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## EXPLAINING GROWTH
## IN BURUNDI: 1960-2000

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**Abstract**

This study analyses Burundi's economic performance over the period 1960–2000 and finds that it has been catastrophic. The usual economic factors explaining growth are endogenous to political decisions, suggesting that it is politics first not economics that is responsible for the dismal performance. This picture particularly limits the relevance of textbook models that rely on the assumption of a competitive resource allocation rule. When cronies rather than qualified managers are running the economy, when priority is given to investment projects in function of their location rather than the objective needs of the economy, the economic model loses its explanatory power. Economic performance has been shaped by the occurrence of violent conflicts caused by factions fighting for the control of the state and its rents. The capture of rents by a small group has become the overarching objective of the governments that have ruled the country since shortly after its independence. Therefore, economic performance will not improve unless the political system is modernized from a dictatorial regime playing a zero-sum game to a more democratic and accountable regime. It would be naïve to propose that economic reforms will boost the country's economy if they are not preceded or at least accompanied by political reforms. One central message of this study is that Burundi's poor economic performance is the result of specific identifiable factors evolving around governance. There is nothing fundamentally wrong with Burundi: Development failure may be reversed if the factors underlying it and identified in the study are properly addressed.

## INTRODUCTION

Burundi is landlocked between Tanzania to the East, the Democratic Republic of Congo to the West and Rwanda to the North. Over the last decades, the country's economic growth performance has been affected by its natural, human and institutional environment. Burundi has a population of about 6 million people spread over 27,834 $km^2$. With an urbanization rate of 7%, Burundi's economy is essentially rural, and despite having one of the highest population densities in Africa, the country has been able to feed its people in peaceful periods in spite of its archaic production techniques. However, population pressure and poor ecological management, especially during the current civil war, have affected Burundi's self-sufficiency. The country's population is divided into three ethnic groups, though these are hardly distinguishable on the basis of language, physiological features, cultural characteristics or geographical settlement. According to colonial statistics, the Hutu represent 85% of the population, the Tutsi 14% and the Twa 1%.[1]

Since independence in 1962, politico-ethnic feuds and other factors have led to five bloody wars involving the two main ethnic groups. Poor governance appears to be at the heart of the dismal political performance of the different regimes that have ruled the country since the early 1960s. Most of post-colonial Burundi's history has been dominated by military dictatorships. Three Tutsi presidents from the same province of Bururi and the same commune of Rutovu have been at the helm of the country for 80% of the period covered by this study (1960–2000).[2] They have all shared the same style of predatory leadership, putting individual and narrow group interests before national interests. This has resulted in a highly centralized state, imposing its controls in all domains of the country's social, political and economic life. Their policies have resulted in civil wars that have claimed more than 500,000 lives and have produced about a million refugees over the last 36 years.

Burundi's economic performance has been a total failure. Even in absolute terms, GDP per capita fell from about 620 dollars to 370 dollars between 1960 and 1998. The objective of this paper is to explain the reasons behind this catastrophic performance, by highlighting the salient features of the growth process and by showing which and how different factors contributed to this process. It should be stated from the outset that Burundi's economic performance has been narrowly associated with political factors. Poor governance has suffocated individual expression in all forms, frustrating private initiative and leaving economic activity to a state machinery ill equipped or unwilling to organize an efficient system of production. Throughout the study, it is argued that the usual economic factors that explain growth have been endogenous to political decisions. Decision making over economic variables that determine growth such as investment, infrastructure, education, trade and employment have been made on the basis of political considerations.

The study comprises four substantive sections. The first section presents a general picture of macroeconomic and sectoral performance of the economy. The aim is to define the time pattern of growth in Burundi, by dividing the sample period into three subperiods, which correspond to two periods of decline and one period of growth. Using Penn World Tables data on per capita GDP, this periodization is data driven. The three subperiods fit well predictions on the basis of political economy. Ngaruko and Nkurunziza (2000) discuss in details the plateaux and plains of the trajectory. They find a striking correspondence between economic and political trajectories. Sectoral growth is also reviewed in light of the three subperiods.

Sections two and three analyse the microeconomic processes underlying growth. Section two focuses on the role of goods and factor markets in explaining Burundi's disappointing growth performance. Section three centres the discussion on firms and households, two agents whose potentially high contribution to growth has been frustrated by misguided government policies against private initiative. The fourth section discusses in more details the political economy of growth. It explains the economic objectives of political leaders and shows how they have used the system to satisfy narrow individual and group interests at the expense of society at large. It also attempts to explain why politicians behaved so irresponsibly. Section five concludes.

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[1] Ngaruko and Nkurunziza (2000) provide a discussion of the confusion surrounding the concept of ethnic group in Burundi and the caution needed for its interpretation.

[2] Lack of information on the period before 1960 did not allow us to start the analysis from 1950. Even for the period 1960 to 1970, statistical information is sketchy.

# 1. MACRO AND SECTORAL GROWTH

This section aims to provide an overview of the process of economic growth. The section first identifies the relevant periods of this process. It then decomposes actual growth into growth of the main factors of production. The third subsection focuses on sectoral contributions to growth, while the fourth subsection compares Burundi' growth experience with that of other countries.

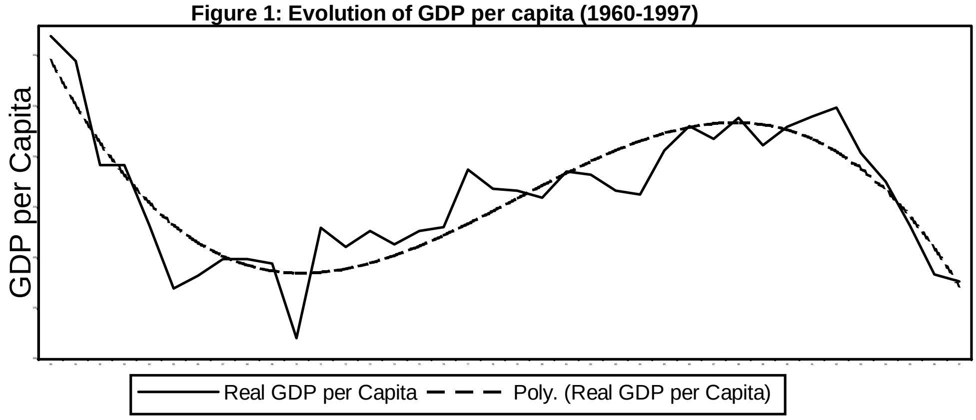
## 1.1 Periodization

The period of study, which covers four decades from 1960 to 2000, can be divided into three subperiods. These are suggested by Burundi's political history as well as the evolution of the country's economic performance. Figure 1 shows that the trend estimated from a third order polynomial adjusts well to the evolution of GDP per capita. The parameters of this function are given in Equation 1:

$$\begin{aligned} GDP_{CAP} &= -0.0545t^3 + 3.2788t^2 - 53.095t + 665.35 \\ R^2 &= 0.8135 \end{aligned} \quad (1)$$

where $GDP_{CAP}$ represents real GDP per capita in year $t$. As Figure 1 shows, the process of Burundi's economic growth unfolded along atypical patterns in comparison with the rest of Africa where economic growth was relatively strong between 1960 and 1973. Most countries experienced two decades of stagnation or decline since then, while this was a period of growth in Burundi. Since 1994, many African countries have enjoyed a modest recovery, while Burundi has slid into crisis.

