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Explaining Entrepreneurship in underdeveloped countries of The Great Lakes region of Africa: what are the factors that favor or hinder entrepreneurship? Evidence from Burundi.

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Abstract

This paper is based on the assumption that entrepreneurship contributes to the economic development of a nation. Building on the determinants of entrepreneurship proposed in the Eclectic Theory of Entrepreneurship by Verheul et al. (2002), and following the Framework of determinants of entrepreneurship by Wennekers et al. (2002), the paper tries to point out to what extent economic growth in underdeveloped countries of The Great Lakes Region of Africa can be sustained through the economic phenomenon of entrepreneurship. An attempt is specifically made to bring to light the factors that hinder or favor entrepreneurship in Burundi.
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1. Introduction

Burundi is a landlocked country bordered by Rwanda in the north, Tanzania in the east and south, and Lake Tanganyika and the Democratic Republic of the Congo in the west. Burundi is a natural resource-poor country without natural resources such as gold, diamond, petrol etc. and has an underdeveloped manufacturing sector. The economy is predominantly agricultural with roughly 90% of the population dependent on subsistence farming. Economic growth depends on coffee and tea exports, which account for 90% of foreign exchange earnings. According to Central Intelligence Agency (CIA) factbook\(^1\), the 2002 estimate of the population below poverty line for Burundi mounted to 68%. The Gross Domestic Product (GDP) estimates for the various sectors in 2005 indicated a composition of: 45.6% for agriculture, 20.8% for industry and 33.6% for services. For the same year, GDP–purchasing power parity mounted to $4.432 billion with a real growth rate of 5.5% and a per capita purchasing power parity of -$700.

It is estimated that only one in two children goes to school, hence a high rate of illiteracy. Food and clean water, medicine, and electricity remain in short supply. The UNDP HDI report (2003) that covers 175 countries lists Burundi at the 171\(^{st}\) position. The report with many other indicators shows that Burundi is among the poorest countries in the third world in need of economic development and considerable improvement in the standard of living of its citizenry.

In their paper “Explaining growth in Burundi”, Nkurunziza and Ngaruko (2002) are of the opinion that bad governance and abusive political regimes can explain Burundi’s poor economic performance. However, events unfolding, the current political dispensation offers reason for hope and great expectations.

In some developing countries such as China and India, entrepreneurship has proven to be beneficial to national economic development. Several researchers such as Nathaniel H. Leff, (1979); David Burnett, (2000); van Der Sluis, van Praag and Vijnverberg, (2004); Carree and Thurik, (2003); Wennekers et al. (2002); Audretsch and Thurik, (2004) have generally argued that entrepreneurship is important for economic growth. In the same perspective, this study presents entrepreneurship as one of the ways to contribute to national economic growth. This paper is an explorative study that embarks on an investigation of how to enhance entrepreneurship in the search to combat poverty in the so-called “Great Lakes Region of Africa”. The paper focuses mainly on Burundi.

Local economic experts and/or experienced government officials in the economic sector as well as researchers\(^2\) at university of Burundi all agree that the level of entrepreneurship in Burundi is inadequate. The objective of this study is to find out factors that hinder (and/or favor)

\(^1\)For up-to-date facts see [http://www.cia.gov/cia/publications/factbook/geos/by.html#Econ](http://www.cia.gov/cia/publications/factbook/geos/by.html#Econ)

\(^2\)Banderembako, Kidwingira and Nkeshimana, in CURDES (2001).
entrepreneurship in Burundi. However, given such a poor resource-based context, is entrepreneurship a feasible option for Burundi as an alternative to contribute to its economic development? This research tries to answer this and similar questions. In addition, building on the evidence from Burundi, the present paper aims at providing a constructive entrepreneurial tool for other developing countries faced with similar socio-political and economic conditions as Burundi.

The structure of this paper is as follows: an attempt is made to define the concept of entrepreneurship in part two. Part three presents different measures of entrepreneurship while part four discusses the link between entrepreneurship and economic growth. Parts five and six treat the determinants of entrepreneurship. Whereas part five discusses the determinants of entrepreneurship in broad terms, and presents the model used for this study, part six treats the determinants of entrepreneurship in developing economies. Parts seven and eight analyze entrepreneurship in the great lakes region of Africa. Part seven gives a general information as well as economic overview of the region and part eight deals with factors that affect entrepreneurship in the region by analyzing the case of Burundi. Finally part nine concludes the study by stressing some relevant policy implication as well as suggestions for policy implication and further research.
2. Defining Entrepreneurship

In this section, an attempt is made to discuss the various definitions of entrepreneurship within existing literature. According to Verheul et al. (2002), entrepreneurship is a multidimensional concept, the definition of which depends largely on the focus of the research being undertaken. Verheul et al. (2002), refer to Sahlman and Stevenson (1991) who define entrepreneurship as a way of managing that involves pursuing opportunity without regard to the resources currently controlled. Within this perspective, entrepreneurs identify opportunity, assemble required resources, implement a practical action plan, and harvest the reward in a timely, flexible way.

Hébert and Link (1989), argue that entrepreneurship pertains to the actions of a risk taker, a creative venture into new business or the one who revives an existing business.

Carree and Thurik (2003) discussed three types of entrepreneurs, each with a specific function. The first type is “Schumpeterian entrepreneurs” who are mostly found in small businesses. They establish and direct autonomous firms that are pioneers or innovators and which by their actions creatively destroy existing market structures. In fact, innovative entrepreneurs challenge incumbent big firms. They introduce new inventions that render obsolete, existing technologies and products. This is what Schumpeter referred to as “the process of creative destruction”.

German economist, Schumpeter has singlehandedly, drawn attention to the phenomenon of innovative entrepreneurship. He refers to “entrepreneur” an individual who carries out new combinations called enterprise. The second type is “entrepreneurial managers (intrapreneurs)”: These are employees whose leadership results in entrepreneurial ventures within larger firms. They act on behalf of their employers by taking commercial initiatives, risking their time, reputation and sometimes their jobs. If circumstances oblige, they leave their position and create new and own enterprises. The third category of entrepreneurs includes those formally classified as managerial business owners. These consist of shopkeepers and people in professional occupations and many franchisees.

Carree and Thurik (2003) argue that as an individual introduces a new product or starts a new firm, this can be interpreted as an entrepreneurial act in terms of the three types of entrepreneurship. The individual is an innovator; since he or she has perceived a hitherto unnoticed profit opportunity and he or she takes the risk that the product or venture may turn out to be a failure.

The Global Entrepreneurship Monitor (GEM) defines entrepreneurship as any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of existing business, by an individual, team of individuals, or established businesses. In the GEM report on Uganda (2003) it is argued that the definition of entrepreneurship has proved controversial. Not only do different people have different views of who is an entrepreneur, but also the same people may use different definitions when researching entrepreneurship in different economic and social contexts.

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3 See GEM global report 2004, p10
Considering the existence of numerous definitions, the definition of Audretsch & Keilbach (2005) is solely adopted for the purpose of this study. Since attempt is made to analyze issues that affect the state of knowledge of economic agents as well as factors that affect the creation of enterprises in Burundi, the view of Audretsch & Keilbach is of relevance to this study. They define Entrepreneurship as consisting of two criteria. The first criteria involves the state of knowledge and is the ability of economic agents to recognize economic opportunities that can only or best be realized through the creation of a new enterprise. The second involves economic behavior and specifically the creation of a new enterprise to appropriate the economic value of that knowledge⁴.

⁴ Audretsch & Keilbach (2005), Entrepreneurship Capital – Determinants and Impact; P.4
3. Measuring Entrepreneurship

After exploring different perspectives of entrepreneurship in the previous section, this section gives a brief overview of how the concept is measured.

Several researchers such as Verheul et al. (2002) and Wennekers et al. 2002 measured entrepreneurship in terms of “rate of business ownership” and “self-employment”. Verheul et al. (2002) discuss two perspectives of entrepreneurship namely static and dynamic. The authors argue that self-employment or business ownership rate is an important static indicator of the level of entrepreneurship. They define the term self-employment as referring to people who provide employment for themselves as business owners rather than seeking a paid job. They also state that the dynamic perspective of entrepreneurship focuses on the so-called nascent and start-up activity, as well as on the net entry rate and the turbulence rate (total of entry and exit).

The Global Entrepreneurship Monitor (GEM) constructs measures of entrepreneurship based on two different levels of entrepreneurial activity. The first level includes start-up activities. These are supposed to happen during the period that precedes the actual creation of a business. The measure of these activities is labeled “nascent entrepreneurship prevalence rate”. The proportion of the adult population (18-64yrs) who carry out such activities is also measured and called “nascent entrepreneurs”. This phase of entrepreneurship is labeled “nascent entrepreneurship”. The second level comprises of two activities. One corresponds to the actual process of creating and running an identifiable new business. GEM measures these activities for a period of 42 months. The measure is then labeled “the new firms prevalence rate”. GEM also measures the proportion of the adult population (18-64yrs), which is currently active in running these new or baby businesses. At this level, other activities include the revival or restructuring of an existing business (established firms). This is about innovation and growth. The combination of the two measures (nascent and new firm entrepreneurship) gives another measure namely the “Total Entrepreneurial Activity rate” (TEA). However the TEA index is not always equal to the exact sum of the other two measures since some individuals may be both nascent and new firm entrepreneurs.

In sum it can be said that different ways of measuring entrepreneurship exist. This is therefore not an exhaustive listing. It has been shown that entrepreneurship can be measured in terms of the rate of business ownership, the rate of self-employment, the nascent entrepreneurship prevalence rate, the new firms prevalence rate and the combination of these last two measures, which give the so-called Total Entrepreneurial Activity (TEA) rate. In the present study entrepreneurship is measured in terms of business ownerships.
4. Entrepreneurship and Economic growth

4.1. Introduction

Objective measures of economic growth like entrepreneurship are not straightforward and different people have different views of what is economic growth. For example, according to “Our common interest” a recent work of the commission on Africa by Blair et al. (2005), when asking the big question: ‘What is development for?’ there were very different answers in different cultures. The report says: “...many in Western countries see it as being about places like Africa ‘catching up’ with the developed world. In Africa, by contrast, you will be more likely to be told it has something to do with well being, happiness and membership of a community. In the West, development is about increasing choice for individuals; in Africa it is more about increasing human dignity within a community. The trouble is that in the debate on development, though we all use the same terms, we often don’t mean the same thing by them. Different cultures manifest their ideas of political and economic freedom in very different ways...”

In light of this, the meaning given to economic growth and how growth is measured, the role of entrepreneurship in economic growth and the mechanisms through which entrepreneurship contributes to economic growth are the three areas considered in this section.

4.2. Defining and measuring economic growth

For the sole purpose of this study, economic development and economic growth are assumed to mean the same thing. Economic growth (or development) together with personal wealth and firm profitability are considered as determinants of economic performance.

According to Report GEM Suisse (2002), economic growth is generally measured in terms of variation in two principal indicators: GDP and employment. It is assumed in this study that the adoption of entrepreneurship will increase both GDP and the employment rate in a country or region.

4.3. Role of entrepreneurship in economic growth

In the previous section the meaning of economic growth is given. The question now becomes whether entrepreneurship is of importance to economic growth. Many researchers affirm that entrepreneurship is indeed important in the process of economic growth. For instance, Leff (1979) and Burnett (2000) state that entrepreneurship is so important for economic development, that it has sometimes been conceptualized as a fourth factor of production. Van Der Sluis, Van Praag and Vijnwerberg (2004) argue that developed countries have contributed much to their economies through policies that favored creation and proliferation of small businesses. According to Carree and Thurik (2003) the role of entrepreneurship in economic growth can be seen in the functioning of markets. They argue that many economists and politicians have concluded that there is a positive impact of entrepreneurship on the growth of GDP and employment and that entrepreneurs play the role of implementing innovations. Wennekers et al.

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5 See the framework used for this study by Wennekers et al. (2002)
(2002) are of the view that entrepreneurship is a potential source of job creation and economic growth. Audretsch and Thurik (2004) stipulate that there is evidence to support the relationship between the birth of new firms and local economic and employment development. According to Alistair Nolan, OECD (1999), entrepreneurship creates jobs and wealth.

Having established the important role of entrepreneurship in the process of economic growth, the question then becomes, through which mechanisms or what are the conditions in which entrepreneurship brings about economic growth? In the following section an attempt is made to answer the above question(s).

### 4.4. Mechanisms by which Entrepreneurship leads to Economic Growth

Audretsch and Thurik (2000) concluded that today the world is experiencing what might be termed an “entrepreneurial society” which is conducive to innovative activity because it encourages people to create new ideas and to actively commercialize those ideas. Carree and Thurik (2003), Van Stel, Caree and Thurik (2005), stated that entrepreneurship stimulates economic growth by encouraging innovations and enhancing competition. Carree and Thurik mention Acs (1992), as one of the first individuals to distinguish consequences of increased importance of small firms: entrepreneurship, roots of innovation, industry dynamics and job creation. According to these authors, Acs claims that small firms play an important role in the economy by serving as agents of change through their entrepreneurial activities being the source of considerable innovative activity, stimulating industry evolution and creating an important share of newly generated jobs.

Other economic growth trends brought by entrepreneurship include what Havey Leibenstein (1968) captures in the notion of “per capita income”, in discussing what he calls important points of the theory of economic development. He argues that per capita income growth requires shifts from less productive to more productive techniques per worker, the creation and adoption of new commodities, new materials, new markets, new organizational forms, the creation of new skills and the accumulation of new knowledge and an interaction of economic capacity and the related creation of demand so that some rough balance between capacity growth and demand growth can occur. Elsewhere, Audretsch and Thurik (2004) state that entrepreneurship capital exerts a positive impact on competitiveness and economic growth through knowledge spillovers, a mechanism underlying endogenous growth; through augmenting the number of enterprises, increasing competition and by providing diversity among firms.

