secondary as comprising the total enrolment, regardless of age, expressed as a percentage of the population of official primary (or secondary) education age. It is thus normal that it exceeds 100 percent because of the inclusion of over-aged and under-aged students owing to early or late school entrance and grade repetition³. In the case of Burundi, the rate may exceed 100 percent due to the catch-up effect in the post-conflict environment, as many children could not go to school during the conflict time. With respect to the gross tertiary enrolment, it includes the “total enrolment in tertiary education, regardless of age, expressed as a percentage of the total population of the five-year group following on from secondary school leaving.”⁴

³ See World Development Indicators technical notes

⁴ *Ibid*

Table No. 3. Trend of Indicators of Education
(School enrolment rates, % gross)

Years	Burundi		
	Primary	Secondary	Tertiary
2003	77	11	2
2004	83	13	2
2005	88	14	2
2006	113	15	2
2007	126	16	2
2008	136	18	3
2009	147	21	3
2010	156	25	3

Source: World Development Indicators, various reports

3.2.2. Is low appropriability the constraint?

Low appropriability of return to investment may induce low return to economic activity through government or market failures. This issue is discussed in the following sub-sections.

3.2.2.1. Are government failures the constraint?

Some evidence on the state of governance, through microeconomic risks (such as the level of corruption and property rights) and macroeconomic risks (fiscal deficit, inflation rates, and current account deficit), will shed light on whether government failures can cause low appropriability of return to investment in Burundi.

First, Burundi ranks 172th out of 182 countries in 2011 on the Corruption Perception Index (CPI) with a poor score of 1.9. This score indicates that Burundi is among the highly corrupt countries in the world. The CPI ranks countries on a scale of 0 (highly corrupt) to 10 (very clean). As Table No. 4 below shows, the problem of corruption seems to be exacerbating (or becoming more rampant) in Burundi, in comparison to Rwanda where the efforts of transparency are observed. In fact, Burundi's score declined from 2.3 in 2005 to 1.9 in 2011, whereas Rwanda's score improved from 3.1 in 2005 to 5 in 2011. Moreover, according to the

World Bank (2012), 56.5 percent of surveyed firms report that they are expected to pay bribes to public servants in order to get things done. All these indicators show how corruption is rampant in Burundi with negative effects on businesses, as the bribes paid increase the transaction costs for firms and divert resources away of investment activities.

Table No. 4. Comparing Burundi's Corruption Perception Index (2005 – 2011)

Year	2005	2006	2007	2008	2009	2010	2011
CPI Burundi	2.3	2.4	2.5	1.9	1.8	1.8	1.9
CPI Rwanda	3.1	2.5	2.8	3	3.3	4	5

Source: Transparency International, several reports

Furthermore, based on the World Bank's Governance Indicators, the institutional environment appears to be posing enormous challenges to the economy in Burundi. As shown in Table No. 5 below, its performance on all six indicators of the quality of governance is very poor, as it ranks poorly (in percentile) on all the measures of governance⁵ (voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption).

Furthermore, the Doing Business report (2012) reveals that Burundi ranks 169th out of 182 countries on the overall Ease of Doing Business Index (Table No. 6 below), indicating that the regulatory environment constitutes a serious challenge to the business climate. For instance, as Table No. 7 shows, enforcing contracts is more challenging in Burundi than in Rwanda. In the former country, businesses are required to comply with 44 procedures and spend 832 days (more than two years and three months) to enforce contracts, whereas in Rwanda businesses face 24 procedures and less than a year (230 days). Burundi's performance in relation to doing business reveals that the institutional and regulatory framework is not conducive to the success of businesses, hindering economic growth, accordingly.