**Figure 1: Evolution of GDP per capita (1960-1997)**




This points to the fact that constraints such as those associated with international markets only play a modest role in explaining economic growth and stagnation in Burundi, thus suggesting that specific and internal factors are more important. The periodization proposed aims to emphasize these factors. As Figure 1 shows, the first subperiod (1960–1972) is characterized by a steady decline in per capita GDP. The second subperiod (1972–1988) corresponds to a steady increase in per capita GDP, and the third subperiod (1988 to date) is characterized by a deepening economic crisis. A snapshot explanation of the different subperiods follows.[3]

***1960–1972***

Decline during this period was due to a number of shocks. First, in 1960, when Congo became independent, Burundi lost half of its Eastern Congolese export market, resulting in large trade deficits. Second, in 1962, Burundi and Rwanda gained independence from Belgium. As a result, Burundi

[3] A more detailed discussion is provided in the thematic sections.

progressively lost its Rwandan export market as Rwanda developed its own industrial sector, compounding the poor performance of the country's external sector. Third, the colonial power left a legacy of high ethnic tensions, especially at a time of stiff competition for the control of state institutions and some assets left by Belgians. These tensions paralysed institutions, culminating in the first large-scale political violence in 1965. Fourth, decolonization also resulted in scarcity of qualified manpower and capital stock. As a result, industrial production plummeted, with firm capacity utilization dropping to about 25% in 1962/63. This was worsened by ferocious fights for influence among different political, regional and ethnic elites that did not care about the economy. During this period, Burundi's economic growth was lower than the African average and much lower than that of Asian highly performing countries.

***1972–1988***

On the political front, this period was characterized by a relative calm warranted by a highly repressive regime. The period followed the 1972 massacre in which thousands of Tutsis were killed by a group of Hutu rebels, triggering a horrendous repression by the Tutsi-dominated army throughout the country. Most Hutus able to exercise any political, administrative or economic power were physically eliminated. The massacre was followed by a long period of political repression until the fall of Bagaza regime in 1987.

From 1975, in addition to an increase in coffee export earnings, the country embarked on a massive programme of investment, financed mostly by foreign resources. A number of public corporations were created without any concerns about their economic viability. Used as political instruments for the collection and distribution of rents among the political elite, the management of these corporations involved massive transfers of subsidies, crowding out resources for productive investment. These policies were consistent with efforts to embark on government-led growth on the basis of large-scale public projects and on public firms. The period experienced positive rates of economic growth. However, the widening budget deficits and the cost of servicing the debts contracted in the 1970s became unsustainable. In 1986, Burundi adopted a structural adjustment programme. To economic difficulties was added the 1988 civil war, a result of political tensions that had been brewing during the preceding long period of repression.

***1988 to Date***

Despite the fact that war in 1988 was shorter and less costly in terms of human loss relative to 1972, it opened the way for increasing grievances from a new generation of Hutus who had been excluded from political and economic participation in the country's affairs since 1972 (Lemarchand, 1994). Facing an international community that conditioned more and more of its external aid to political inclusion of the Hutus, Burundi experienced a volatile political environment with a drastic decline in investment (Reyntjens, 1994). In 1993, another civil war erupted after the assassination of the first democratically elected president by the army.

In August 1996, the crisis deepened when Burundi's neighbouring countries imposed an economic embargo in reaction to a new military coup. The international community followed suit by suspending its cooperation with the country. As a consequence, export and import smuggling increased. Economic agents, including the government, attempted to import and export illegally some strategic products, criminalizing economic activity. Transaction costs increased manifold as speculation and corruption became rampant. The Burundi franc plummeted and inflation reached levels never seen before. As a result, Burundi recorded its highest levels in poverty. To date, although the embargo has been suspended, war is still ravaging the country and the economy is in shambles, as illustrated by the negative rates of economic growth prevailing in most of the years after 1993.[4]

[4] In order to have an idea of what Burundi would have become if it had not experienced all the civil wars discussed, we have assumed that the country would have had the mean growth rate of African countries, including those that have experienced war. It turns out that by 1997, GDP per capita would have been $667, an amount that is 68% higher than the actual figure of $397. Taking the mean growth rate of countries that have experienced no war would increase the figure. This simple figure gives an idea of the cost of Burundi policies over the years after 1960.

### 1.2 Growth Accounting for the Period 1960 to 1997

Collins and Bosworth (1996) provide a decomposition of actual growth in GDP per capita per worker into growth in physical capital per worker, education per worker, and total factor productivity (TFP) residual, set out in Equation 2:

$$\frac{q}{l} = \alpha \frac{k}{l} + (1-\alpha)h + a \tag{2}$$

where $\frac{q}{l}$, $\frac{k}{l}$, $h$ and $a$ represent growth of output per worker, growth of physical capital per worker, growth of education per worker, and growth of total factor productivity, respectively. We decompose Burundi's economic growth along the same lines over the period 1960–1997. Human capital is proxied by secondary school enrolment ratio, in spite of the inherent limits of this indicator (Gemmell, 1996), because of the lack of data on alternative proxies.[5]

Concerning workforce and physical capital per capita, we make three assumptions. The first concerns the definition of a worker. Burundi has a pre-industrial economy dominated by subsistence agriculture that involves over 90% of the population. Everybody is potentially a landowner who has the choice to farm the land for a living. Even urban dwellers are landowners who are often immigrants from rural areas. In such an economy, full unemployment is potentially rare except for a very small proportion of the urban population. Therefore, we assume that the part of the population over 15 years constitutes the group of workers.

The second assumption concerns physical capital per worker. As data for physical capital per worker are difficult to find, we estimate them assuming that Burundi has the same physical capital per worker as the average of sub-Saharan Africa, that is, US$1,069 in 1990. Likewise, following Collins and Bosworth (1996), we assume that the annual rate of geometric depreciation of physical capital is 0.04. As the authors argue, even though estimated physical capital might differ from actual data for the benchmark year, this does not have an important impact when they are adjusted by long time series of investment. Thus $k/l_t$ the amount of physical capital per worker for year $t$ is determined on the basis of Equation 3:

$$k/l_t = k/l_{t-1}(1-0.04) + i\,y_{t-1} \tag{3}$$

where $i$ is the ratio of investment over GDP per capita $y$. The third assumption concerns data on workers. On the basis of the generally used assumption that $\alpha$ is 0.35 (Ndulu and O'Connell, 2000; Collins and Bosworth: 1996), we find that while between 1960 and 1997 GDP per capita decreased by more than 40%, physical capital per capita had been multiplied by 58 and human capital by 5; total factor productivity (TFP) had been divided by 25.