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6 According to Audretsch & Keilbach (2005) entrepreneurship capital of an economy, a region or a society is a regional milieu of agents and institutions that is conducive to the creation of new firms. This involves a number of aspects such as social acceptance of entrepreneurial behavior but of course also individuals who are willing to deal with the risk of creating new firms and the activity of bankers and venture capital agents that are willing to share risks and benefits involved.
4.5. Conclusion

In this section, the link between entrepreneurship and economic growth was explored. As mentioned earlier, defining and measuring entrepreneurship is not easy and neither is linking entrepreneurship to growth. If we define entrepreneurship as new business creation, we assume that over time there will be a net increase in new businesses, and that the sum of the contribution of the surviving firms in terms of products and services is positive. It follows that generally, the greater the level of entrepreneurship, the greater the contribution to economic growth.

Existing literature has shown five major outcomes of successful entrepreneurship that is, the one which is likely to contribute to economic growth. They include innovation, variety in products and services, competition, creation of wealth and increase in employment. In the presence of such kind of entrepreneurship there is an overall increase in GDP and improvement in the quality of life serving as indicators of economic growth.

It is important to notice however that most of the studies discussed here hinge on observations and practices in developed countries whose culture, business models and other entrepreneurial conditions might be different compared to developing countries. Hence, it is expected that different contexts and conditions will dictate not only different kind of entrepreneurs and therefore different qualities of entrepreneurship but also different obstacles to be confronted. The remainder of this paper explores the main obstacles to entrepreneurship in countries of the great lakes region of Africa. First of all, the study presents the general determinants of entrepreneurship. Subsequently it investigates the factors that affect those determinants by analyzing the case of Burundi.

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7 Stressing the role of creation of wealth and employment, it can be said that as entrepreneurs get wealthier, (and ever mindful of the need to sustain their new found wealth), they associate with other entrepreneurs or individuals e.g. employ more workers in the hope of increasing productivity, thereby increasing the ranks of the employed As more and more of the population gets employed, their purchasing power increases as well. Note that in cultures such as in Africa and especially in Burundi, as one gets employed, it means a big hope and source of potential help not only for the restrained family but also the extended family that is, relatives and friends
5. Determinants of Entrepreneurship

5.1. Introduction

In the previous section the link between entrepreneurship and growth was discussed. It was established that entrepreneurship is an important factor for economic growth. Consequently, entrepreneurship should be recommended, encouraged and stimulated in developing countries. This section looks at general determinants of entrepreneurship. For this study, these determinants are used as benchmarks in analyzing entrepreneurship in countries of the Great Lakes region of Africa. Any deviation (as determined by prevailing favorable or unfavorable conditions in the local socio-political and economic context) from these determinants, explain the current level of entrepreneurship in the country or region of study. Section 5.2 discusses the demand and supply sides of entrepreneurship and section 5.3 presents the framework of determinants of entrepreneurship used for this study.

5.2. Demand and Supply sides of Entrepreneurship

Recent researchers (e.g. Thornton, 1999, Verheul et al., 2002) revealed that the level of entrepreneurship in a particular country could be explained by making a distinction between the supply and the demand sides of entrepreneurship. Whereas the supply side of entrepreneurship is about all those factors that relate to the labor market perspective, that is, the active part and engine of entrepreneurship in a given community, seen mainly through the characteristics of the population (potential entrepreneurs), the demand side is about the opportunities for conducting economic activities. In other words, the supply side of entrepreneurship refers to the pool of individuals with both the capabilities and preferences to start a business and the demand side of entrepreneurship refers to the opportunities available for starting a business. The demand side of entrepreneurship involves identifying entrepreneurial opportunities while the supply side of entrepreneurship involves being able and willing to respond to those opportunities.

5.3 The Model

The previous section presented entrepreneurship as an economic factor, by stressing the existence of demand and supply sides of entrepreneurship. This section looks at conditions that control the effective demand and supply of entrepreneurship. To investigate this, the framework of determinants of entrepreneurship by Wennekers et al. (2002) is used.
The model reveals two important points: an implied causal sequence and a backward loop. The aggregate conditions influence the level of entrepreneurship, which in turn, influences the level of economic performance through personal wealth, firm profitability and economic growth (at the country level).

The present study focuses mainly on the shaded area of the framework, discussing the first part of the framework to see how the components under “aggregate entrepreneurial conditions” affect entrepreneurial activities and how they can be influenced to stimulate entrepreneurship. The following is a brief presentation of the determinants of entrepreneurship as they appear in the model above.

**Technological conditions.**
When the question is about “what product or service is needed to satisfy a given want”, technology becomes the first condition. Verheul et al. (2002) stated that technological development is considered a driving force for entrepreneurship. According to these authors, entrepreneurship will affect technology and vice versa. On the one hand a new technological evolution translated by new needs in products and services constitutes the entrepreneurs’ opportunity to act. For instance, today’s technology is marked by the application of information technology. Verheul et al. (2002) point out that this appears to favor small-scale production through cheaper capital goods, a minimum efficient scale and possibilities for flexible specialization. They argue that recent advances in information technology have created better access to information and communication devices that may smooth the progress of small business venture and boost the competitiveness of established small businesses. On the other hand...
hand, the existing (perhaps, optimal) level of technological development will in space and time, constrain entrepreneurs, by dictating the kind of entrepreneurial activities that are likely to take place. This constraint can be in two ways. Either the required level of technological development is not yet available or it is available but requires a high entry cost.

**Economic conditions**

In analyzing the work of Carree and Thurik (2003), it can be concluded that while entrepreneurship contributes to growth, the existing level of economic development will shape the kind of entrepreneurship that is likely to emerge and the rewards thereafter (see also Van Stel, Carree and Thurik, 2005).

The level of economic development can have a positive or negative impact on the level of entrepreneurship. In this regard, Verheul et al. (2002) argue, for example, that economic development is accompanied by an increase in wage levels and often by an improved system of social security. Rising real wages raise the opportunity costs of self-employment and thus make wage employment more attractive. Elsewhere, the increasing wealth brought by economic development leads to higher consumer needs. The demand for a variety of products and services increases and small firms are well equipped to supply these new and specialized goods.

The analysis of Carree and Thurik’s work reveals two noteworthy points; they state that business ownership rates are influenced by economic development and that the introduction of new technologies is positively related to the stage (or level) of economic development because economic development cannot be made possible without the necessary skills and other investments.

Referring to notions of closed/open economy, diversity in demand and integrated markets, globalization, another economic factor that cannot be overlooked vis-à-vis entrepreneurship, can be seen through the lens of economic development. According to Verheul et al. (2002), globalization expresses itself through increase in international competition and the increase in cross-cultural influences. The authors add that globalization involves the disappearance of trade barriers, creating new opportunities for all firms. Consequently globalization increases competition in international markets, which might have a negative impact on the survival of small firms.

In sum, the impact of economic development on the level of entrepreneurship is complex and confusing. However, it is expected that countries or regions with well-performing economies will produce higher-level of entrepreneurship. However, economic development cannot be taken in isolation when linking it to entrepreneurship. It works through a number of other factors such as education, share of resources, demographics etc.

**Demographic conditions**

This is a complex but crucial factor for entrepreneurship since it is about human capital. The following examples show the impact of demography on the level of entrepreneurship. According to Verheul et al. (2002), demography includes issues such as:
- *Population growth* (e.g. population growth creates a future increasing demand for goods and services),
- *Population density and urbanization rate* (e.g. high population density in urban regions may be the reason for the existence of many small businesses and the startup of new businesses in urban areas),
- *Age structure of the population* (e.g. a too young or too old population might not be able to start a business),
- *Immigration issues* (for instance, immigration has consequences on population growth while language and customs may constitute handicaps for doing business),
- *Participation rate of women in the labor market* (for instance, working women show substantially lower self-employment rates than working men),
- *Income levels and unemployment* (for instance, high-income levels resulting from sustained high wage levels makes it easier to raise start-up capital), and
- *Individual characteristics* related to decision-making behavior, skills as well as behavior with regard to risk (for instance, for an entrepreneurial opportunity to materialize, it is important that an individual has ability to perceive it and possesses the knowledge and skills needed to act upon this perception).

In essence, it can be concluded that demographic variables can have a positive as well as negative impact on the level of entrepreneurship.

**Cultural conditions**
The notion of culture is not easy to grasp. According to Verheul et al. (2002), culture is a highly complex phenomenon mainly unobservable. Culture involves deeply embedded values and manifestations, things such as trust, commitment and authority relationships and so on. It is restricted to collective, often normative mental programs. Mental programming relates to things that are partly unique to individuals and partly shared with individuals who belong to the same culture. “The sources of one’s mental programs lie within the social environments in which one grew up and collected one’s life experiences. The programming starts within the family; it continues within the neighbourhood, at school, in youth groups, at the work place, and in the living community.” (Hofstede, 1991)

Culture is about all those things such as stories in the media about successful entrepreneurs and the respect for those who start new business as well as individual preferences for self-employment, which appear to be shaped by the nation’s prevailing attitude towards entrepreneurship (Verheul et al. 2002). Other issues discussed by the same authors include the way people respond or relate to failure in entrepreneurial activities; whether a given society is individualistic (perception of individual gains) or not (e.g. in non-individualistic cultures as can be found in Africa, people are more prone to helping each other and this might increase the level of entrepreneurial activities if for instance the help is centered on capital procurement to finance business formation); the prevailing degree of uncertainty avoidance; the prevailing attitudes with respect to entrepreneurship in the educational system which, probably influence the degree of relevant training that is offered in schools; the prevalence of entrepreneurial values within the realm of government and politics that may influence the scope of the private versus the social sector etc.
In short, although the influence of culture on the level of entrepreneurship is not straightforward, culture is significant in determining the entrepreneurial orientation of individuals. Culture can stimulate or impede entrepreneurial activities. Therefore cultural conditions deserve great attention in analysis when it comes to stimulating entrepreneurship.

**Institutional conditions**

By institutions, it is referred here to governmental institutions. This is another important condition for entrepreneurship. Entrepreneurship or the small business sector attracts government’s attention because of its importance in economic growth through different ways such as job creation. Highlighted below are some hints and practical examples of the ways in which government institutions make themselves relevant to the entrepreneurial process. According to Verheul et al. (2002), the government creates the legal framework in which the property right of all market parties are guaranteed and protected. Government may take steps to correct market failure when competition is being put at risk. On the one hand, government may intervene to protect small business in its early stages during which they need support and protection to compete effectively in the market place. On other hand, some (potential) firms may be frustrated by government intervention especially when government implements rigorous laws, excessive regulation and other measures to prevent market concentration and/or monopoly. Government is supposed to provide relevant information to entrepreneurs as well as lean administrative procedures that minimize energy, time and money spent on compliance with regulation, so that entrepreneurs can have maximum resources available to spend for essential business operations. Ensuring peace, security, health, a stable economic environment and many other factors necessary for entrepreneurship to flourish is the primary role of government.

**Intermediary variables**

One cannot end this short description of the five aggregate entrepreneurial conditions presented in the model without pointing out the relevance of elements represented by the first asterisk (*) in the shaded area of the model. These elements are intermediary variables, which include things such as opportunities as well as individual capabilities, and preferences that control individuals’ assessment of risks and rewards before and during the actual entrepreneurial process. In fact before starting a business or becoming self-employed, individuals assess the benefit of doing so. They also assess whether they can do it successfully, that is, if the environment (e.g. the prevailing business opportunities, financial and physical facilities, natural resources, customer bases, government regulations…) is conducive to entrepreneurial success and if so, to what extent are they willing to risk resources or how capable are they (e.g. educated, skilled) in taking action that will turn their efforts into a success. Potential entrepreneurs make judgments on the success or failure of their envisaged efforts and consequently choose to begin a new firm or to restructure an existing business or even to quit the market.
5.4. Conclusion

In this section, an attempt was made to explain the model used for this study. For each aggregate condition for entrepreneurship, a practical example(s) was identified to show how that condition is likely to influence entrepreneurship. Analysis of literature shows that those factors can affect entrepreneurship positively as well as negatively.

In particular, the role of government in entrepreneurship deserves special attention. Verheul et al. (2002) identified five types of policy measure through which government enhances entrepreneurship:

- Influence on the number and type of entrepreneurial opportunities through income policy, competition policy, and legislation governing the establishment of new businesses as well as sponsorship of R&D activities and technological advancements, which help in creating new entrepreneurial opportunities.
- Influence on the number and type of potential entrepreneurs (e.g. immigration and regional development policies, composition and dispersion of population…)
- Influence on the availability of resources, skills and knowledge of individuals (e.g. providing financial support: subsidies, grants, loans…etc, development of venture capital market, labor force regulation, education and training, information)
- Influence on preferences (e.g. introduction of entrepreneurial elements in education system and paying attention to entrepreneurship in the media)
- Influence on decision-making process of individuals, which might directly touch the risk-reward profile of entrepreneurship (e.g. taxation, social security arrangement, labor market regulation regarding hiring and firing etc.)

Before applying the model to the case of Burundi, special attention needs to be paid to the determinants of entrepreneurship: do they differ in developed and developing economies? Subsequently it would be convenient to have an idea of the economic context existing in Burundi as well as an overall snapshot of entrepreneurship in the great lakes region of Africa. The next two sections present essential facts on these issues.
6. Determinants of Entrepreneurship in developing countries

According to Lingelbach et al. (2005), entrepreneurship in emerging markets is distinctive from that practiced in more developed countries. Unfortunately, as the same authors stress, entrepreneurship in developing countries is perhaps the least studied significant economic and social phenomenon in the world today. Hence it becomes hard to find a well-formulated and structured entrepreneurial model (if any) that can objectively describe determinants of entrepreneurship in developing countries. This section discusses the determinants of entrepreneurship in developed economies.

According to Lingelbach et al. (2005), three main specific conditions seem to characterize the world of entrepreneurship in developing countries. These include:

Opportunity: There is high opportunity to conduct business in developing economies compared to developed economies. Needs and opportunities are more widespread in emerging markets.

Financial resources: While it might not be the case for developed economies, financial resources constitute a big handicap for entrepreneurs in developing countries. In fact, personal and family savings are limited, there is an absence of financial innovation; internal financing accounts for the majority of financing for SME’s, there is a persistent reliance on informal sources of finances to start new business and at present, bank lending and venture capital play a very limited role in financing entrepreneurs, at least in the startup stage in developing countries. Consequently, entrepreneurs in developing countries start their businesses down-stream, by directly serving customers.