⁵ Annex 2 provides an explanation of the six indicators of governance

Table No. 5. Burundi's Ranking on Governance Indicators (percentile, 1-100)

Indicators	Percentile Rank (1-100)			
	1996	2000	2005	2010
Voice and accountability	5.3	3.4	28.4	21.8
Political stability/absence of violence	2.4	1.4	6.7	7.5
Governance Effectiveness	2.9	4.9	8.8	12.9
Regulatory Quality	4.4	12.3	8.3	11.5
Rule of Law	4.3	3.3	12.4	10.0
Control of Corruption	4.9	9.8	18.5	12.4

Source: World Bank, Worldwide Governance Indicators, several reports

Legend (color indicates):

0th-10th Percentile 25th-50th Percentile 10th-25th Percentile

Table No. 6. Burundi's ranking on Doing Business Index

Ease of	2010 (out of 183)	2011(out of 182)	2012 (out of 182)
Doing Business (overall)	176	177	169
Starting a Business	130	102	108
Dealing with Constructions Permits	172	154	159
Registering Property	118	111	109
Getting Credit	167	152	166
Protecting Investors	154	153	46
Paying Taxes	116	142	125
Trading Across Borders	175	174	174
Enforcing Contracts	172	172	172
Resolving Insolvency	183	183	183

Source: World Bank, Doing Business Reports (2010 – 2012)

Table No. 7. Comparing Burundi's Performance on Doing Business

Easy of:	Burundi		Rwanda	
	Procedures	Times (days)	Procedures	Times (days)
Enforcing contracts	44	832	24	230
Starting a business	9	14	2	3
Dealing with construction Permits	22	135	12	164
Registering a property	5	94	5	25

Source: World Bank, Doing Business Report- 2012

With respect to macroeconomic risks, and as can be seen from Table No. 8 below, it is clear that macroeconomic governance in Burundi is very poor and not supportive of growth. For instance, the inflation rate is projected to rise to 12.3 percent in 2012 from 6.5 percent in 2010. This inflation trend may be the result of increases in the prices of imported commodities or an expansionary monetary and fiscal policy. The current account deficit (in percent of GDP) is high and expected to significantly increase to 28 percent in 2012 from near 22 percent in 2010. It is worth reminding here that the current account deficit has been on the rise for years, as already proven previously (from an average of 4.7 percent for 1996-2002 to an average of 9 percent for 2003-2007, and reaching 16 percent in 2007). Finally, the table shows that fiscal deficit (in percent of GDP) is also high; it was estimated at 7.5 percent in 2010 and is projected to remain around the same level in 2012. The increase in both the current account deficit and the fiscal deficit is probably the consequence of external shocks (rise in commodities prices) and the inability of the government to generate more revenues, aside from foreign aid.

Table No. 8. Burundi's Macro Risks Indicators

Year ⁶	2010	2011	2012
CPI Inflation	6.5	8.3	12.3
Budget Balance (% of GDP)	-7.5	-7.7	-7.2
Current Account (% of GDP)	-21.8	-18.1	-28

Source: OCDE, Africa Economic Outlook-2011/Burundi, country profile

Based on the evidence presented above, it is worth arguing that the state of governance in Burundi is very poor and not conducive to the success of economic activities, consequently contributing to the low appropriability of investment. Macroeconomic policies appear to be on an unsustainable path and are eventually causing the depreciation of assets and a loss of international reserves, with adverse implications on growth. Thus, the study finds that

⁶ Estimates for 2010 -2011, and projections for 2012-2013

government failures could be a binding constraint to growth in Burundi because of their adverse effects on economic activities as revealed by the analysis.

3.2.2.2. Are market failures the constraint?

The symptoms of market failures as the binding constraint can be observed through information externalities (self-discovery) or coordination externalities.