Overall, these figures conform to the Burundi case. While investments were made in line with relative scarcity before independence in 1962 to cater for Belgian colonial needs, thus having a positive impact on economic growth, the pattern changed after independence. In the post-independence period investment has been generally allocated on the basis of non-economic needs. Decision making has evolved around rent-seeking through regionalism, clientelism, nepotism and patronage. This picture limits the relevance of the Collins–Bosworth model, which relies on the assumption of an investment allocation rule on the basis of a competitive environment. When cronies rather than qualified managers are running the economy, when priority is given to investment projects in function of their location rather than the objective needs of the economy, it is not surprising that TFP decreases (Easterly, 2001). Consequently, despite an apparent large increase in investment, which has become predominantly public since the 1970s, jumping from 5.6% of total investment in the early 1970s to 42.8% in 1980, effective increase in relevant physical capital was modest. As a

[5] Gemmell (1996) argues that school enrolment rates conflate the level effects of this factor and blurs the distinction between human capital and the growth in labour force.

result, GDP per capita decreased, reducing TFP. This picture suffers from an important limitation, however: it does not distinguish between periods of peace and periods of war.

**Table 1: Decomposition of the contribution to growth: Period annual average (%)**

| Period | $\frac{q}{l}$ | $\frac{k}{l}$ | H | A |
|---|---|---|---|---|
| 1960–1972 | -2.5 | 105.8 | 15.4 | -49.5 |
| 1973–1988 | 1.56 | 13.4 | 3.3 | -5.27 |
| 1989–1997 | -2.8 | 2.1 | 2.7 | -5.25 |
| 1960-97 | -0.74 | 40.56 | 7.01 | -19.47 |

Interpretation of these results calls for a number of remarks. First, the enormous rates of increase of physical and human capital per capita between 1960 and 1972 are due to the particularly low initial conditions rather than to high additional capital. They are observed at the same time as large negative TFP. The second remark points to the most critical feature of the accounting exercise in the case of Burundi. The specification of capital depreciation seems to be inappropriate for economies like Burundi. With the massive destruction of human and physical capital due to repetitive wars, the figures in the table should be lower.

The first war-related destruction of capital refers back to the 1965 conflict. Though Burundi had probably a few dozen university graduates, the Tutsi-dominated army executed more than 300 Hutu elites among the most educated. This was a consequence of a foiled coup by Hutu elements in Bujumbura and the massacre of Tutsi peasants in the central province of Muramvya by Hutu insurgents (Lemarchand, 1994). Seven years later, during the army repression of the Hutus in 1972, between 200,000 and 300,000 people were killed, especially Hutus with post-primary education. An equal number of Hutus fled to neighbouring countries, creating the first wave of long-term refugees the country that has produced over the decades. Consequently, from one year to another, for comparable secondary school enrolment ratios, the human capital was cut by a large fraction. The later conflicts, particularly the one that started in 1993, followed the same pattern.

These conflicts have also caused an important loss of physical capital. Arson, looting and displacement of populations that accompany civil wars have caused the destruction of much of the accumulated capital. During the current civil war, the killing and looting of livestock – a capital asset particularly prized by rural households – have caused a decline from 2.6 million head to 1.8 million from 1993 to 1999, a fall of 31% in just six years. Given the importance of livestock for land productivity through its supply of organic fertilizer, it is clear that such a loss represented an important destruction of household capital. In addition, looting and killing of livestock have deprived rural households of an important source of food especially at a time when many of them have been forced to leave their houses and live in displacement camps because of rebel activity.

HIV/AIDS is another source of human capital destruction that is gaining prominence. Recent figures suggest that HIV prevalence has increased rapidly since the early 1990s, accelerating during the current civil war as a result of population displacements, army and rebel movements and promiscuity in displacement camps. The prevalence rate in cities has increased from 1% in 1983 to 15.1% in 1993 and to 21% in 1997, against 0.73% in 1989 to 5.9% in 1997 in rural areas (The World Bank, 1999). According to UNAIDS statistics, Burundi is the thirteenth most severely affected country in Africa. No doubt that by its ravages within educated urban elites, HIV has had a severe impact on the stock of human capital, further weakening the relevance of the estimation of human capital productivity along the Collins and Bosworth model.[6]

Thus, the rates of growth of physical and human capital in Burundi are likely to be over-estimated, at least in two respects. First, the figures estimated by the Collins–Bosworth model do not take into account the shocks just discussed. Second, with time, the actual path of capital accumulation has diverged from that suggested by the Collins–Bosworth model because of the persistence effect of these shocks. Therefore, today, 35 years after the country experienced the first shocks, the figures suggested by the parameters of Table 1 have little to do with reality. As a result, the values of

[6] Easterly (2001) provides a detailed critique of the growth accounting exercise on the basis of the Solow growth model.

$k/l$ and $h$ are over-estimated and productivity is likely higher than suggested in Table 1. However, other political and economic factors resulted in a substantial misallocation of productive resources, undermining factor productivity. Accordingly, while over-estimation of physical and human capital per worker implies under-estimation of total factor productivity, it would be wrong to infer that the latter variable is very high. The fourth section will focus on these political economic factors.

### 1.3 Sectoral Contribution to Growth

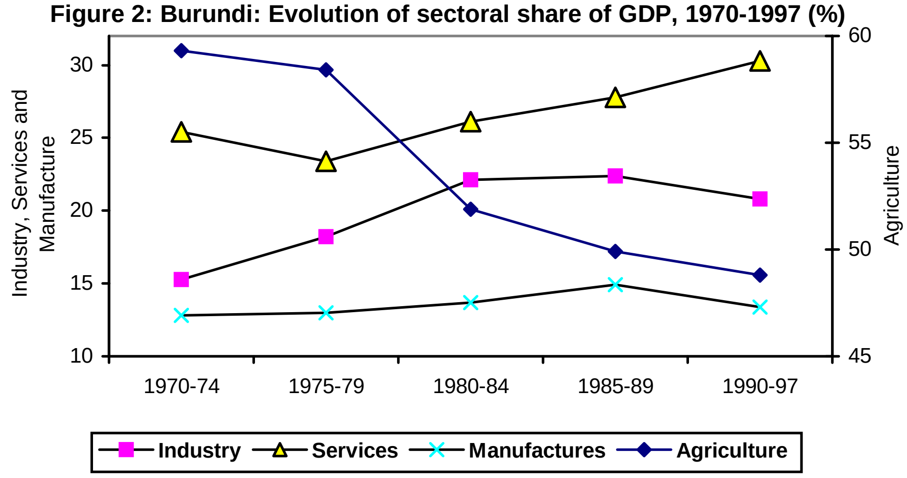
An important part of the economic literature emphasizes that there is a transformation of sectoral shares of labour and output in the course of economic development (Chenery and Syrquin, 1975). According to this literature, productivity increases in the traditional sector (agriculture) underpin the movement of labour towards modern sectors (industry, services), thus rising overall per capita incomes. However, other economists argue that in Africa, over-taxation of agriculture has impeded its structural transformation, thus limiting its contribution to long-term growth (Bates, 1983). On the other hand, approaches emphasizing governance and civil strife suggest that the bias has been against the manufacturing sector in Africa.