Apprenticeship and Human resources: According to Lingelbach et al. (2005), emerging markets lack the normal avenues of preparation and mentorship. Developing economies are generally corrupt and do not necessarily serve as the best guides for new businesses. Besides, absence of certain domestic skill sets such as financial management makes scale achievement difficult.

To the above-mentioned conditions, other researchers on entrepreneurship in developing countries (e.g. bridges.org, 2005; Sanja Lall, 2005) add other factors affecting entrepreneurial activities such as infrastructure (e.g. lack of roads, electricity…) and social issues (e.g. the fear for failure that can be a barrier) and the lack of good investment climate, the most fundamental need for national competitiveness, which is usually guaranteed by a stable social and political regime.

Based on a real entrepreneurial experience in Tanzania, the article “An Entrepreneur’s Journey in Africa” by Cynthia Churchwell (2004), gives some interesting insights into the challenges of entrepreneurship in developing countries. The article appears in the form of an interview that Churchwell had with Monique Maddy. From Maddy’s experience, “African people face overwhelming odds, sometimes brought about by natural disasters, but more often than not, by

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9 See “Supporting Entrepreneurship in Developing Countries: Survey of the field and Inventory of initiatives” accessible at www.bridges.org

failures of their own governments and other ostensible agents of economic progress”. From her
tropical experience in Tanzania, government and nongovernmental bureaucracies are
difficult to avoid in developing countries. According to her, governments should be concerned
with creating the type of investment climate (rule of law, healthy and well-educated people, good
physical infrastructure, favorable tax structure, respect for private property) that leads to private
investment. In her view, the greatest challenges managers face in pursuing business ventures in
developing economies, in particular, Africa, include the deficiencies in economic or competitive
context: human resources, capital resources, physical resources, administrative, information, and
scientific and technological infrastructure; unavailable or ill-enforced legal elements such as rule
of law, property protection, open competition, absence of corruption and the non-availability of
related and supporting industries and potential suppliers of inputs to their products and services.
The lack of all or any of these creates a huge disincentive to private investment.

Speaking of important barriers to SMEs’ development in Africa, Luciano Borin (2004) in
“Enabling Entrepreneurship in Africa”11 expressed the view that most issues that SMEs in Africa
face are not so specific to Africa. According to him, factors such as access to financing, equity
shortage, lack of skills, etc are common constraints to SMEs’ development all over the world. In
Africa, however, some issues weigh heavily such as the absence of a sufficiently conducive and
enabling environment. Another major problem he mentioned is that many markets are too
fragmented. He stated that most of the African economies are very small. He added that as
barriers to trade continue to fall and African companies have to compete with international
operators, economies of scale are needed to compete, and regional integration in terms of local
markets and productive capacity is therefore important.

In sum, determinants of entrepreneurship are similar in nature for both developing and developed
economies but they differ significantly in the way they affect entrepreneurs in developed and
developing countries. In general whether in developing or developed economies, determinants of
entrepreneurship are entrepreneurial conditions that challenge entrepreneurs. In developing
countries for example, a huge array of opportunities seems to favor entrepreneurial activities
while in developed economies the entrepreneurial opportunities are very low and entrepreneurs
operate at the fringes of the economy (Lingelbach et al. 2005). Although the list is not
exhaustive, entrepreneurship in developing countries is negatively affected by:
- Insufficient financial resources
- Inappropriate apprenticeship and human resources (including education & training system);
- Lack of adequate infrastructure,
- Lack of good investment climate (due to problems related to bureaucracies, tax structure,
  legal framework, private property, corruption, political regime and culture).
- Inappropriate industry structure (less open competition, absence of supporting industries and
  potential suppliers of inputs, fragmented markets)

The rest of this paper discusses the state of entrepreneurship in one region of Sub Saharan Africa
namely the Great Lakes Region.

11 This article is an interview of ‘Development Gateway’ with Mr. Luciano Borin, Director, Private Sector
Operations, African Development Bank (July 2004); was retrieved from www.developmentgateway.org
7. The Great Lakes region of Africa

7.1. Introduction

Relatively little attention has been devoted to researching the nature and functioning of entrepreneurship in developing countries of Africa. Emerging literature in this field abounds but most of it is focused on developed nations and economies of Europe and US and to some extent on the emerging economies of South East Asia. Consequently, the need to bridge this gap which otherwise might lead to the effect of “the rich get richer and the poor get poorer”, cannot be overstated. For instance of all countries in Africa, GEM reports on entrepreneurship include only South Africa and Uganda. In this section an attempt is therefore made to situate Burundi in its proper economic context, while at the same time, painting a picture of the existing state of entrepreneurship in the region.

7.2. General information

The Great Lakes region is a part of the sub-Saharan Africa. From the West to East, this paper considers (the eastern part of) the democratic republic of Congo, Rwanda, Burundi, Tanzania, Uganda and Kenya as countries of The Great Lakes Region of Africa. In reality the study of entrepreneurship for the whole region is beyond the scope of this paper. Prominent among some of the limitations are time constraints and lack of economic data related to entrepreneurial activities in these countries.

For more than a decade now, most of this region has endured an unstable political climate due to civil wars respectively in Rwanda, Burundi and Congo, with very negative implications for the socio-political and economic climate not only in these countries but for neighboring countries as well. The devastating effects of the war on entrepreneurship in the region could not be overstated since the lack of peace and security do not give room for economic activities to be run properly, as business infrastructures and human resources may be destroyed or displaced.

7.3. Economic perspectives

The table 1 below gives a picture of the economic growth measured in GDP per capita in all six countries of the great lakes region of Africa. The table reveals a clear and consistent net difference in growth among those countries. Two groups are distinguishable: the group Kenya – Tanzania - Uganda on top and the group Rwanda – Burundi – Congo with a low growth rate. Thus it may not be far-fetched to infer that the climate of insecurity caused by the above-mentioned recent wars is the primary cause of this observed low growth in the second group.

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12 These Lakes are: Tanganyika and Victoria. In particular, the Lake Tanganyika is the deepest in Africa and the second in the world after the lake Baikal in Russia. At 642 meters below the sea level, Tanganyika is the longest lake in the world with 677Km long, a paradise of over 350 species of fish.
**Table 1:** Economic Growth: GDP per capita (constant 2000 USD) in the countries of the Great Lakes Region

<table>
<thead>
<tr>
<th>Year</th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Rwanda</th>
<th>Burundi</th>
<th>Congo (DR)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>364</td>
<td>255</td>
<td>226</td>
<td>225</td>
<td>105</td>
<td>114</td>
<td>1996</td>
</tr>
<tr>
<td>1997</td>
<td>363</td>
<td>257</td>
<td>231</td>
<td>206</td>
<td>103</td>
<td>105</td>
<td>1997</td>
</tr>
<tr>
<td>1999</td>
<td>356</td>
<td>262</td>
<td>248</td>
<td>228</td>
<td>103</td>
<td>96</td>
<td>1999</td>
</tr>
<tr>
<td>2000</td>
<td>347</td>
<td>269</td>
<td>253</td>
<td>235</td>
<td>100</td>
<td>89</td>
<td>2000</td>
</tr>
<tr>
<td>2001</td>
<td>344</td>
<td>280</td>
<td>261</td>
<td>244</td>
<td>101</td>
<td>84</td>
<td>2001</td>
</tr>
<tr>
<td>2002</td>
<td>341</td>
<td>294</td>
<td>271</td>
<td>259</td>
<td>103</td>
<td>85</td>
<td>2002</td>
</tr>
<tr>
<td>2003</td>
<td>341</td>
<td>309</td>
<td>277</td>
<td>254</td>
<td>100</td>
<td>87</td>
<td>2003</td>
</tr>
<tr>
<td>2004</td>
<td>343</td>
<td>322</td>
<td>285</td>
<td>263</td>
<td>104</td>
<td>89</td>
<td>2004</td>
</tr>
</tbody>
</table>

**Source:** World Development Indicators database, September 2005

Besides the GDP analysis, other elements show that the region is economically lagging behind. As for the whole Sub-Saharan Africa, entrepreneurship might be obscured in the great lakes region due to communication issues. Figure 2 below shows the number of telephone mainlines per thousand people for four regions. The sub-Saharan Africa has a lower number, which implies that the region might have communication problems due to lack or insufficient communication network and consequently the cost of telephone communication might be high and this has negative influence on entrepreneurship.

![Figure 2](http://www.uneca.org/era2005/)

**Source:** Economic report on Africa (2005), http://www.uneca.org/era2005/

The figure 3 below compares the state of road networks in the sub-Saharan Africa and other developing regions. It shows that the paved roads in percentage of total network in the sub-Saharan Africa are still small. One would also say that transport infrastructure and other facilities are few or absent in the region. The topography does not allow for affordable communication equipment and so the road infrastructure is in such a pitiful state and does not cover the whole region.
In the Great lakes region, there exist almost no ferry lines that connect the capital with the main commercial cities in these countries. For example only a few and antiquated railway lines in and from Tanzania to Zambia, in Kenya and Congo exist. Internal air and maritime transport infrastructure is very limited in coverage and woefully inadequate. Such conditions do not allow for smooth run of business thus a handicap for entrepreneurship.

The figure 4 below compares transportation cost as percentage of total import value. It shows again that the sub-Saharan region is the most suffering region in terms of transport cost.
According to United Nations Conference on Trade and Development (July 2003), “empirical studies have concluded that – ceteris paribus – greater transport costs lead to lower levels of foreign investment, a lower savings ratio, reduced exports of services, reduced access to technology and knowledge, and a decline in employment. It is estimated that a doubling of transport costs leads to a drop in the rate of economic growth of more than half a percentage point”. Hence the bad situation of communication and transportation means and the associated costs in the region might jeopardize the run of business in general and in particular entrepreneurship.

In Kenya for example, as (H.E. Kalimi M. Mworia) the Kenyan ambassador to the Netherlands mentioned during her speech at Erasmus University Rotterdam (June 2005)\(^\text{13}\), poor infrastructure results in poor economic performance. Other problems she mentioned include security problems associated with the influx of refugees, international terrorism, poor governance, corruption, and health issues (e.g. those associated with HIV/AIDS), etc. One can also remark that although regional integration effort exists, (e.g. EAC, COMESA) this is still weak given the problems mentioned above and so for all intents and purposes, the label “great lakes region” has no economic connotation at all!

7.4 Entrepreneurship in the great lakes region

With regards to entrepreneurship, not much is known about this region. So far, existing literature seems to suggest that comprehensive entrepreneurial information is available for only one country in the region namely Uganda. From the GEM reports on entrepreneurship in Uganda published in two consecutive years, result of 2003 showed among other things that Uganda was the most entrepreneurial country in the GEM group. It was stated that results of 2004 confirmed trends in entrepreneurial activity of the previous year’s results. In analyzing the case of Uganda, this section seeks to raise three issues. One is related to the fact that Uganda is among the top most entrepreneurial countries in the GEM group yet one of the poorest countries in the group. The second is whether Uganda can be an example for Burundi and the Great Lakes region and the third is whether Uganda is the most entrepreneurial country in the great lakes region.

According to Uganda GEM report (2004) over one in three adult Ugandans is engaged in some form of entrepreneurial activity, and rates are particularly high amongst men, people aged between 25-34, the better educated and higher income earners. It is reported that rates of entrepreneurial activity are surprisingly high in all self-reported labor market categories, which indicates, that a large number of people who are employed have a business as well. The report suggests that the distinction between employment and self-employment in Uganda is a complex issue. Ugandans have a high rate of entrepreneurship motivated by necessity, but also a very high rate motivated by opportunity. Overall Ugandans are very positive about the idea of starting a business, with most viewing this as a good career choice that also confers high social status. The report says that rate of failure was high, for every business started nearly one other closed.

\(^{13}\) On the second June 2005, ALSA (African Link Student Association) organized at Erasmus University Rotterdam the “Thinking Africa” event where three African Ambassadors were invited to speak about “Effort towards Economic Growth” in their respective countries.
However, the majority of those who failed expected to start another business within three years, while a sizeable minority had already started a new business. It is stated that Ugandans are beginning to formalize their business activities, with over a third of businesses being registered.

The Uganda GEM report (2004) states that Uganda has the second highest TEA (Total Entrepreneurial Activity) with an index of 31.6 among all GEM countries, signifying that 32 out of 100 Ugandans – almost every third Ugandan - is engaged in some kind of entrepreneurial activity. In comparison the USA, the “country of entrepreneurship” has a score of 11.3, Japan scores 1.5. With regard to TEA, Uganda used to be at top among all GEM countries (see Uganda GEM report, 2003). According to the report of 2004 Uganda has been overtaken by Peru as the country with the highest TEA (40.3), but Uganda still has the highest rate of new firms (those that have actually started). It is reported that rates of TEA are high between both sexes, but Uganda follows the world trend in showing a higher TEA for men (see table 2)

Table 2. Entrepreneurial activity by gender in Uganda

<table>
<thead>
<tr>
<th></th>
<th>TEA overall</th>
<th>TEA opportunity</th>
<th>TEA necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>35.6</td>
<td>37.9</td>
<td>21.1</td>
</tr>
<tr>
<td>Women</td>
<td>22.9</td>
<td>25.5</td>
<td>13.1</td>
</tr>
</tbody>
</table>


As regard to entrepreneurship inspired by necessity and by opportunity, Uganda has one of the highest rates for “opportunity” entrepreneurship (16.5) and the highest for “necessity” entrepreneurship (14.4). However as table 3 below shows it, Uganda’s share of TEA opportunity in total TEA shows that Uganda does not perform well.