3.2.2.2.1. Is it self-discovery?

Following Hausmann et al. (2005), self-discovery is, for an economy, to find out new tradable products out of what already exist within that economy. This process implies, in other words, innovation - generating new ideas and products for the market (domestic or foreign). In the case of Burundi, the structure of the economy over decades (primarily dominated by the agricultural sector) gives credence to the conclusion that self-discovery is still not happening in Burundi; this is constraining economic growth. However, this statement does not imply that self-discovery is the binding constraint to growth because there are factors that underpin the creation of new ideas and products. For instance, knowledge externalities within firms or in the form of human capital are key ingredients for self-discovery and for growth (Rodriguez-Clare and Klenow, 2004). The stock of knowledge accumulated by firms and workers is likely to spill over across the economy and generate new ideas and products, in addition to increasing productivity. The institutional or regulatory framework, in terms of protecting property rights, is another element that can underpin the process of self-discovery. Or, as the analysis has shown, the regulatory environment is not conducive to growth in Burundi. Moreover, Burundi's standing on the competitiveness index - 139th out of 139 countries in 2011 - (The Global Competitiveness Report, 2011) illustrates that the domestic environment hinders the process of self-discovery in

particular and economic growth in general. Therefore, this study rules out the option that self-discovery could form the binding constraint to economic growth in Burundi.

3.2.2.2.2. Is it coordination failures?

Achieving economic prosperity is a function of not only economic agents' decisions, but also of the coordination of those decisions. Agents' incentives to invest in an economy or in a specific sector of the economy are important for growth. As Easterly argues, "Prosperity happens when all the players in the development game have the right incentives" (2002, p.289). In other words, achieving economic prosperity requires that the government set policies that induce capital owners to invest in the economy (for instance by increasing spending in education, fighting corruption, keeping the inflation rate low, or securing private property) and private entrepreneurs have the right incentives to conduct their businesses, pay taxes, etc. The coordination of economic agents' actions and decisions, as well as creating proper incentives, are so important that they determine the level of interaction among the players in the economy.

In an economy such as Burundi's, the role of coordination between economic agents, particularly the government and the private sector, is crucial to promoting economic growth. For instance, the government's actions in securing property rights and promoting security as a public good are deterministic of the decisions of businesses entrepreneurs and coffee producers in rural areas. Nevertheless, based on the evidence presented above on micro and macro risks, as well as on the state of the economy as the whole, it can be inferred that coordination is missing as a key factor in search of economic prosperity in Burundi, but is not perceived as the binding constraint for it appears to be a result of governance failures.

To summarize this chapter, the growth diagnostics analysis conducted in the preceding sections reveals that almost all the factors examined in the decision tree could qualify as binding

constraints to economic growth in Burundi. The constraints are not only numerous, but complex and overlapping, to the extent that singling out a specific factor as the most binding constraint seems very difficult. Nevertheless, this study asserts that, given Burundi's post-conflict status, the most important binding constraint is the business environment, particularly the regulatory framework that imposes exorbitant costs to private entrepreneurs. The study shows that doing business in Burundi is not that easy as entrepreneurs have to comply with multiple and lengthy regulatory procedures established by the government, impeding thereby the success of their business. Therefore, the study recommends that, in the short-term, the government pursue regulatory reforms so as to promote a friendly business environment that will facilitate the conduct of private economic activities. The study acknowledges that access to finance, poor geography, lack of infrastructure, human capital, etc. are all constraints to growth in Burundi and unlocking them will have tremendous effect on growth and the wellbeing of citizens. The main reason that justifies the choice of the business environment as the binding constraint is that Burundi is a post-conflict country that is facing numerous development challenges. As such, I believe that it must be difficult and too demanding for the government, which I presume lacks sufficient governance capacities, to try to fix all the problems together. The long period of conflicts has diminished the government capacities to cope with its development challenges. Therefore, focusing on one policy area sounds strategic and rational.