Agriculture is the largest contributor to aggregate GDP in Burundi. Its share has fallen from 60% in the 1970s to about 50% in the 1990s. Over the same period, the average for sub-Sahara African countries decreased from 35% to 30%, against rates of 27% to 21% for developing countries as a group. Industry benefited more than services from this relative decline of agriculture in Burundi, while it was the converse in the rest of Africa. Thus, while industry's share in GDP increased from 15.3% to 20.8% in Burundi, services went from 25.4% to 30.3%. For sub-Saharan Africa, these shares grew from 23.6% to 25.8% for industry, and from 41.2% to 44.2% for services.

To some extent, this evolution of African economies consisted in a convergence towards the expected sectoral structure, given the continent's income and population patterns. Estimation of fixed effects by O'Connell and Ndulu (2000), on the basis of the Chenery and Syrquin model, shows that given its income and population level, sub-Saharan Africa's service sector is smaller, but its industry and manufacturing sectors are larger than would be expected on the basis of cross country norms. Furthermore, this estimation shows that the share of the labour force in agriculture is larger, and that labour productivity differential in favour of non-agricultural sectors tends to be much higher in Africa than in other regions. In this light, the case of Burundi seems atypical by its lack of convergence. Actual data on agriculture's share in labour force and the ratio of agriculture versus non-agriculture labour productivity and fitted values of these two variables produce large and increasing residuals over time (Ndulu and O'Connell, 2000), thus illustrating that Burundi diverges from the rest of the continent.

In Burundi, agriculture's share of the labour force fell from 95% in the 1960s to 91% in the 1990s. Such an evolution is not distinctive from the one in other African and developing countries. What is distinctive is that this decrease was more important in other parts of the world, suggesting that sectoral transformation was relatively marginal in Burundi, where the share remained one of the highest. The share remained higher than the mean of these groups of countries, and fell outside one-standard deviation margin of developing countries.

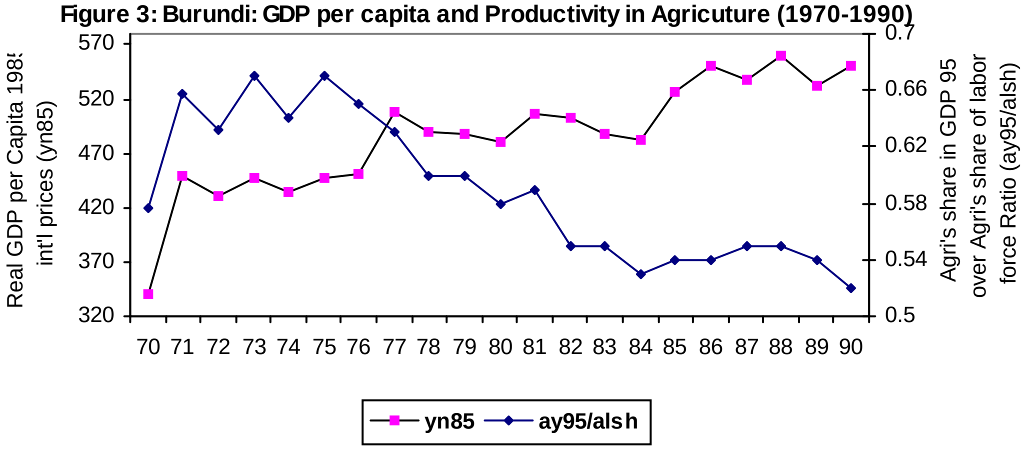
**Figure 2: Burundi: Evolution of sectoral share of GDP, 1970-1997 (%)**




Thus, while this share went from 73% to 68% for sub-Saharan Africa between the 1975–1979 and 1985–1989 periods and from 54% to 49% for the group of developing countries, it remained almost unchanged in Burundi from 93% to 92% over the period. This evolution can also be illustrated by the productivity pattern in agriculture. Between 1975 and 1989, non-agriculture versus agriculture average labour productivity ratio decreased from 9.5 to 8.7 in sub-Saharan Africa and from 6.6 to 5.9 for developing countries as a whole. Over the same period, the ratio rather increased in Burundi from 9.8 to 11.6, illustrating a relative decline in agricultural labour productivity. These figures show that Burundi's relatively strong economic growth was not accompanied by notable sectoral transformation.

Productivity differentials in agriculture show an atypical evolution of Burundi relative to the rest of Africa and even much more relative to highly performing Asian economies (HPAEs). This suggests, first, that investment and growth took place at the expense of agriculture. Second, through this allocation, Burundi diverged from a competitive equilibrium, since the productivity gap across sectors tended to widen (see Figure 3).

**Figure 3: Burundi: GDP per capita and Productivity in Agricuture (1970-1990)**




These suggestions point to large policy distortions, a question that will be addressed from a distribution standpoint. More specifically, four hypotheses are explored to explain the patterns of economic growth in Burundi. First, farmers have been over-taxed through several channels, including cash crop producer prices and exchange rate policy, preventing accumulation in agriculture and the transformation of the sector. Second, while the industrial sector has benefited from the massive external borrowing that took place from the mid 1970s, the process disconnected economic growth, as captured by the evolution of GDP per capita, from productivity in agriculture (Figure 3). Third, the creation of state-owned enterprises resulted in bureaucratic expansion and predation to the benefit of the elite. Fourth, the ensuing public deficits increased taxation of the private sector to secure massive subsidies for poorly managed public enterprises. This pressure was transmitted to agriculture through manufacturing firms relying on agricultural inputs.

### 1.4 Growth Regression Evidence

The limits highlighted in the growth accounting exercise of the second sub-section are also relevant for the cross-country comparison, inasmuch as this comparison relies on data that do not account for losses caused by political instability. Moreover, comparing Burundi with other countries and groups of countries raises an additional serious problem of data comparability. The 1985 international price-based data on economic growth on which the previous analysis relied, and which are the reference for the analysis in the next sections, are so divergent with GDN data, on which the cross-country comparison is based, that it is difficult to develop a coherent explanation articulated on both sources over the 1960-2000 period. Figure 4 plots per capita GDP growth rates on the basis of these two sources to show their inconsistency.