Table 3. Relative performance opportunity TEA / total TEA

<table>
<thead>
<tr>
<th></th>
<th>TEA</th>
<th>TEA opportunity</th>
<th>TEA necessity</th>
<th>(TEA opportunity. / TEA)*100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>5.3</td>
<td>4.8</td>
<td>0.4</td>
<td>90.5660377</td>
</tr>
<tr>
<td>Sweden</td>
<td>3.7</td>
<td>3.3</td>
<td>0.3</td>
<td>89.1891892</td>
</tr>
<tr>
<td>Iceland</td>
<td>13.6</td>
<td>12.0</td>
<td>0.7</td>
<td>88.2352941</td>
</tr>
<tr>
<td>Singapore</td>
<td>5.7</td>
<td>5.0</td>
<td>0.6</td>
<td>87.7192982</td>
</tr>
<tr>
<td>U K</td>
<td>6.3</td>
<td>5.5</td>
<td>0.6</td>
<td>87.3015873</td>
</tr>
<tr>
<td>Spain</td>
<td>5.2</td>
<td>4.5</td>
<td>0.6</td>
<td>86.5384615</td>
</tr>
<tr>
<td>Ireland</td>
<td>7.7</td>
<td>6.6</td>
<td>1.0</td>
<td>85.7142857</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2.6</td>
<td>2.2</td>
<td>0.4</td>
<td>84.6153846</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5.1</td>
<td>4.3</td>
<td>0.7</td>
<td>84.3137255</td>
</tr>
<tr>
<td>USA</td>
<td>11.3</td>
<td>9.5</td>
<td>1.5</td>
<td>84.070965</td>
</tr>
<tr>
<td>New Zealand</td>
<td>14.7</td>
<td>12.3</td>
<td>2.1</td>
<td>83.6734694</td>
</tr>
<tr>
<td>Belgium</td>
<td>3.5</td>
<td>2.9</td>
<td>0.2</td>
<td>82.8571429</td>
</tr>
<tr>
<td>Norway</td>
<td>7.0</td>
<td>5.8</td>
<td>0.8</td>
<td>82.8571429</td>
</tr>
<tr>
<td>Canada</td>
<td>8.9</td>
<td>7.3</td>
<td>1.4</td>
<td>82.0224719</td>
</tr>
<tr>
<td>Australia</td>
<td>13.4</td>
<td>10.7</td>
<td>2.5</td>
<td>79.8507463</td>
</tr>
<tr>
<td>Finland</td>
<td>4.4</td>
<td>3.5</td>
<td>0.3</td>
<td>79.5454545</td>
</tr>
<tr>
<td>Country</td>
<td>TEA</td>
<td>TEA opportunity</td>
<td>TEA necessity</td>
<td>(TEA opportunity / TEA)*100</td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>-----------------</td>
<td>---------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Jordan</td>
<td>18.3</td>
<td>14.5</td>
<td>2.6</td>
<td>79.2349727</td>
</tr>
<tr>
<td>France</td>
<td>6.0</td>
<td>4.5</td>
<td>1.4</td>
<td>75.0000000</td>
</tr>
<tr>
<td>Portugal</td>
<td>4.0</td>
<td>3.0</td>
<td>1.0</td>
<td>75.0000000</td>
</tr>
<tr>
<td>Japan</td>
<td>1.5</td>
<td>1.1</td>
<td>0.2</td>
<td>73.3333333</td>
</tr>
<tr>
<td>Israel</td>
<td>6.6</td>
<td>4.8</td>
<td>1.5</td>
<td>72.7272727</td>
</tr>
<tr>
<td>Italy</td>
<td>4.3</td>
<td>3.1</td>
<td>0.3</td>
<td>72.0930233</td>
</tr>
<tr>
<td>Argentina</td>
<td>12.8</td>
<td>9.1</td>
<td>3.7</td>
<td>71.0937500</td>
</tr>
<tr>
<td>Germany</td>
<td>4.5</td>
<td>3.1</td>
<td>1.2</td>
<td>68.8888889</td>
</tr>
<tr>
<td>Ecuador</td>
<td>27.2</td>
<td>18.2</td>
<td>8.4</td>
<td>66.9117647</td>
</tr>
<tr>
<td>Peru</td>
<td>40.3</td>
<td>26.9</td>
<td>13.1</td>
<td>66.7493797</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>3.0</td>
<td>2.0</td>
<td>1.0</td>
<td>66.6666667</td>
</tr>
<tr>
<td>Greece</td>
<td>5.8</td>
<td>3.8</td>
<td>1.6</td>
<td>65.5172414</td>
</tr>
<tr>
<td>Hungary</td>
<td>4.3</td>
<td>2.8</td>
<td>1.2</td>
<td>65.1162791</td>
</tr>
<tr>
<td>Poland</td>
<td>8.8</td>
<td>5.7</td>
<td>3.1</td>
<td>64.7727273</td>
</tr>
<tr>
<td>Croatia</td>
<td>3.7</td>
<td>2.0</td>
<td>1.6</td>
<td>54.0540541</td>
</tr>
<tr>
<td><strong>Uganda</strong></td>
<td><strong>31.6</strong></td>
<td><strong>16.5</strong></td>
<td><strong>14.4</strong></td>
<td><strong>52.2151899</strong></td>
</tr>
<tr>
<td>South Africa</td>
<td>5.4</td>
<td>2.8</td>
<td>2.4</td>
<td>51.8518519</td>
</tr>
<tr>
<td>Brazil</td>
<td>13.5</td>
<td>7.0</td>
<td>6.2</td>
<td>51.8518519</td>
</tr>
</tbody>
</table>

**Source:** Uganda GEM report 2004

According to Uganda GEM report (2004) Uganda scores high amongst GEM countries on the number of “business angels” - respondents who have provided any kind of funds for other people to start a business. However, the average amount of money invested by these “angels” is very low. Analysis of table 3 above may support the Uganda GEM reporters’ argument that the greater the poverty, the higher the TEA of the country concerned.

The GEM Uganda team argues that necessity is a factor in accounting for a high TEA. The authors of the report add that the high TEA rates also mirror the fact that developing countries such as Uganda are catching up from a low base of economic development, and that most people are participating with some enthusiasm in the business opportunities created within a growing economy. According to the authors, the association of entrepreneurship and economic growth is positive, one whose direction of causality remains an open question. The high rate of economic growth in Uganda is led by services and trade, rather than manufacturing businesses. This does not facilitate the task of policy makers regarding how to best optimize the boost that entrepreneurship provides since most models of development are based on manufacturing, not on services.

A Further analysis of the GEM report (2003) on Uganda showed that the main factors that limit entrepreneurial activities in Uganda include: insufficient availability and accessibility of formal financial support, unfavorable cultural and social attitudes towards wealth creation and risk taking and low standards of the education and training system, particularly in respect of entrepreneurship promotion. Some of the factors that have contributed positively to entrepreneurship in Uganda include: a considerably conducive socio-economic environment that
is: relative peace, food security, macro economic stability, a considerably high level of market
openness reflected in low barriers to entry, plenty of business opportunities, ongoing regional
and global market integration, favorable government policies and programs focusing on areas
such as physical infrastructure, financial system development, legal framework, good
governance, export promotion, and policies and programs to improve the health of the
population (e.g. fight against HIV/AIDS) and the environment etc. However, the second report,
GEM Uganda (2004), assessed the overall perception of entrepreneurial environment in Uganda
as being still negative and that policies and programs have not been sufficiently well targeted. It
is argued that in an international comparison, Uganda is still underdeveloped in terms of physical
and commercial infrastructure, R&D as well as the protection of intellectual property rights is
almost non-existent and the development of human capital and knowledge is insufficient.

Now let’s turn back to our questions. One was, how come in 2003 Uganda was the most
entrepreneurial country in the GEM countries yet one of the poorest countries in the group?
Previously in this study, it was shown that entrepreneurship that is likely to contribute to
economic growth is one that comes with innovation, variety in products, competition; creation of
wealth, increase in employment and improvement of quality of life. Besides, it is important to
note that entrepreneurship is simply one among factors that contribute to economic growth.
From GEM overall results one can notice that being entrepreneurial does not necessarily mean
being rich or vice versa. However, the level of entrepreneurship is not an indicative measure of a
nation’s wealth but contributes to it. Van Stel, Caree and Thurik (2005) seem to have a more
reliable argument. They use a sample of 36 countries to investigate whether TEA influences
GDP growth. They conclude that poorer countries (such as Uganda) fail to benefit from
entrepreneurial activity because they may lack enough large companies. According to these
authors, larger firms play an important role in the transformation process from a developing to a
developed economy. In poorer countries entrepreneurs have lower human capital levels
compared to those in developed countries. Van Stel, Caree and Thurik (2005) advance that
apparently many entrepreneurs (shopkeepers) in small crafts would be more productive as wage-
earner in a bigger firm.

The second question was whether Uganda could be an example for Burundi and the Great Lakes
region. Relying on GEM, the answer is “yes”. According to the global GEM report (2004),
although policies that succeed in one country may fail in others, countries within the same
national income groups can learn from one another taking into account their particular
circumstances and the need to tailor adopted policies successful in another country to their own
national conditions.

The third question whether Uganda is the most entrepreneurial country in the great lakes region
is still an open one. The answer is neither “no” nor “yes”. To answer that question, one may need
to carry out the same study as was done in Uganda using the same method in all the countries of
the region for a better comparison! We will probably have to wait for some time.
7.5. Conclusion

There is not enough data’s related to entrepreneurial activities in the great lakes regions of Africa. The climate of insecurity in this region contributes to the worsening of the existing poor economic state. The label “great lakes region” has no economic connotation and there is very little economic integration and exchange in the region. Macro economic conditions such as infrastructure, poor physical topography, and the state of general wealth and health of the population in the region do not allow for commercial activities to flourish and hence do not offer favorable conditions for entrepreneurship.

Despite the prevalence of conditions hostile to entrepreneurial activities in the region, entrepreneurship in Uganda seems to be successful and hence this country constitutes a sign for hope for the whole region. This implies that if entrepreneurship is possible in Uganda, it might also be possible in other countries such as Burundi since these countries share lots of commonalities. From Uganda, Burundi as well as other countries in the need to tailor entrepreneurship can learn that ensuring conducive socio-economic environment that is ensuring: peace, security, macro economic stability, high level of market openness reflected in low barriers to entry; adhering to regional and global market integration, adopting government policies and programs focusing on creating and maintaining in good conditions physical infrastructure; developing good financial system; creating and enabling acceptable legal framework; ensuring a good governance; promoting export, and adopting policies and programs aimed at improving the health of the population etc all contribute to building environment conducive to entrepreneurial activity. The next part looks at the determinants of entrepreneurship in Burundi
8. Determinants of entrepreneurship in Burundi

8.1. Introduction

In previous parts, an attempt was made to explore significant aspects of entrepreneurship in the great lakes region of Africa. Unfortunately, because not much is known about entrepreneurship in Burundi, little if any could be said on Burundi, which is yet, the focus of the present study. To find out more, an empirical study among 92 entrepreneurs whose activities were located in (or near) Bujumbura\(^\text{14}\) was conducted. This part analyzes data from interviews that were run as well as other data related to entrepreneurial economic activities in Burundi at a macro-level. It concludes by identifying factors that hinder or favor entrepreneurial activities in Burundi.

8.2. Sample description

The objective of the investigation was to uncover factors leading individuals in Burundi to get involved in entrepreneurial activities and more importantly the difficulties they had to surmount. A questionnaire was made and distributed to business owners. The design of the questionnaire was such that data gathered would reflect information related to determinants of entrepreneurship as they appear in the model used for this study. Questionnaires were made available in three languages: French, Kirundi and English so the interviewee could choose between languages. Interviewers had to assist interviewees in filling in answers during the interview. Entrepreneurs were chosen randomly in different areas: the central market of Bujumbura and other business areas of the capital city of Burundi. In general entrepreneur in the sample is a man, has finished primary school, has attempted but failed a secondary education and the entrepreneur is seen as important in the society.

The figure 5 below shows the distribution of entrepreneurs interviewed according to the date of commencement of business operations. For instance it shows that one of the interviewees had started his business in 1977, four interviewees had started in 1992; and there were eighteen who started their businesses in 2000. The distribution suggests that majority of interviewed entrepreneurs had started their activities during 2000-2005. The average age of firms in the sample is 6.3 years. 23% of interviewed entrepreneurs were women sole owners, 75% were men sole owners and 2% were associate entrepreneurs.

\(^{14}\) Bujumbura is the capital city of Burundi. It is the only main city and the most important city for business and commercial activities in Burundi. Any sample approaching 100 individuals might be considered (with small error) as representative for the whole country.
The figure 6 shows the distribution of interviewed entrepreneurs according to their age at the time of the interview. The figure shows that the number of entrepreneurs varies with age. As the population gets older the number of entrepreneurs decreases. It follows that the age of Burundian entrepreneur is normal compared for instance to GEM countries. On average the age of entrepreneur in the sample is 33. Unfortunately the use of age-interval could not allow determining precisely the exact age of individual entrepreneurs at start-up.

The sample showed a rate of “business angels” of 31.5% since 29 of the 92 entrepreneurs reported they had given some money to others to start their own businesses.

Activities in the sample share the following commonalities. More than 70% of activities (i.e. 65 out of 92) are concentrated in one industry namely the service industry. The rest are involved in manufacturing\(^\text{15}\) (16), art (3) construction (1) and Transport industry (1) while none was found to be dealing with agricultural or farming activities. One would wonder if such situation could not explain that the level of entrepreneurship in Burundi as well as its degree of diversity is low.

\(^\text{15}\) The word manufacturing may not be appropriate. In this sample it simply refers to confectioning clothes and making wood furniture
In general the fair value\textsuperscript{16} of the businesses within the sample was found to be very low. Only 8 entrepreneurs that is, less than 9\% reported their businesses value being greater than FBu 5000,000 (\(\equiv\) euro 3300)! About 77\% (71 of 92) valued their business (between FBu 100,000 and FBu 4000, 000) or on average at FBu 2050,000 (\(\equiv\) euro1350). The remaining 13 estimated their business value was less than FBu 100,000 (\(<\) euro 70). The only six entrepreneurs who had a business fair value greater than 5,000,000 had started their firms within the last 5 years. This is contrary to expectation: normally, majority of the oldest firms would have the greater value since their longevity has enabled them to accumulate huge reserves of cash and capital which enables them to be more competitive and financially powerful. These results imply a situation where the rate of entrepreneurship might be high while its contribution to economic growth is low. The results converge with the result found by André van Stel et al. (2005) that poorer countries fail to benefit from entrepreneurial activity in SME’s partly because of insufficient number of large firms. Hence, the next section looks at the state of large firms in Burundi.