General Conclusion

This study applied the Hausmann, Rodrik and Velasco growth diagnostics approach, using the decision tree methodology, with the aim of finding the most binding constraint to economic growth in Burundi, one of the poorest nations in the world. The study shows that Burundi has faced recurrent ethnic conflicts with devastating consequences on its political environment, the economy, and the well-being of its citizens. The long years of conflicts have diminished the state's capacities and resources to promote economic growth and improve the living standards of the population. Burundi is facing a slew of development challenges that necessitate tremendous efforts and resources from the government to address them. Burundi's economic performance has been very poor for many years, most likely as the result of political instability and ethnic conflicts the country and its population have experienced. Social cohesion appears to be broken and difficult to build. The indicators of human development are very poor, to the extent that the majority of citizens are living in grinding poverty. The peace process launched in the early 2000s is an opportunity for national reconciliation and nation building. However, given the many years of conflicts the country has faced with adverse consequences on the whole society, ensuring a sustainable peaceful environment and economic development will take time and entail enormous efforts and resources.

With regard to the study's main objective and based upon the evidence from the growth diagnostics analysis, the study finds that there are many and complex constraints that hinder Burundi's economic growth. The study finds that most factors in the decision tree could qualify as binding constraints to economic growth in Burundi. Nevertheless, the study concludes that the business environment, especially the regulatory framework, qualifies as the most binding constraint to economic growth in Burundi. The study recommends, therefore, that the

government reforms the regulatory framework so as to promote a friendly business environment. The reforms should encompass all the variables of the index of doing business as previously explained. For instance, the government should reduce the number of procedures through which businesses have to go in relation to starting a business, enforcing contracts, hiring, getting licences, etc. Doing so will be a significant incentive to the private sector to develop its investment opportunities.

The study acknowledges that other factors examined in the decision tree, such as access to finance, poor geography, lack of infrastructure, human capital, macroeconomic governance, etc. are not conducive to economic growth in Burundi and unlocking them will have tremendous effect on growth and the country's human development level. However, the study rules them out as the binding constraint for strategic reason, given the complexity of challenges uncovered in the growth diagnostics analysis. Burundi has just emerged from a long period of conflicts that strongly hampered its development process. As a post-conflict country, Burundi is experiencing numerous development problems that require a strategic policy agenda to address them, especially in the short-term. This is consistent with the spirit of the HRV growth diagnostics approach. Given the complexity of challenges and based upon Burundi's political economy as examined in this study, recommending that the government tackles more than one issue together is doomed to failure as the absence of governance capacities appears to be another challenge facing Burundi.

It is important to point out here that overall the growth diagnostics methodology constitutes an important and very informative tool for examining barriers to growth in a poor country such as Burundi. However, the only problem I find with the methodology is that it does not provide adequate guidance in establishing policy priorities in the context where almost

everything is a challenge to growth. Moreover, the approach does not take into account a country's specific political dimension into the analysis. The elements of government failures, for instance, in the decision tree can be consequences of the country's political process. Therefore, a particular emphasis on the politics of the country under consideration should be highlighted in the methodology. Economic problems are highly associated with domestic politics. The specific context of politics in Burundi and their implication on the country's economy should not be disregarded in analysing the most important barriers to economic growth. In this regard, the sequence of actions to be undertaken, when the analyst is facing a poor country with various challenges appears to be lacking in the HRV growth diagnostics approach.

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Appendices

Annex 1. Map of Burundi



Annex 2. Understanding the Governance Indicators

- a) Voice and accountability: captures perceptions on freedom of expression, free media, freedom of association and the extent to which citizens participate in selecting their governments.
- b) Political stability: measures the possibility that a government will be destabilized or demised by unconstitutional or violent means
- c) Government effectiveness: measures perceptions on the quality of the public services and its independence from political pressure, as well as the quality of policy formulation and credibility of the government to commit to policies
- d) Regulatory quality: measures the perceptions of the government to formulate and implement sound policies that permit and promote the development of the private sector.
- e) Rule of Law: measures the perceptions of citizens in the quality of contract enforcement, private property, the police, and the courts
- f) Control of corruption: measures the perceptions of citizens on the extent to which power is exercised for private gain and the capture of state by the elites and private interests.

Source: Kaufman, D et al. (2010). *The Worldwide Governance Indicators: Methodology and Analytical Issues*