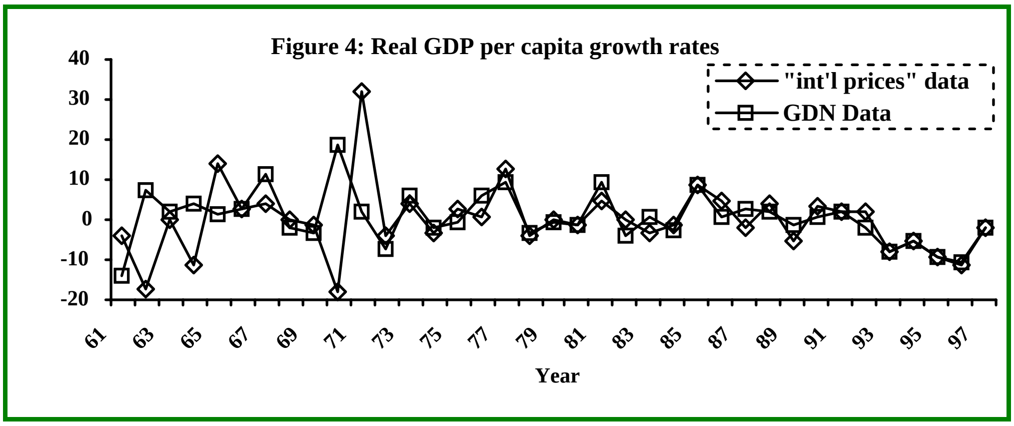


**Figure 4: Real GDP per capita growth rates**

As Figure 4 shows, the most important divergences relate to the 1960–1974 period. We, therefore, limit the comparison of Burundi to other countries and regions for the period 1975–1997 only. In this light, given the features already outlined concerning growth in Burundi, we chose variables covering a range of aspects, to show the position of Burundi relative to different groups of countries. These variables represent initial conditions (initial income), structural endowments (“landlocked” variable), exogenous shocks (terms of trade), and a proxy for policy quality, institutions and political instability (black market premium). Table 2 provides the results on the position of Burundi relative to different groups of countries.

**Table 2: Factors of growth: Burundi compared with Africa and Asia**

| Explanatory factors of growth | Expl. Power* | Position of Burundi relative to SSA and HPAEs | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 75–79 | | 80–84 | | 85–89 | | 90–97 | |
| | | SSA | HPAE | SSA | HPAE | SSA | HPAE | SSA | HPAE |
| Real GDP per capita growth rate | - | c | A | c | A | c | B | a | A |
| Initial income (expressed in log) | High | a | A | a | A | b | A | b | A |
| Landlocked | High | d | D | d | D | c | D | d | D |
| Cumulative terms of trade shocks | None | c | D | c | C | b | C | c | B |
| Black market premium | High | b | D | b | D | b | D | d | D |
| Initial life expectancy | High | b | A | b | A | b | A | a | A |
| Age dependency ratio | High | c | D | c | D | c | D | c | D |
| Growth in potential labour force | High | d | A | c | A | a | A | b | A |
| Trade-wt growth rate of GDP per capita, trading partners | High | b | A | b | A | b | A | b | A |
| Political Instability | High | b | A | b | B | b | D | c | D |
| Inflation | Low | c | D | b | B | c | C | d | D |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Extended Barro–Lee gov't spending (% GDP) | High | b | D | b | D | n.a. | N.A. | n.a. | N.A. |
| Ln ratio of investment to GDP (%) | | b | A | c | A | c | A | n.a. | N.A. |

Notes: * High, low and none explanatory power apply to 1%, 25% and more than 50% of error, respectively. These parameters result from OLS multivariate regression of real GDP per capita on several explanatory factors. Blanks mean that the variables are not included in the regression: they are included in Table 2 just for comparative purposes of Burundi's position relative to SSA and HPAE groups of countries; **(a):** Burundi falls below the mean of the group of countries and below the one-standard deviation margin; **(b)**: Burundi falls below the mean of the group of countries but within the one-standard deviation margin; **(c):** Burundi falls over the mean of the group of countries but within the one-standard deviation margin; **(d):** Burundi falls over the mean of the group of countries and over the one-standard deviation margin; (**n.a.):** Not available; SSA= Sub-Saharan Africa; HPAE = Highly Performing Asian Economies.

As Table 2 shows, Burundi's particularly low initial income confirms the weak initial conditions. Coupled with the high growth rate, at least relative to sub-Saharan African countries from 1975 to 1989, this suggests that up to the 1993 war, the dynamics of Burundi's economy lend some support to the conditional convergence hypothesis emphasized by O'Connell and Ndulu (2000: 11). This is so despite the structural factors discussed earlier and those highlighted in Table 2, including the geographical constraints imposed by the lack of access to the sea.

In the 1990s, the civil war reversed the gains of the previous periods. For most of the variables, Burundi was worse off relative to the groups of developing countries. Table 2 also shows that foreign exchange policy worsened during the 1990–1997 period, when most other countries' official and informal markets tended rather towards convergence (Nkurunziza, 2001). The data on some key explanatory factors such as age dependency ratio as a proxy for health conditions, black market premium as a proxy for government controls over the economy and inflation from 1990 to 1997 are consistent with a war economy. Cukierman et al. (1992) have noted that inflation increases in periods of political instability, which is the case in Burundi. The impact of growth of the ratio of people between 15 and 65 years of age (potential labour force) is more difficult to explain. Given the evolution of the position of Burundi relative to the rest of Africa, one could hypothesize that this growth was important as a demographic response to the toll caused by the 1972 civil war, which had particularly hit this segment of the population.

**Table 3: Burundi: Fits and residuals from pooled conditional model**

| Period | Fits and residuals | | | Actual and predicted growth deviation | | | | Breakdown of policy contribution by variable | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Contribution to predicted growth deviation | | | | | |
| | Actual growth | Fitted growth | Residual | Actual growth deviation from sample mean | Base variables | Political instability | Policy | Inflation (>500%) | Black market Premium (>500%) | B/L gov't spending/ GDP |
| 1970–74 | 3.80 | | | 1.60 | 0.11 | 0.00 | | 0.04 | | -0.70 |
| 1975–79 | 2.07 | 2.06 | 0.01 | -0.13 | -0.05 | 0.13 | -0.43 | -0.01 | 0.01 | -0.44 |
| 1980–84 | 0.46 | 0.29 | 0.17 | -1.74 | -0.95 | 0.20 | -0.45 | 0.03 | -0.01 | -0.47 |
| 1985–89 | 2.50 | | | 0.30 | -0.69 | 0.13 | | 0.04 | 0.01 | |
| 1990–97 | -4.18 | | | -6.37 | -1.16 | -0.13 | | 0.00 | -0.09 | |
| Total | 0.93 | 1.18 | 0.09 | -1.27 | -0.55 | 0.07 | 0.14 | 0.03 | 0.00 | -0.06 |

Source: Based on Ndulu and O'Connell (2000).