8.3 The share of big companies\textsuperscript{17}

The table 4 below was constructed using the recent data’s from the chamber of commerce and industry in Bujumbura.

<table>
<thead>
<tr>
<th>Professional sectors</th>
<th>Firms per sector</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Merchandising: import and wholesaler</td>
<td>99</td>
<td>25</td>
</tr>
<tr>
<td>2 Merchandising: retailer sellers</td>
<td>58</td>
<td>14.5</td>
</tr>
<tr>
<td>3 Agro- industry</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>4 Agriculture, life stock and fishily production industry</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td>5 Wood treatment, paper production, printing and Editing services industry</td>
<td>18</td>
<td>4.5</td>
</tr>
<tr>
<td>6 Art industry</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>7 Textile, Industry</td>
<td>6</td>
<td>1.5</td>
</tr>
<tr>
<td>8 Housing and construction material production industry</td>
<td>30</td>
<td>7.5</td>
</tr>
<tr>
<td>9 Public works industry</td>
<td>10</td>
<td>2.5</td>
</tr>
<tr>
<td>10 Chemical industry</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td>11 Mechanical industry</td>
<td>22</td>
<td>5.5</td>
</tr>
<tr>
<td>12 Mine and Energy industry</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>13 Petroleum industry</td>
<td>9</td>
<td>2.3</td>
</tr>
<tr>
<td>14 Tourism, Hostelry, Restaurants, Theatre and leisure</td>
<td>17</td>
<td>4.2</td>
</tr>
<tr>
<td>15 Insurance, Study bureaus, Commercial intermediaries and other services</td>
<td>43</td>
<td>10.8</td>
</tr>
<tr>
<td>16 Merchandise transportation and auxiliary services</td>
<td>15</td>
<td>3.8</td>
</tr>
<tr>
<td>17 Persons transportation and travel agency industry</td>
<td>7</td>
<td>1.8</td>
</tr>
<tr>
<td>18 Banking and financial institutions industry</td>
<td>15</td>
<td>3.7</td>
</tr>
<tr>
<td>Total (approximated)</td>
<td>398</td>
<td>100</td>
</tr>
</tbody>
</table>

\textit{Source}: Rapport annuel de la chambre de commerce et industrie, 1999.

\textsuperscript{16} “Fair value” of business was defined in this paper as the amount entrepreneur would ask if (s) he had to sell the business without loss or without looking for benefit

\textsuperscript{17} “Big company” means simply that the company is not classified as SME in Burundi. Thus it does not necessarily mean the same for “big company” in Europe or USA.
Around 400 registered big companies are divided into eighteen different professional sectors. The table includes “big” private as well as public companies and/or organizations. The total number of 398 firms shows that there exist few professional firms in Burundi. In the Netherlands\textsuperscript{18} for example, per January 1st, 2005 there were in total 985000 companies of which were 4900 “big companies” that is companies of 100 and more fulltime employees. There were also 6300 companies of 50 to 99 fulltime employees, 59600 companies of 10 to 49 fulltime employees, 73300 companies of 5 to 9 fulltime employees, 236200 companies of 2 to 4 fulltime employees, 405700 companies of one fulltime employee and 199700 companies of not fulltime employees.

Assessment of the concentration of activities in different industries in Burundi leads to the following conclusions: the concentration ratio\textsuperscript{19} of the top four sectors ($CR_4 = 58.3$) shows that the share of the top four sectors does not account for a very high percentage of total economic activities. The top four sectors are: (1) general commerce: import and wholesaler with 25% of total activities, (2) general commerce: retailer sellers with 14.5%, (3) Insurance, Study bureaus, Commercial intermediaries and other services with 10.8% and (4) Agro-alimentary industry with 8%. Usually these are sectors where small firms are abundant. Unfortunately these small and medium enterprises are not traceable in the chamber of commerce. Consequently the exact number of firms that exist in Burundi and the share of entrepreneurial activities per person cannot be determined.

The HHIndex\textsuperscript{20} is 1190.32. It is a small number. This is the most accurate measure of industry concentration. Unfortunately the number given here should be interpreted with caution provided the computation does not include small firms. In any case such a small index shows an industry structure where activities are not concentrated in only few firms. For this case it means that activities are not concentrated in only few sectors. With regards to large firms, one can say that all sectors are represented but with a very few firms in each.

Table 4 attempted to paint a picture of what constitutes the large business environment in Burundi as of the year of the report. Since then, lots of things have changed. Unfortunately there is no available information tracing the changes and the fact that small and medium enterprises are not traceable in the chamber of commerce does not allow for any reliable conclusion. Apparently such an industry structure presents big opportunity for large-firms establishment. The next section employs the entrepreneurial model presented in section 5.3 above to discuss the main factors that explain the prevailing state of entrepreneurial activities in Burundi.

\textsuperscript{18} Source: http://www.kvk.nl/artikel/artikel.asp?artikelID=46702&SectieID=200

\textsuperscript{19} $CR_4$ is usually the summation of market shares of the four top firms in an industry. Here it is calculated as summation of the market shares of the four top sectors in the overall economy.

\textsuperscript{20} HH Index or H Index (Herfindahl-Hirschman Index) is usually the summation of the squares of market shares of all firms in a given industry. Here it was calculated as total summation of squared market shares of different sectors of the economy. This index varies between 0 and 10000. The bigger the index, the more activities are said to be concentrated in few firms or here in few sectors.
8.4. Entrepreneurial model: application to the case of Burundi

8.4.1. Technological conditions

It can be said that entrepreneurial activity might be impossible and/or insignificant if the necessary information and technology infrastructure are not yet available. Table 5 illustrates what that means in Burundi.

**Table 5. Information technology and development 2005**

<table>
<thead>
<tr>
<th></th>
<th>Burundi</th>
<th>RDC</th>
<th>Rwanda</th>
<th>Uganda</th>
<th>Tanzania</th>
<th>Kenya</th>
<th>USA</th>
<th>Netherlands</th>
<th>France</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital access index (1-100, 100=most access) 2002</td>
<td>10</td>
<td>12</td>
<td>15</td>
<td>17</td>
<td>14</td>
<td>19</td>
<td>78</td>
<td>79</td>
<td>72</td>
</tr>
<tr>
<td>Annual investment in telecommunications (million USD) 2001</td>
<td>30</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td>51</td>
<td>29620</td>
<td>2633</td>
<td>6405</td>
</tr>
<tr>
<td>% of homes with personal PC, 1996-2002</td>
<td>0.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.5</td>
<td>56.5</td>
<td>-</td>
<td>37.0</td>
</tr>
<tr>
<td>Internet users (per 1000 people), 2002</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>13</td>
<td>551</td>
<td>506</td>
<td>314</td>
</tr>
<tr>
<td>Subscribers to broadband internet (1000’s), 2002</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17841</td>
<td>1170</td>
<td>1644</td>
</tr>
<tr>
<td>% of homes with (one or more) telephones 1996-2003</td>
<td>0.3</td>
<td>1.1</td>
<td>2.7</td>
<td>2.0</td>
<td>2.7</td>
<td>95.3</td>
<td>90.0</td>
<td>97.0</td>
<td></td>
</tr>
<tr>
<td>Main telephone lines (per 1000 people), 2002</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>646</td>
<td>618</td>
<td>572</td>
</tr>
<tr>
<td>Mobiles telephones subscribers (per 1000 people), 2002</td>
<td>7</td>
<td>11</td>
<td>14</td>
<td>16</td>
<td>22</td>
<td>38</td>
<td>488</td>
<td>745</td>
<td>647</td>
</tr>
<tr>
<td>Waiting list for main telephone lines; 19996-2002</td>
<td>4692</td>
<td>-</td>
<td>8000</td>
<td>9161</td>
<td>7968</td>
<td>110066</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TV sets (per 1000 people), 2001</td>
<td>29</td>
<td>2</td>
<td>8</td>
<td>14</td>
<td>45</td>
<td>41</td>
<td>938</td>
<td>553</td>
<td>632</td>
</tr>
<tr>
<td>Radios (per 1000 people), 1997-2003</td>
<td>164</td>
<td>380</td>
<td>151</td>
<td>163</td>
<td>418</td>
<td>218</td>
<td>2079</td>
<td>977</td>
<td>950</td>
</tr>
<tr>
<td>Daily newspaper (per 1000 people); 1996-2001</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>8</td>
<td>196</td>
<td>279</td>
<td>143</td>
</tr>
</tbody>
</table>


Comparing to other countries such as Kenya, the USA, the Netherlands and France, the table shows that the level of access to information and technology is relatively low for Burundi. Consequently this is likely to have a negative impact on entrepreneurial initiatives. In fact, as
discussed in section 5.3, technology affects entrepreneurship. Elsewhere better access to information and communication devices accelerates the progress of small business venture and enhances the competitiveness of established small businesses.

Recently the United Nations development program introduced some technology measurements that are presented in table 6 below namely the technological index\(^{21}\), the “technology achievement index”, the “investment in technology creation” and the “diffusion of technology” for some countries. Only the first five and the last five countries in their order of importance are listed and Burundi is at the 160\(^{th}\) position. Worldwide, data in table 6 show that Burundi is far behind when it comes to technological developments. According to this classification, Burundi is among the five countries with the lowest technological indexes. Its technology achievement index is not fully determined due perhaps to non-availability of relevant data. Only the “diffusion of old innovations” (DOI= 3) is available, a very low amount compared to for example, Norway with 1329. Similarly, Burundi’s “investment in technology creation” is very low compared to other countries. Thus the clear implication is that Burundi is one of those countries, which technologically, depends to a large extent on other countries. As discussed in section 5.3 this observed weak technological development is likely to have severe consequences for Burundi’s level of entrepreneurship. So we can conclude that a lower level of technological development in a country or region leads to a lower level of entrepreneurship.

Researchers at university of Burundi (e.g. Nkeshimana, 1999) argued that exploiting imported technologies lead to numerous problems. Due to inadaptability of technology to local conditions,

\(^{21}\) Technology Achievement Index
- (TC): Technology creation: Patents granted to residents (per million people) in 1998
  Patents are documents, issued by a government office, that describe an invention and create a legal situation in which the patented invention can normally be exploited (made, used, sold, imported) only by or with the authorization of the patentee.
  The protection of inventions is generally limited to 20 years from the filing date of the application for the grant of a patent.
- DRI (a): Diffusion of recent innovations: High- and medium-technology exports (as % of total goods exports) in 1999
- DRI (b) High-technology exports (as % of total goods exports) in 1999
  Includes exports of electronics and electrical products such as turbines, transistors, televisions, power generating equipment and data processing and telecommunications equipment, as well as other high-technology exports such as cameras, pharmaceuticals, aerospace equipment and optical and measuring instruments.
- (DOI): Diffusion of old innovations: Telephones (mainline and cellular, per 1,000 people), 1999. A telephone line connecting a subscriber to the telephone exchange equipment

Investment in technology creation
- (R&D): Research and development (R expenditures: as % of GNP during 1987-1997. Current and capital expenditures (including overhead) on creative, systematic activity intended to increase the stock of knowledge. Included are fundamental and applied research and experimental development work leading to new devices, products or processes
- (MYS): Mean years of schooling (age 15 and above) in 1990: The average number of years of school attained by the population aged 15 and above
- (SE): Scientist Engineers in R (per 100,000 people) during 1987-1997: People trained to work in any field of science who are engaged in professional research and development (R&D) activity. Most such jobs require the completion of tertiary education

Diffusion of technology: Agriculture and Manufacturing
- (FC): Fertilizer Consumption (kg per hectare of arable and permanently cropped land), 1998. The amount of manufactured fertilizer—nitrogen (N), phosphate (P\(_2\)O\(_5\)) and potassium (K\(_2\)O)—consumed per year per hectare of arable and permanently cropped land.
- (T): Tractors in use (per hectare of arable and permanently cropped land), 1998. The number of tractors in use per hectare of arable and permanently cropped land
imported technologies do not exactly correspond to market dimensions, characteristics of local raw material and qualifications of available personnel. Most often there is an implied necessity to import qualified personnel, which is costly.

Results from the interviews indicate a lack of technological innovations in activities undertaken by interviewed entrepreneurs. To judge the level of innovativeness and competitiveness, entrepreneurs were asked whether their businesses or companies come up with new products or ways of producing products or services in their respective industry or whether they were copycat companies that offer standard products or services, but perhaps better, cheaper or faster. Results indicated that only five of the 92 that is, 5.4% of entrepreneurs in the sample could be said to be running innovative activities. In particular, one could consider the activity “taxi-vélo” to be innovative. As explained by one of the interviewed entrepreneurs, “Taxi-vélo is a taxi service using a bicycle for locations inaccessible by car”. This mode of transporting people has not yet been exploited and can be seen as innovative.

Table 6: Technological index

<table>
<thead>
<tr>
<th>General Rank for</th>
<th>Country</th>
<th>Technology Achievement Index</th>
<th>Investment in technology creation</th>
<th>Diffusion of technology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TC</td>
<td>DRI (a)</td>
<td>DRI (b)</td>
</tr>
<tr>
<td>1</td>
<td>Norway</td>
<td>103</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Australia</td>
<td>75</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Canada</td>
<td>31</td>
<td>39</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Sweden</td>
<td>271</td>
<td>34</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>Belgium</td>
<td>72</td>
<td>37</td>
<td>11</td>
</tr>
<tr>
<td>……</td>
<td>……</td>
<td>……</td>
<td>……</td>
<td>……</td>
</tr>
<tr>
<td>158</td>
<td>Ethiopia</td>
<td>3</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>159</td>
<td>Burkina Faso</td>
<td>5</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>160</td>
<td>Burundi</td>
<td>3</td>
<td>0.3</td>
<td>1.4</td>
</tr>
<tr>
<td>161</td>
<td>Niger</td>
<td>3</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>162</td>
<td>Sierra Leone</td>
<td>2.1</td>
<td>5.6</td>
<td>0.2</td>
</tr>
</tbody>
</table>


Analysis of the technological data in Burundi as well as results from the interview, seem to suggest that the level of technological development is low in Burundi. One would say that the required level of technological development is not yet available in Burundi. This partly explains the low level of entrepreneurship in the country and especially the lack of innovative activities. Elsewhere even if there could be highly educated entrepreneurs; the technological barrier would frustrate their entrepreneurial ambitions. Burundi is not technologically independent. As Nkeshiman (1999) argues, a big challenge is technology cost effectiveness that is, the tradeoff between the cost of imported technology and the benefit of using it. The government will need to make a choice between different technologies taking into account the local needs and capabilities. Given the predominance of service business, things such communication devices,
Internet, telephones and other similar digitally based technologies would, to a great extent, lead to enhancement of small-scale and innovative entrepreneurial activities in Burundi.