Though the lack of data on initial educational attainment does not allow comparing Burundi with other countries on the basis of fixed effects or the contribution of different variables to growth in line with Hoeffler (2000) on the basis of the augmented Solow model and sys-GMM, some key observations can be made. First, whether or not the 1960–1973 period is taken into account in view of the divergences in data already observed, it is clear that Burundi's economic performance is dependent on whether war occurred during the period under consideration. This is consistent with the typology of African economies proposed by Hugon (1993), who suggests that Burundi's economic dynamics are essentially explained by war. As Table 3 shows, the deviation in Burundi's actual economic growth from the sample mean is a function of war, implying that a model that fails to take this variable into account fails to capture a key feature of Burundi's economic growth. On the other hand, while Table 3 confirms the importance of basic economic variables (life expectancy at birth, initial conditions, age dependency ratio, growth in potential labour force participation, terms of trade shocks, trade partner growth rates and the country's landlocked status), it highlights the role of policies. Among the latter, government spending has a particularly important impact.

In summary, developments and evidence in this section have shown that observed economic growth in Burundi was not rooted within the economic structure. It was due to massive government spending owing to foreign borrowing and favourable international prices of coffee, the country's main export, but achieved little structural transformation of the economy. This was emphasized both by data on sectoral transformation and by the absence of a demographic transition captured by the unfavourable evolution of the age dependency ratio. As discussed in detail in the following sections, these failures stem from a lopsided distribution policy that has culminated in five episodes of civil war, each destroying the gains achieved during the previous periods. Thus, in the remaining part of the paper, the problem of governance will remain a central feature in explaining Burundi's economic growth. The next section analyses how the constraints imposed on market institutions by government policies prevented them from contributing positively to the process of economic growth.

## 2. MARKETS AND GROWTH

Markets play a central role in the process of economic growth. They foster specialisation and exchange at low cost. In Africa, the weaknesses of large hierarchical organisations such as firms, government agencies, banks and parastatals makes markets even more important relative to developed economies (Fafchamps, 1999). Judging from the five institutional pillars of free and efficient markets identified in Afeikhena and Olawale (1999, p.4), Burundi fares poorly. The country's currency is unstable; the legal system is not credible; the financial market is rudimentary; market integration is low as a result, among others, of poor market infrastructure; and, there is little market information on prices and quantities available to market participants. This section aims to provide insights into these effects by focusing on the functioning of product, financial and labour markets.

### 2.1 Goods Markets

Goods markets are underdeveloped. Politicians have structured economic institutions in a way that responds to their political goals without concern for efficiency. This section shows that, as the economy is meant to serve a narrow partisan political agenda, market institutions are characterized by strict government controls that stifle private initiative.

***Government Direct Involvement in Goods Markets***

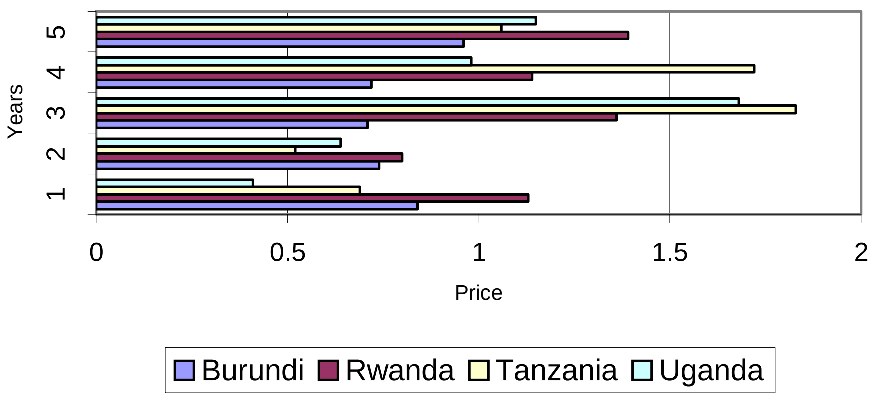
Traditionally, the government has controlled the marketing of a wide range of products through the establishment of marketing boards. Prominent among them are three that control the marketing of export cash crops: OCIBU for coffee, OTB for tea and COGERCO for cotton.[7] These three parastatals control almost 100% of total exports. The parastatals provide some extension services to producers and they are responsible for the marketing of the produce, including some processing before export. One important aspect of this policy is the government's full control of the determination of producer prices. The structure of coffee prices, for example, provides a picture of the predatory character of the government.

Although controls on coffee were relaxed in the early 1990s, producer prices are still determined by the government. During the 15 years preceding the adoption of a structural adjustment programme in 1986, coffee farmers were paid, on average, 40% of the world price, the lowest in the region. The

[7] OCIBU is Office des cultures industrielles du Burundi; OTB is Office du thé du Burundi and COGERCO is Compagnie de gérance du coton.

difference was appropriated by different agents and institutions, many of them controlled by the government or politically connected individuals. Estimates for the 1997/98 season show the following allocation of the average green coffee selling price: producers were paid 43%, intermediaries and wholesalers took 18%, export costs and charges were 23%,OCIBU kept 13%, and transport cost 2%. Restructuring the cost could allow an increase of producer prices by reducing the portion going to intermediaries and wholesalers, for example, as well as OCIBU levies and export taxes. For comparison, the ratio of farmer price to international price in Burundi is far lower than the ratio in Kenya (about 85%) and Cameroon (50%), but the same as in Tanzania (about 43%). Recent data show that while other countries in the region, namely Rwanda, Uganda and Tanzania, increased producer prices in the 1990s, Burundi's have remained relatively low. The difference in prices cannot be explained away by the cost of international transport. Rwanda, a country under similar conditions, was paying its farmers at least 50% more than Burundi until the mid 1990s.

**Figure 5: Coffee producer price in East Africa ($ per kilo): 1992(=1) to 1996(=5)**




In addition, taxes on coffee have accounted for almost all export duties; the amount represented about 14% of total government tax revenue in the mid 1990s. Since 1991, the government has imposed a coffee export tax, which was set at 9% at the beginning. This rate has been changing according to economic conditions both in the international market and at home. For example, following an international coffee price hike in 1994, the tax was increased to 31%; by 1997, it had been reduced to 15% (IMF, 1997). Taxation and inappropriate pricing policies, coupled with the effects of war, have resulted in output decline. While production had stabilized between 30,000 and 40,000 tons between the early 1980s and early 1990s, output plummeted to 11,000 tons, its lowest level since the 1960s despite favourable international prices, in the mid 1990s.

In addition to those handling export cash crops, in the mid 1970s the government established parastatals to manufacture and/or market a range of other products, including hides and skins, basic pharmaceutical products, food products such as rice, beans, sorghum, sugar, salt; and fish and fish products.. Moreover, during the same period, the government created the Office National de Commerce (ONC), a general trading company tasked with the importation and marketing of all consumer goods not produced in the country. It was involved in retail sales and served as a warehouse for retail traders. It sold a wide range of consumer goods, from cement to notebooks to needles. Since most of these products were subsidized, speculators would collude with the company's managers to create shortages and resell the products in parallel channels at higher prices.

ONC's unfair competition with the private sector affected the economy in three ways. First, its policy distorted the market price mechanism, creating shortages that forced buyers to pay higher than equilibrium prices in the parallel channels. Second, ONC's monopoly over the importation of an array of goods delayed the learning process of private importers by suppressing their link with external markets. Third, the system created a structure of incentives encouraging rent-seeking benefiting a small group involved in the management of the system. Bad management, nepotism and corruption eventually killed the parastatal by the late 1980s, as connected traders bought goods on credit and never paid.

The marketing of locally produced agricultural produce, especially staple produce such as beans and sorghum, was in the hands of a different state corporation, SOBECOV (Société Burundaise d'Entreposage et de Commercialisation des produits Vivriers). Unlike the marketing boards for coffee, tea and cotton, SOBECOV was never involved in the production process. Its role was to buy the produce from farmers, store and resell it to consumers through its branches throughout the country. Similar to export cash crops, these marketing boards did not offer prices on the basis of economic fundamentals. They acted to extract rents from farmers and distribute them to urban elites known to be politically more powerful than the millions of farmers (Bates, 1983). This biased incentive structure may have played a role in the observed steady decline in food production over the years. The production of staple crops such as maize, sorghum, millet, bananas and cassava declined or stagnated in the 1970s through the 1980s. In the 1990s, production of all these food crops declined (World Bank, 1998). Although more than one factor may have contributed to this trend it should be noted that the introduction of marketing boards in the second half of the 1970s coincided with a decline in per capita food production. From 117–120 between 1970 and 1975, the food production index dropped to 105 in 1980 and to 82 in 1997. The dramatic decline in the 1990s was no doubt precipitated by civil war (Nkurunziza, 2002B). Obviously, in a poor country dominated by a labour-intensive agricultural sector, a reduction in the availability of food has hampered the growth process.

***Government Indirect Intervention***

Excessive taxation and exchange rate controls are two examples of government involvement that has distorted the functioning of the market mechanism. The system of taxation in Burundi lacks all three characteristics of an efficient tax system: certainty, simplicity and transparency. Lack of certainty is illustrated by the ad hoc use of quantitative import restrictions. As government controls imports by subjecting them to the issuance of an import licence, it uses its discretion to determine who imports and what amount of imports should enter the country. Anecdotal evidence purports that licences are sometimes denied to non-connected businesses even when they do not require foreign currency from the central bank to pay for their imports. Lack of certainty is also illustrated by the changing of import or export tax rates from one year to the next, as discussed in the case of coffee export taxes.

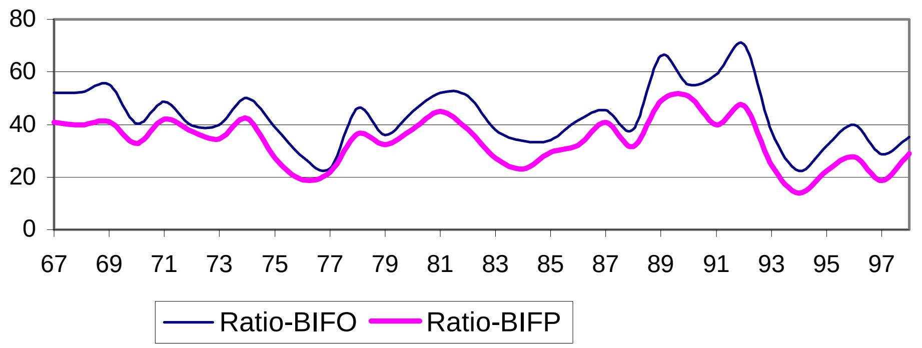
Complexity of the tax system is shown by the variety of taxes forming the system of border taxation: these are entry taxes and fiscal taxes, with considerable variations between and within these two broad categories. For example, within the category of fiscal taxes, section XVI relating to machinery has 15 different rates. Lack of transparency of the system is illustrated by the fact that there are many non-tariff forms of protection, among which are quotas. The tax system in Burundi provides leeway for abuses that increase the potential for corruption. In 1993, for example, import duty exemptions represented 50% of potential import duty revenue. The undefined category of “other exemptions” represented 3.3 billion Burundi francs in 1996, accounting for as much as 42% of total exemptions. Most officials controlling these decisions do not hesitate to monetize them. It is known in Burundi that customs and Inland Revenue officials are the richest civil servants, although their official wages are not different from those of other civil servants.[8]

The extent of exchange rate distortions is usually proxied by the exchange rate premium. It is defined as the relative difference between the official and the parallel rates of exchange. Burundi’s premium stood at an average of 21.2% for the period 1970–1989, with a maximum of 51% in February 1985 (Nkurunziza, 1997). For comparison, the average premium for the same period was 437% in Ghana, 199.93 in Algeria, 150.65 in Tanzania, 99.54 in Sudan, 96.77 in Egypt, 95.14 in Zaire, 93.9 in Nigeria, 92.66 in Zambia, 83.36 in Ethiopia and 52.47 in Malawi (Ghei and Kiguel, 1992). However, the main difference with these countries is that the latter managed, during the 1990s, to unify their foreign exchange markets, while Burundi’s has been surging. Between 1990 and 2000,

[8] The public always wonders how a civil servant with a monthly wage of $40 can afford real estate worth 1,000 to 5,000 times his monthly wage, which cannot even cover the monthly cost of petrol for his fleet of cars. More amazing is the fact that the country’s leadership does not seem to be disturbed by such facts. These indirect benefits provide the most dominant form of rent extraction. Only the well connected customs officers and tax collectors are posted in the “best” places where revenues are highest.

the average level of the premium more than doubled, reaching 45% with a maximum of 101% in September 1999. Because of this increase, Burundi moved from the group of moderate to that of high premium economies between the two periods. The consequence of a high premium for farmers is that it reduces their real purchasing power. If the ratio of coffee producer price is evaluated at the parallel exchange rate, it falls from 40 to 34% of the world price for the period 1967–1998. Figure 6 compares the shares in the world price when the prices are evaluated at both the official (BIFO) and the parallel market (BIFP) rates.