8.4.2. Economic conditions

In section 4.2 it is argued that economic growth is measured in terms of variation in two principal indicators: GDP and employment. This section discusses these two elements for the case of Burundi. Figure 6 below depicts the evolution of Burundian GDP from 1996 to 2004.

Looking at figure 7, the period before 2000 corresponds to a steady decline in GDP. This decline seems to match the low rate of start-ups observed in the sample (see fig. 5). This period can be explained by the chaos that resulted from the killing of the first democratically elected president, Ndadaye in 1993. It followed a horrible civil war, which persisted but begun to attenuate seven years later in 2000\(^{22}\). From 2000 to date, the figure shows a considerable increase in GDP but the shock of the preceding period still impacted the growth in GDP. This increase in GDP as well as the observed higher level of start-ups (see fig.5) may be explained by the fact that since 2000, considerable progress has been made at reaching a peace settlement between the rebels and the government. Since then people who fled the country began returning and progressively restarting their activities.

Paralysis of economic activities resulting from the volatile socio-political environment that has marked Burundi for the past 12 years has not allowed for economic development. In 1996 the crisis was deepened by the return to power of Pierre Buyoya in a military coup. This led to the imposition of an economic embargo on Burundi by its neighbors and the international community. Analysis of figures 5 and 7 shows that new start-ups and GDP growth depends much on the prevailing climate of peace and security. The implication is that if the current climate of peace and security in Burundi remains uninterrupted in the long term, we may expect a high and increasing rate of entrepreneurial activities in Burundi.

\(^{22}\) In Augustus 2000, under Mandela, although the representatives of the principal Hutu and Tutsi political parties signed the Arusha Accords that were followed by establishment of two consecutive transitional governments, the first led by Buyoya and the second by Ndayizeye, there were still armed factions in the country including the main rebel movement FDD. It is only in November 2003 that FDD signed in Dar es Salaam a peace accord with the transitional government led by Domicien Ndayizeye. Since then things dramatically changed: from rebel fighters, the FDD became a political party then followed its representation in the government. In Augustus 2005, FDD the new political party led by Pierre Nkurunziza won the presidential elections and integration of the FDD fighters into the national army is being implemented.
Regarding employment in Burundi, Nkurunziza and Ngaruko (2002) argue that Burundi has a pre-industrial economy dominated by subsistence agriculture that involves over 90% of the population, where everybody is potentially a landowner who has the choice to farm his land for living and where even urban dwellers are landowners who are often immigrants from rural areas. According to the authors, in such an economy full unemployment\(^{23}\) is uncommon except for a very small proportion of the urban population. This explains the fact that some of the interviewed entrepreneurs were classified as opportunistic\(^{24}\) entrepreneurs. Of the 89 who responded fully to question (10), it is concluded that 50 were entrepreneurs by necessity while 39 could be considered opportunity entrepreneurs. Unfortunately the interviewees did not disclose what their occupations were before they started their businesses. Therefore in relying on the sample, no further conclusion can be drawn regarding opportunity-based entrepreneurial activities in Burundi. However, of the 92 entrepreneurial establishments only 15 had not employed someone. A total of 251 persons were employed resulting in a 273% employment rate. It follows therefore that entrepreneurship in Burundi can achieve the goal of creating employment. The question is perhaps how much it pays and what are the working conditions.

### 8.4.3. Demographic conditions

This section seeks to illustrate, from the case of Burundi, some of the demographic issues that affect entrepreneurship as discussed in section 5.3. From the sample, we could deduce that, the Burundian entrepreneur is a man with an average age of 33 years, an age that falls in the normal

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\(^{23}\) The no availability of unemployment rate for Burundi is also evidenced by the world indexmundi. [http://www.indexmundi.com/burundi/unemployment_rate.html](http://www.indexmundi.com/burundi/unemployment_rate.html)

\(^{24}\) Opportunity entrepreneur was anyone who agreed with the proposition “I was employed or earning money somehow (thus could still live without this business), but I wanted to start my own business anyway”. See question no 10.
range according to GEM findings. Unfortunately, as the overall information on the population presented in the table 8 below shows it, compared to other countries, demographics’ features may not favor entrepreneurship in Burundi.

Table 7: Demographics

<table>
<thead>
<tr>
<th></th>
<th>Burundi</th>
<th>D R Congo</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>6,370,609</td>
<td>60,085,804</td>
<td>8,440,820</td>
<td>36,766,356</td>
<td>27,269,482</td>
<td>33,829,590</td>
</tr>
<tr>
<td>Population growth rate</td>
<td>2.22%</td>
<td>2.98%</td>
<td>2.43%</td>
<td>1.83%</td>
<td>3.31%</td>
<td>2.56%</td>
</tr>
<tr>
<td>Structure of population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-14 yrs:</td>
<td>46%</td>
<td>48.1%</td>
<td>41.9%</td>
<td>44%</td>
<td>50.1%</td>
<td>42.5%</td>
</tr>
<tr>
<td>15-64 yrs:</td>
<td>51.3%</td>
<td>49.4%</td>
<td>55.5%</td>
<td>53.4%</td>
<td>47.7%</td>
<td>55.2%</td>
</tr>
<tr>
<td>&gt;=65 yrs:</td>
<td>2.6%</td>
<td>2.5%</td>
<td>2.6%</td>
<td>2.6%</td>
<td>2.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Birth rate /1000 pop</td>
<td>39.66</td>
<td>44.38</td>
<td>40.6</td>
<td>38.16</td>
<td>47.39</td>
<td>40.13</td>
</tr>
<tr>
<td>Death rate /1000 pop</td>
<td>17.43</td>
<td>14.43</td>
<td>16.32</td>
<td>16.71</td>
<td>12.8</td>
<td>14.65</td>
</tr>
<tr>
<td>Migration rate /1000 pop</td>
<td>0</td>
<td>-0.17</td>
<td>0</td>
<td>-3.11</td>
<td>-1.49</td>
<td>0.08</td>
</tr>
</tbody>
</table>

B: Western countries

<table>
<thead>
<tr>
<th></th>
<th>USA</th>
<th>U K</th>
<th>France</th>
<th>Germany</th>
<th>Belgium</th>
<th>Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>295,734,134</td>
<td>60,441,457</td>
<td>60,656,178</td>
<td>82,431,390</td>
<td>10,364,388</td>
<td>16,407,491</td>
</tr>
<tr>
<td>Population growth rate</td>
<td>0.92%</td>
<td>0.28%</td>
<td>0.37%</td>
<td>0%</td>
<td>0.15%</td>
<td>0.53%</td>
</tr>
<tr>
<td>Structure of population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-14 yrs:</td>
<td>20.6%</td>
<td>17.7%</td>
<td>18.4%</td>
<td>14.4%</td>
<td>16.9%</td>
<td>18.1%</td>
</tr>
<tr>
<td>15-64 yrs:</td>
<td>67%</td>
<td>66.5%</td>
<td>65.2%</td>
<td>66.7%</td>
<td>65.7%</td>
<td>67.8%</td>
</tr>
<tr>
<td>&gt;=65 yrs:</td>
<td>12.4%</td>
<td>15.8%</td>
<td>16.4%</td>
<td>18.9%</td>
<td>17.4%</td>
<td>14.1%</td>
</tr>
<tr>
<td>Birth rate /1000 pop</td>
<td>14.14</td>
<td>10.78</td>
<td>12.15</td>
<td>8.33</td>
<td>10.48</td>
<td>11.14</td>
</tr>
<tr>
<td>Death rate /1000 pop</td>
<td>8.25</td>
<td>10.18</td>
<td>9.08</td>
<td>10.55</td>
<td>10.22</td>
<td>8.68</td>
</tr>
<tr>
<td>Migration rate /1000 pop</td>
<td>3.31</td>
<td>2.18</td>
<td>0.66</td>
<td>2.18</td>
<td>1.23</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Source: CIA World Factbook\(^{25}\) (2005)

The table 7 above gives an overview of certain recent demographic information that is likely to affect entrepreneurship in the countries of the Great Lakes Region and compares with some western countries.

For Burundi, the age range 15-64 yrs, which includes potential entrepreneurs, constitutes more than half of the population. One can therefore say that the potential for entrepreneurship in Burundi is high. In this regard, Rwanda might even have a greater potential for entrepreneurship. However, compared to other countries in the region, Burundi has the lowest population, relatively low population growth rate (2.22%) and birth rate (39.66 per thousand). In addition Burundi has the higher death rate (17.3) in the region and its immigration rate is zero. These indications do not present great opportunities for high demand of goods and services as well as the supply of (potential) entrepreneurs for the future. This becomes clear by comparing to western entrepreneurial countries specifically the United States and the Netherlands. For these

two countries, the rates of the population between 14 and 64 (potential entrepreneurs) are among
the highest while the whole group of developed countries presents the highest immigration rates.

8.4.4 Cultural conditions

Culture as it relates to entrepreneurship can be a double-edged sword, one conducive to
entrepreneurial activity another constituting an impediment to entrepreneurship. How is the
culture in Burundi likely to affect entrepreneurship?

Trade and migration from the Swahili coast during the nineteenth-century helped spread the
Kiswahili language to the interior of Africa and so reached Burundi. Also during the colonial
time, Kiswahili was used for communication with the local inhabitants. Years ago, Kiswahili
may have been a predominant language of business and commercial transactions in Burundi.
According to Nkeshimana (1999), Kiswahili was long considered by Burundians as language
of bandits, liars and robbers and people whose behavior and morale were suspicious and
questionable. Although the earlier image of Kiswahili reflected a negative effect on business and
commercial activities, fortunately Burundians are now interested in the Kiswahili language,
which is spoken in the whole eastern African region. This might positively change the perception
of business and entrepreneurial activities in Burundi.

In addition, one can observe that the most talented individuals who by their natural aptitude and
pedigree are more likely to succeed in business prefer instead to join the political and military
elite, because those in these fields are considered more intellectually refined and socially
superior than those in the business class. In Burundi social and cultural expectations limit the
role of most women in society to that of a housewife and domestic care givers and implicitly
exclude women as potential entrepreneurs, a phenomenon that helps to limit the potential for
entrepreneurship even further (see also Nkeshimana, 1999). Such negative perceptions and or
social attitudes towards business as a calling and those in the business class as well as the issue
of feminism has led many people to neglect business and commercial activities explaining the
present state of entrepreneurial activities in Burundi.

The negative influence of culture notwithstanding, slowly societal attitudes towards business are
evolving in a positive manner. For example, today one can find elements of the intellectual and
political elite carrying out some form of business activity next to their administrative and
political functions. According to the sample, females are now embracing entrepreneurship more
than before, making up 23% of the entrepreneurial class. Nkeshimana (1999) maintains that
despite strong negative attitudes towards women in business, Burundi is witnessing an upsurge in
the number of small enterprise associations resulting from female initiatives. Attitudes and
perceptions of the image and influence of businessman have improved for the better, with
Corresponding changes in attitudes towards entrepreneurship. Near 60% of entrepreneurs that
participated in the study think that other people find them as having done an important act in the

26 http://www.glcom.com/hassan/swahili_history.html#ueneaji
27 Refer to Nkeshimana (1999), quoting Banderembako in “Mode de gestion des PME au Burundi”, CURDES

37
of the 92 entrepreneurs only 29 indicated they had given some money to other people for starting their own business thus a rate of business angels near 32%. However, regarding the rate of business angels, in a non-individualistic culture country such as Burundi, one would expect a rate equal at least to 50%. The present results seem to suggest that in Burundi entrepreneurship is not imbedded the culture.

According to Nkeshimana (1999), no strategy aimed at promoting entrepreneurship is feasible out if the public image of entrepreneur is not good. Verheul et al. (2002), argue that the more often people speak of, read in newspapers or hear on radio and TV about the merits of entrepreneurs the more other people might be stimulated to engage in entrepreneurial activities. Unfortunately this was found lagging behind in Burundi. The present study wanted to evaluate to what extent contemporary media spread a favorable image of the entrepreneur, his function and role in the society. Analysis of the data in the sample has proved that media such as TV, radio, and newspapers had not helped to motivate entrepreneurial activity in Burundi. In fact 55 of 92 entrepreneurs (56%) interviewed, reported family members and/or other good examples of entrepreneurs as the motivation for starting their own businesses.

Regarding foreign entrepreneurs, not many were found in the empirical analysis. The sample included a very small proportion perhaps due to the war and the resulting insecure environment. Another possible explanation might be the culture and especially the local languages spoken that might be a barrier for foreigners to conduct entrepreneurial activities in Burundi.

8.4.5. Institutional Conditions

The role of government in encouraging entrepreneurship cannot be overemphasized. Government creates and empowers institutions that guarantee an enabling environment for business activity. It can generate demand for collective goods, enforce respect for property rights, mediate conflicts, prevent market failure and adopt sound macro-economic policies. What then are the institutional conditions in Burundi?

The empirical analysis revealed that in Burundi the entrepreneurial class is made up mostly of the illiterate and high school dropouts. Analysis of the data from the interviews shows that quality as well as quantity of potential Burundian entrepreneur is still low. First of all his educational level is low. Question 17 looked at the level of general education of entrepreneurs. Three classes were constructed. Those who at least finished or failed: primary, secondary or higher education (university). Of the 87 who fully responded to the question, 39 had a primary education, 42 secondary education and only 6 had reached higher education. Close analysis revealed that the majority of these 42 had failed their study at very early stage of their secondary school (in most cases they failed after two years of study). These results coincide with the problem advanced by Nkeshimana (1999) that local personnel might be not qualified.
Even those whose education is favorable to quality entrepreneurship seem to ignore\textsuperscript{28} this sector or perhaps are risk averse. According to researchers at the university of Burundi (e.g. Nkeshimana 1999), in Burundi the number of educated entrepreneurs is small and university students who are trained to become entrepreneurs prefer to secure administrative jobs rather than creating or retaking other enterprises. Although there is no clear link between education level and the success, believe is that in the absence of basic education, a country cannot have quality entrepreneurship. For example, referring to section 8.2, the majority of interviewed entrepreneurs were found to be less educated. Whether it is a coincidence or not, it is shown they failed to adequately act according to the available needs and opportunities. They concentrated their efforts on subsistence entrepreneurial activities that lack innovativeness, less diverse and for most of the time with insignificant economic value.

When asking how the war affected different entrepreneurs, the questionnaire deliberately left the question of lost lives caused by the war. Analysis of the sample revealed that of the 90 who fully responded to the question (22), 19 individuals or 21\% of entrepreneurs reported that the situation of war and insecurity did not affect their business. This is contrary to expectation. Explanation may include the fact that those who took this position appear to be those busy with: restaurant, repairing shoes, clothes designer, furniture designer, reflecting perhaps kind of products or services which are basic necessities.

Generally the negative consequences of the war have been overwhelming\textsuperscript{29}. In Burundi the war targeted the active population. Thousands were killed and the rest were forced to leave their normal and daily activities to settle into camps in and outside the country. In that way the functioning of economic activities was stopped or rendered difficult. The assumption is that in absence of civil war there would be peace and security in Burundi and economic activities including entrepreneurship would be run easily and could find government support. Due to war, the health conditions have degraded. Displaced people within the country have encountered bad living conditions and contagious diseases such as HIV/AID were easily transmitted between people. The government redirected the attention away from health assistance by focusing on fighting for “peace and security”.

It was shown in section 5.1 that the number of large firms in Burundi is too little. André van Stel et al. (2005) argue that large firms play an important role in the transformation process from a developing economy to developed economy. According to these authors, in the proximity of large firms, smaller firms may also flourish as they may act as suppliers for large firms and may learn a lot from the large companies.

Empirical study revealed that the financial as well as taxation system and firm registration have a major impact on entrepreneurship in Burundi. In Burundi only very few business are registered. For example, analysis of the sample shows that only 29.3\% had registered their firms in the

\textsuperscript{28} This ignorance must be caused by many factors including lack of start-up capital, mental heritage of Burundians that activities that pay are working for the government and belonging to the military corps

\textsuperscript{29} Refer to Global IDP Project: http://www.reliefweb.int/rw/rwb.nsf/AllDocsByUNID/28a695d55739809e1256c31002debf
chamber of commerce. Majority of those who did not register claim their businesses were so small that they did not need to register. The rest did not know or see the importance of doing so. Mandatory registration, which must be a pre-condition for everyone willing to conduct commercial activities in order to facilitate tax collection, is not strictly enforced. However the few foreign entrepreneurs encountered (10.8%) had registered their businesses. It is unclear whether this means that the government enforces the need for registration on foreigners only or whether only foreign entrepreneurs can see the importance of business registration. Business registration is essential in promoting entrepreneurship because it would help the authority to keep track of economic activities properly. Apart from the tax collection purpose, government cannot know where it needs to put more effort in encouraging and promoting entrepreneurial activities unless it has full information on available business activities. Also a larger informal business sector might render erroneous the determination of certain economic measures such as GDP.

In Burundi, according to the result of the empirical study, the amount of tax that entrepreneurs pay is predetermined. It means that tax is arbitrary and does not depend on how much income is earned during the period for which it is being paid. Consequences of this abound for both entrepreneurs and the government. Either the tax authorities collect less tax or the firms pay too much tax than required. This would be a bad scenario since high taxes negatively affect entrepreneurship. Bruce and Knoxville (2005), state that marginal tax rates have significant effects on entrepreneurial entry and exit. According to these authors, the formation and closure of small enterprises are in part determined by the handling of income from entrepreneurial activities in the tax code. The sample used for the present study revealed also a serious issue of coordination that needs to be eradicated. It was found that multiple authorities within the single city (Bujumbura) assess taxes on business. Some are paid at the zone; others at the municipality while other taxes are paid at SOGEMAC (the organization hosting the largest central market of the capital Bujumbura).

According to Biggs & Srivastava (1996), analysis of credit and financial markets is perceived as one of the major constraints to the growth of [manufacturing] enterprises in Africa, particularly small and medium firms. In Burundi, Nkeshimana (1999) admits that the capital market is imperfect; on average banks in Burundi have a conservative approach to loans and grants for business formation. Consequently the current bank system is not entrepreneurial. Banks make loans for to businesses after assessing that the risk of default is virtually zero.

Analysis of the sample showed that at the start of business operations, the main financial sources used by the interviewed entrepreneurs were: personal capital, family and/or friends and Banks. 41 of 92 that is, 44.6% asked for financial aid and they got it. 22% (9 of 41) got it from Bank, 73% (30 of 41) from family and/or friend and 5% (2 of 41) from other institutions. 92% of those who got aid from banks and other institutions reported they were very satisfied; 80% of those who got financial help from family member and/or friend reported satisfaction to some extent. It follows that in Burundi only the financial aid from banks and other financial institutions seems reliable and can play a significant role towards the development of entrepreneurship. Unfortunately for the whole sample only 1/10 (9 of 92) entrepreneurs could secure financial aid from banks implying a high rejection rate (90%). Hence, there is a need to reform the financial
sector. According to the interviews, 73% of those who needed external finance to start their businesses relied heavily on family and/or friends as main source of startup capital. This reliance on other sources other than formal financial sources in a poor country such as Burundi constitutes a source of potential liquidity problems for potential entrepreneurs. The government needs to put in place an efficient banking system ready to support with a lower degree of risk aversion, the activities of young entrepreneurs. For instance, the government should develop and promote a venture capital market (see Thornton Patricia H. 1999), it should also facilitate and stimulate business incubators, initiate things such as direct governmental credits and subsidies to be offered to entrepreneurs who cannot get such help from banks.

There seems to be a need for the population in Burundi to be informed on the importance of financial assistance from banks and other financial institutions. For example, only 52% of interviewees reported they knew about the existence of financial institutions. It follows that almost half of the population interviewed didn’t know there were additional source of financial aid. Nkeshimana (1999) \(^{30}\) has succinctly treated the necessity of information for the case of Burundi. He discussed for instance the different avenues for obtaining financial support as well as the necessity to elaborate and develop a new policy aimed at forming; informing and assisting SMEs even at their management level. The implementation of the issues addressed in his work would certainly help alleviate the problem of financial resources for SMEs in Burundi.

The result of the interview showed that after the business had started, only seven entrepreneurs reported they looked for additional finance. Four of them who failed to get any credit reported they did not meet the conditions such as bank collateral (guarantee or security). Normally to get financial help from a bank or financial institutions, one needs a well-written business plan and a guarantee such as collateral in case of default. Although the questionnaire that was used did not ask about any effort to make a business plan, it is probable that majority of Burundian entrepreneurs are not able to convince the bank authorities that the capital they are seeking will be paid back. With marginal levels of education most potential entrepreneurs may not know how to write a business plan and given the very simplistic and elementary nature of most business concerns in Burundi, who can blame the banks if they are reticent in making loans to potential entrepreneurs.

\(^{30}\) It is recommended to consult the work of Nkeshima (1999), II. Propositions pour améliorer la création et la viabilité des PME, “La promotion de l’entrepreneurship comme nouvelle stratégie de développement économique: cas de PME/PMI au Burundi, CURDES, 1999”
9. Conclusions and future research orientation.

The present study is aimed at investigating factors that affect entrepreneurship in the Great Lakes Region of Africa by focusing on Burundi. Studying entrepreneurship in Burundi has not been easy because of certain problems, which include the time frame and most importantly, the difficulty of acquiring information related to entrepreneurship in Burundi. A sample of 92 entrepreneurs running their activities in Burundi was used. In this study a Framework of determinants of entrepreneurship proposed by Wennekers, Uhlaner and Thurik (2002) was employed. The five aggregate entrepreneurial conditions namely technologic, economic, demographic, cultural and institutional conditions were analyzed.

This study is consistent with other studies in its findings that entrepreneurship contributes to a nation’s economic growth through the process of innovation, diversity, competition, creation of wealth by creating employment and increasing GDP and also that the determinants of entrepreneurship are similar in nature for both developing and developed economies. However, they differ significantly in the way they affect entrepreneurs in developed and developing countries. The study also showed that developing countries present more entrepreneurial opportunity compared to developed countries. These findings may be especially true for developing countries such as Burundi where markets are not yet fully saturated, and where all sectors of economy are not fully exploited. For instance in Burundi different ranges of activities, even those requiring small startup capitals are still possible. In developed countries such possibilities are rare and business startup demand high ingenuity, high competitiveness and consequently require huge investment in human and financial capital (knowledge and money). In the case of Burundi, one would argue that entrepreneurial opportunities would include building up the country because there is an absolute necessity to rebuild public as well as private infrastructures that were destroyed during the war. In addition to rebuilding the country’s infrastructures, it is noticed that existing entrepreneurs in Burundi do engage in activities that do not relate directly to rebuilding their shattered economy, which is solely based on agro-pastoral activities. For example, sectors such as agriculture, fishery, and animal farming are less exploited. This presents other opportunities.

Identified among the obstacles of entrepreneurship in developing countries include:
- Insufficient financial resources,
- Inappropriate apprenticeship and human resources (including education & training system),
- Lack of adequate infrastructure,
- Lack of good investment climate (due to problems related to bureaucracies, tax structure, legal framework, private property, corruption, political regime and culture),
- Inappropriate industry structure (less open competition, absence of supporting industries and potential suppliers of inputs, fragmented markets…).

The case of Burundi supports these findings. Burundi is situated in a region that does not facilitate the smooth running of commercial as well as entrepreneurial activities. This study discovered that the region where Burundi is situated has no appropriate infrastructure such

31 In clarifying this model, the eclectic theory of entrepreneurship by Verheul, Wennekers, Audretsch and Thurik (2002) was mainly referred to.
highways, railways, telecommunication…. There are no adequate regional trade agreements and tariffs and the region has been marked by series of inter-ethnic conflicts. It also discovered that terrorism imposes further restrictions on business and free movement. From this study, the following factors that negatively affect entrepreneurship in Burundi were drawn up:
- Unstable social, political and economic environment
- Inappropriate technological development,
- Inappropriate financial as well as human capital based resources.
- Insufficient level of education of the population that leads to poor quality entrepreneurs who fail to adequately act according to the available needs (opportunities). The average Burundi entrepreneur concentrates efforts on subsistence entrepreneurial activities that lack innovativeness, with no diversity and with insignificant economic value.
- The predominance of cultural values that do not allow for a sound enterprising society
- Undeveloped industrial structure
- Undeveloped national taxation system

**Government implications and suggestive policy measures**

Striving to tackle the above identified problems and in the search to stimulate entrepreneurship in Burundi, though the list in not exhaustive, here are some policy measures that need be adopted.

*Determination to create stable and safe political environment:*

It is pointed out in this paper that the political environment in Burundi is neither safe nor stable. Therefore any government in Burundi should adopt and implement measures aimed at maintaining peace and political stability if economic, legal and regulatory developments are to be achieved. For example it was shown in the sample that during the war years, entrepreneurial activity was very much hindered. If peace and security are not assured there will neither be economic partners nor will foreign investors come to Burundi. Other measures should include among others, allowing for globalization: adhering to regional economic treaties and agreements that favor transnational trade, favor free move of people, capital flows and goods across nations, hampering corruption, and keeping criminal activities to a check.

*Effort to increase demand for entrepreneurship:*

Although it is found that Burundi (as any developing country) presents plenty of entrepreneurial opportunities, there is however a need to increase the number and types of those opportunities and more importantly to improve their accessibility. To create new entrepreneurial opportunities, there is a need in Burundi to stimulate technological development since even in the presence of reliable entrepreneurs; their efforts may turn out to failure due to inadequate level of available technology. As Verheul et al. (2002) state, technological advancements create opportunities for entrepreneurial ventures through new ideas or new application processes. The government in Burundi needs to establish R&D centers and or help at financing existing R&D projects. Another way to stimulate demand for entrepreneurship is to establish income policy measures that bring about higher wealth by increasing the wage of workers for instance, which would lead to high demand for tailor-made products and services. Created opportunities as well as existing ones need to be easily accessed. Although it was found that in Burundi there is no threat of market
power of large firms that would inhibit entry of small firms, the laws and regulations for establishing businesses need to be simplified.

*Effort to increase the number and type of potential entrepreneurs:*
It is also found in this study that the number of entrepreneurs in Burundi is smaller. There is a need for the government in Burundi to step in to stimulate the pool or supply of potential entrepreneurs. Different regions correspond to different economic needs. If entrepreneurial policy will be in favor of one region, say Bujumbura, no doubt that the number and type of entrepreneurs will be less than available opportunities. Therefore developmental policies such as the process of urbanization as well as public infrastructures need to be equal and available in all regions. Notwithstanding, public infrastructures such as roads, airports, schools, hospitals, electricity & water supply etc. have to be maintained in good condition for a proper run of private as well as public investments. Another way to stimulate the number and type of entrepreneurs in Burundi is that the immigration laws should be revised to stimulate entry of foreigners whose aim is to start business activities in Burundi. Elsewhere, the government in Burundi needs to ensure public health care for the population since sick entrepreneurs are not productive. There is a need to re-deploy effort to reduce mortality rates.

*Influence on availability of resources, skills and knowledge of potential entrepreneurs*
It was found that there exist financial and knowledge resources gaps in Burundi. Consequently, there is a need to increase the availability of these critical entrepreneurial inputs. Government can help young entrepreneurs by providing financial support: subsidies, grants, loans…etc directly without the long bank procedures whose conditions are inherently difficult to meet. The government needs to ensure (or help at establishing) efficient banking system ready to support with a lower degree of risk aversion the activities of young entrepreneurs. This would help alleviate the lack of adequate sources for startup capital since entrepreneurs rely on - traditional and insufficient - family and/or friends as additional sources of startup capital rather than seeking help from banks and other financial institutions whose financial assistance would be more significant. Another government role in Burundi should be that of facilitating and promoting the development of venture capital market and business incubators. These would help improving the access of entrepreneurs to financial capital at start-up or for expanding their businesses. To influence the availability of skills and knowledge of potential entrepreneurs, there should be clear and consistent assistance of young entrepreneurs in the early stage of their business formation. The government can introduce direct provision of business related information in the form of advice and counseling or indirectly by supporting (existing) research centers aimed at informing and training young entrepreneurs. In addition to helping young entrepreneurs in gathering all needed working information to ensure a well planned and informed successful business startup (e.g. conducting market research, writing business plans), these specialized centers can achieve the role of informing and training through designing short-term courses in entrepreneurship aimed at conducting seminars and/or workshops, letting young entrepreneurs meet each other and/or with experienced entrepreneurs to exchange ideas and talk about their efforts and experience.
**Influence on preferences of individuals to become entrepreneurs**

This study revealed that the quality of entrepreneurship in Burundi is poor. In discussing the quality of entrepreneurship that is likely to contribute to economic growth, it is mentioned that such an entrepreneurship depends largely on the quality of the entrepreneur himself. However, one does not simply become entrepreneur; preferences of people are developed during upbringing as one acquires values and attitudes. The government can play the role of stimulating big part of its population by using different means to inculcate entrepreneurship into the culture of Burundi and into the mindset of its citizens. For instance, government should encourage and support the creation of TV and radio programs that stimulate entrepreneurship. It should also create and/or support local journals and newspapers to report on national entrepreneurial activities including the merits of entrepreneurs in and outside the country. Elsewhere, there is an obvious need in Burundi to prepare potential entrepreneurs. In addition to business information procurement discussed above, reforms should be adopted in the educational system by introducing courses such as entrepreneurship in universities.

**Effort to revive the industrial structure**

It is found that the industrial sector in Burundi needs to be developed. Particularly, the government of Burundi needs to develop the agricultural sector on which its economy depends. Many areas of this sector are still unexploited. For example there was no entrepreneur dealing with fishery, farming to name a few. Entrepreneurship should be promoted and encouraged in Burundi taking these and other key sectors of economy in mind. In the same perspective, it was found that poor countries fail to benefit from entrepreneurship because of lack of large companies. Not only should Burundi stimulate small and medium entrepreneurial activities but she also has to promote and assist large firms. If existing entrepreneurs are not able to establish large firms the government can perhaps play this role. André van Stel et al. (2005) advanced that through exploitation of economies of scale and scope large firms are able to produce medium-tech products. Many local workers may be employed by the large firms and, by training on the job, these local workers may become more productive compared to if they are running a small store and struggling to survive as an entrepreneur. Another way to overcome inefficiency is to encourage Burundian entrepreneurs to combine activities into larger and more identifiable economic entities with centralized management, consistent rules, rights and obligations. These would create opportunities to act as larger firms. Another important remark is that service activities are the most preferred by entrepreneurs in Burundi. This sector needs cheap or affordable and reliable Internet and telephone etc. inputs that for the most part, may require active government intervention in their procurement.

**Influence on decision-making process of potential entrepreneurs**

Discussing the issues of taxation for the case of Burundi, it appeared that there is an obvious government failure to register and efficiently control SMEs. The effects of this are numerous; for instance the promotion and assistance of entrepreneurs are rendered difficult due to lack of information about the needs of entrepreneurs and what solutions to be designed for their problems. Failure to register firms may also result in an inefficient tax system. An absence of relevant taxation control may negatively affect both the government and the (potential) entrepreneur. There is therefore a need in Burundi to design a tax system perceivable as
consistent with the society’s conception of just and equitable burden of taxation. Taxes need not be less or more than should be. Unreliable tax system leads the government to inappropriately fulfill its social security arrangements for the citizens while several other activities become paralyzed. Burundian government has to campaign about the importance of becoming self-employed. Measures that can attract people to start or continue their business in Burundi would include reduction (or elimination) of auxiliary taxes such as toll gate taxes and arbitrary taxes; installation of the value added tax system, which takes into account the amount of income earned, and ensuring that legal consequences of bankruptcy are not merciless which otherwise would make potential entrepreneurs reticent to engaging in self-employment. Other measures to positively influence the decision making of entrepreneurs in Burundi must include ensuring a sound labor market registration that clearly stipulate the hiring and firing conditions of employees. This would help potential entrepreneurs to make informed decision with regard to the cost (reward) of involving third parties in (or out of) their business.

Policy implementation and priorities

Practically in order to bring a remarkable economic growth in Burundi all sectors of economy need to be reformed and that is a big challenge. Only to stimulate entrepreneurship, there are a lot that need to be done in a developing country such as Burundi. The implementation of these policy measures faces existing barriers specifically the lack of reliable resources. The issue is, who, should do what and with what? In such tight conditions there is a need to adopt a strategic and systematic way to implement policy measures suggested in the present study. In any case the most pressing issues that should be given priority are those related to the creation of stable and safe political environment, which form the platform for the implementation of the rest of other policy measures to be achieved. The remaining measures should be addressed step by step, perhaps simultaneously by picking and giving priority to specific needs as they become uncovered taking into account whether they are short or long-term measures and more importantly the availability of human as well as financial resources.

It is worth mentioning that the findings in this paper need to be treated with caution. The analysis has relied on one sample and descriptive statistics were used. The next step is (or would be) to test the statistical validity of the theory built in this paper. Elsewhere, a sample focusing on entrepreneurs who already run a business when studying factors that affect entrepreneurship reveals another concern. Such a study excludes the group of nascent entrepreneurs who failed before the business could be established. Future researchers should also investigate the population who failed in order to find out what went wrong at that pre-startup level so as to fully uncover the roots of the impediment to entrepreneurship.

In any case, this at best represents only the first step in a comprehensive and hopefully ongoing study of entrepreneurship in the region of great lakes of Africa and in Burundi in particular. The belief is that if the issues identified in this study as well as in other relevant material referenced to in this research such as the work of Nkeshimana (1999) are properly addressed, there is no

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doubt that the level of entrepreneurial activity in Burundi will increase thus contributing to the growth of its economy. Last but not least, the humble ambition of the present study was to contribute to providing the whole great lakes region of Africa with an entrepreneurial tool that may serve as a guide in tackling most of the issues inhibiting entrepreneurial activities in member countries. Although every country has specific problems, which might demand different ways to design corresponding solutions, the hope is that the entrepreneurial obstacles identified in Burundi and the way they should be dealt with should inspire neighboring countries and other underdeveloped countries the world over that suffer from difficulties similar to those found in the great lakes region of Africa.

Antoine Kabura,
Rotterdam School of Economics,
March 2006,
References:

- Central Intelligence Agency (CIA), Economy Overview of Burundi, retrieved 3 February 2006; available at http://www.cia.gov/cia/publications/factbook/geos/by.html#Econ


Indexmundi.com, Burundi unemployment rate, retrieved 11 January 2006; available at http://www.indexmundi.com/burundi/unemployment_rate.html


Kalimi M. Mworia (Kenya’s Ambassador to the Netherlands), 2005, Notes for “Thinking Africa: Effort towards economic growth” seminar on Kenya organized by African Link Student Association (Erasmus university Rotterdam), www.africanlink.org


Ministère du commerce et industrie, (République du Burundi), 1999, Rapport annuel de la chambre de commerce et industrie.


Nkeshimana Jean-Claude, 1999, La promotion de l’entrepreneurs hip comme nouvelle stratégie de développement économique: Cas des PME/PMI au Burundi, Centre Universitaire de Recherche pour le Développement Economique et Social –CURDES-, (Université du Burundi)

Nkeshimana Jean-Claude, 2001, L’entrepreneurship passe par les PME : types et sources de financement spécifiques aux PME burundaises et politiques gouvernementales de développement de ce secteur, Centre Universitaire de Recherche pour le Développement Economique et Social –CURDES- (Université du Burundi)

• Reliefweb, 2002, Background Information on the IDP Situation in Burundi, retrieved 13 november 2005, available at http://www.reliefweb.int/rw/rwb.nsf/AllDocsByUNID/28a695d5f5739809c1256c31002dceb
• Tyler Biggs & Pradeep Srivastava, 1996, Structural Aspects of Manufacturing in Sub-Saharan Africa: Findings from a Seven Country Enterprise Survey; WORLD BANK DISCUSSION PAPER NO. 346, Africa Technical Department Series
Appendix

1. Abbreviation used

- EAC: East African Community
- COMESA: Common Market for Eastern and Southern Africa
- GDP: Gross Domestic Product
- UNDP HDI: United Nation Development Program, Human Development Index
- SME: Small and Medium Enterprise
- GEM: Global Entrepreneurship Monitor
- TEA: Total Entrepreneurial Activity
- OECD: Organization for Economic Co-operation and Development
- CURDES: Centre Universitaire de Recherche pour le Développement Economique et Social (Université du Burundi)

2. Questionnaire used for the present study

Please tick the box(es) with a cross (x) or write Yes/No type in a number

1 Gender of business owner
   (a) Female
   (b) Male

2 Nationality of business owner
   (a) Burundian (Yes or No)
   (b) If No in (a) Other (namely)…

3 (a) In which province do you run your business: (mention only one where important function of your business can be found)…
   (b) Important function of your business is in the urban area (city).
      (NB: Capital of province will be considered as city)
      (Yes or No)

4 Your age is in the range: (check only one range)
   (a) 18 – 25
   (b) 26 – 30
   (c) 31 – 35
   (d) 36 – 40
   (e) 41 – 45
   (f) 46 – 50
   (g) 51 +
5 (a) In which year was this business (company) founded?  
(b) Are you a single owner? (Yes or No)  
(c) Is your business registered in the chamber of commerce (Yes or No)  
(d) If No, why not? (Please make use of the space provided on page 5)  

(e) If you pay tax, where and how do you pay this tax? (Please make use of the space provided on page 5)  

6 (a) Do you have employee(s)? (Yes or No)  
(b) If Yes, how many? (Write the number of employees in the box)  

7 Briefly, what is the main focus of your firm, in terms of products or services offered? (Please make use of the space provided on page 5)  

8 What industry (industries) is your business a part of? (Check one or more)  
(a) Agriculture (agriculture, livestock & fishily) industry  
(b) Tourism industry  
(c) Service industry (including personal businesses)  
(d) Manufacturing industry  
(e) Transportation industry  
(f) Other; (write the name):  

9 Of the two alternatives below, which one describes better your business?  
Note: [According to how you agree with the propositions, type a number in the box. (1=not at all, 2=somehow agree; 3=completely agree)]  
(a) Your business or company comes up with new products or ways of producing products or services in your industry.  
(b) Your business or company is a copycat company. It offers standard products or services, but perhaps better, cheaper or faster.  

10 What was the most appealing reason for you to get involved in this business?  
Note: [Of the two alternatives please check only one that describes better your position. Write your answer in (c) if only neither position in (a) or (b) fit your case]  
(a) I was unemployed (therefore I had to do something to live of).  
(b) I was employed or earning money somehow (thus could still live without this business) but I wanted to start my own business anyway).  
(c) Other reasons: (please make use of the space provided on page 5)
In addition to the reason above, to what extent the following played an important informative role for you to engage in entrepreneurial activities?

[1=not at all, 2=slight extent, 3=some extent, 4=great extent, 5=very great extent]; write only one number in each of the boxes.]

(a) Your family member(s) or other good examples of other business people (1,2,3,4,5)
(b) Media (TV, Radio or newspapers) (1,2,3,4,5)

Have you asked any financial support at the time you were setting up the business?
(a) (Yes or No)
(b) Did you get any fund? (Yes or No)

If Yes in (12) from where did you get the fund?
(a) Bank
(b) Family or friends
(c) Other funding institutions (give name):

To what extent were you satisfied with the fund you received?

[1=not at all, 2=slight extent, 3=some extent, 4=great extent, 5=very great extent]

The fund you received was interest payable? (Yes or No)

At present, would you estimate the size of your business in terms of (fair) value to be:
(a) Fbu <1000,000
(b) Fbu 1000,000 – 2000,000
(c) Fbu 2000,000 – 3000,000
(d) Fbu 3000,000 – 4000,000
(e) Fbu 4000,000 – 5000,000
(f) Fbu >5000,000

Have you (or your company) ever given money to someone to start his own business?
Yes or No

What is your top level of education? Give more information about your achieved education (category and type of studies) (Please make use of the space provided on page 5)

To what extent are you satisfied with the level of education you have?

[1=not at all, 2=slight extent, 3=some extent, 4=great extent, 5=very great extent]; write only one number in the box.]

In addition to your education, have you followed any training related to the present business before you start or after you had started it?
(a) (Yes or No)
(b) If Yes, how did this training help? (1=not at all, 2=somewhat good, 3=good 4=very good)
20. From the time you started the business until today (tick the correct answer)
   a) You make use of bank credits
   b) You continue getting support from ONLY your family members
   c) You continue getting support from ONLY your friends
   d) Family members and friends support you

21. To what extent do the majority of people find you did good act in the society?
   [1 = not at all, 2 = slight extent, 3 = some extent, 4 = great extent, 5 = very great extent]

22. (a) There has been a civil war in your country and there is still sort of peace instability. To what extent has this situation negatively affected your business or commercial activities?
   [1 = not at all, 2 = slight extent, 3 = some extent, 4 = great extent, 5 = very great extent]

   (b) If your answer above is not [1], please briefly describe in what way your business was affected. (Please make use of the space provided on page 5)

23. There exist institutions or incumbent organizations that help young entrepreneurs with funds or technical skills and facilities they need
   (a) Do you agree with the proposition above? (Yes or No)
   (b) If Yes, were you aware of any of them at the time you were setting up you business? (Yes or No)
   (c) If Yes in (b), did you make use of them? (Yes or No)
   (d) If yes in (c), to what extent were they helpful?
      [1 = not at all, 2 = slight extent, 3 = some extent, 4 = great extent, 5 = very great extent]
   (e) If your answer in (d) is [1 or 2] can you explain? (Please make use of the space provided on page 5)