Figure 6: Ratio of producer price to world price of coffee (1967-98)




## 2.2 Financial Markets

The country's financial market also reflects Burundian political environment. It has a limited coverage and effectiveness in fostering growth. Burundi's low financial deepening is characteristic of a weak financial system.

***Infrastructure and Coverage***

For most of the post-independence period, the sector has been dominated by just two commercial banks owned partly by the state and partly by Belgian banks; a government savings bank; a government development bank; and a few non-banking financial institutions. With financial liberalization in the late 1980s and 1990s, Burundi's financial sector has become relatively diversified.Given that the country has no stock exchange and no dynamic informal financial market, however, most of the financial transactions are carried out only through banks and other non-banking financial institutions. Currently, the country has eight mainly private commercial banks, one development bank, two leasing companies, two investment banks, one mortgage bank, a rural development fund, and a rural credit and savings cooperative. There are also two government specialized funds that were established to help private investors raise the required guarantees to access lending. The post office network also provides financial services. In addition, the country has five insurance companies, of which four are privately owned.

In terms of the density of the banking network, most of the institutions are still concentrated in Bujumbura except for the two oldest banks, the Banque de Crédit de Bujumbura (BCB) and the Banque Commerciale du Burundi (BANCOBU), which have a wider coverage, with branches in half the country's provinces. However, these branches have no penetration beyond provincial capitals. Rural credit and savings have been catered for by COOPEC (Coopérative d'Epargne et de Crédit) starting from the second half of the 1980s.Their reach is also limited. For example, EP1998 data show that on average, rural households need to walk for two hours to half a day to reach the nearest COOPEC office, yet these are the closest financial structures available in rural areas. Some areas are so badly covered that an important proportion of the households in the sample need more than half a day to walk to the nearest facility and about 13% of the households do not have access to the services of COOPEC at all. Coverage is unequal across the country's provinces but we do not have information to determine whether this inequality is based on economic or political factors.

**Table 4: Average time needed to walk to the nearest COOPEC facility**

| Time required | Provinces |
|---|---|
| 1–2 hours | Bururi, Gitega, Kayanza, Muramvya, Muyinga, Ngozi |
| 2 hours–half a day | Cankuzo, Kirundo, Rutana, Ruyigi |
| More than half a day | Cibitoke |
| No access to COOPEC | Bubanza, Bujumbura Rural, Karuzi, |

The time reported is the mode of the responses given by 3,908 households interviewed. Bujumbura city is not included since COOPEC was specifically designed for rural areas. The last row (no access to COOPEC) simply means that the modes of distributions fall in this category. In Bubanza and Karuzi, respectively, 50% and 34% of households interviewed have no access to this facility. For Bujumbura rural, lack of access to COOPEC facilities may be because households are supposed to use the financial institutions in Bujumbura city.

Source: Computed by the authors on the basis on EP1998.

***Efficiency***

Despite the increasing diversity of the financial infrastructure, the country is still characterized by weak financial deepening. The thinness of the financial sector is illustrated by the low ratio of money demand over GDP. The average ratio of M2 to GDP is only 15% for the period 1965–1998, which is 7 percentage points lower than the African average and less than half that of other LDCs. In the same connection, the level of M2/M1, which stands at 1.35, is almost half Africa's as well as LDC means. These simple statistics show that the economy is less monetized even relative to other poor economies, suggesting both a lack of openness and a high level of financial repression. Until the early 1990s, there were numerous repression policies (Nkurunziza, 1997). Only the central bank could authorize capital transfers abroad and commercial banks could not purchase or sell foreign assets. Residents were prohibited from holding foreign currency accounts either in the country or abroad. Imports and exports were controlled through a strict licensing system, while the rate of exchange of the Burundi franc was determined by government. The central bank imposed exchange fees, administration fees for imports of some products, etc., and lending and borrowing interest rates were fixed at levels that did not reflect market conditions. There were high reserve requirements – of the order of 10% and 5% for short- and long-term deposits, respectively, and restrictions on market entry that resulted in the dominance of only two commercial banks for most of the country's post-independence period. Although some of these measures have been removed, particularly the restrictions on market entry, most remain in place and the financial sector is still repressed.

Large spreads between lending and borrowing rates are usually a symptom of an inefficient and oligopolistic financial sector. In Burundi, lending and borrowing rates were fixed by the government for most of the sample period. On average, the interest rate spread was 8.7% for the period 1975 to 1998, for average lending and deposit rates of 12.5 and 3.8, respectively. The average spread to lending rate was 0.70, a value that is higher than in most African countries including Kenya (0.4), Ghana (0.5), Malawi (0.6), Nigeria (0.65) and Tanzania (0.70).[9] The lending rate is 2.5 points lower than the mean for Africa, or 83% of the latter, while the deposit rate is 4.5percentage points lower, or only 46% of the African average. These spreads translate the objective of a government interested in collecting resources from its economic agents in order to re-distribute them to private sector agents associated with the political elite. From a different perspective, the negative real interest rates characteristic of the period were a way of extracting rents from depositors, most of whom were not able to borrow from the same market. Between 1970 and 1998, the average real interest rate was -6.19% per annum. Money demand has become unstable for the same reasons. Furthermore, the particularly low ratio of M2/M0 is characteristic of a subsistence economy, owing to high taxation especially in the agriculture sector. The impact of this policy has been an underdeveloped financial sector.

It should also be recognized that the spreads were largest in the 1990s. This was in response to high market uncertainty during this period of civil war. War and the ensuing high level of uncertainty have induced financial institutions to ration credit and to privilege short-term lending to the private

[9] These comparative data are from Nkurunziza (2002a).

sector. Long-term and medium-term lending, which represented 16% each of total credit to the economy in 1992 just before the crisis, declined to 11% each in 1998. During the same period, short-term lending, especially in the form of working capital, increased from 62 to 78% (IMF, 1997; 1999) because of high inflation and the decline in firms' self-financing capacity. Credit to the government from the banking sector expanded tremendously as a result of the need for additional resources to fund the war and compensate for the drop in fiscal revenue and in international aid. The ratio of credit to government over credit to the economy jumped from 5% in 1992 to 29% in 1998, suggesting serious crowding out of resources from productive to unproductive uses.

Moreover, allocation of credit appears inefficient, as it does not reflect sectoral contribution to the economy. In 1995, credit to agriculture represented only 1.7% of total credit, in comparison with 35% for trade, 14% for civil engineering and other services, and 10.5% for industrial activities. This was in spite of the fact that during the same year, the primary sector contributed about 50% to GDP against a lower contribution of 6%, 3% and 9% for trade, other services and manufacturing, respectively. These figures translate a lack of integration of the financial sector into the economy. It is interesting to note that the high proportion of credit to the trading sector is in line with the rent-sharing model: since trade itself is controlled by the government through, among others, the issuance of import licences, the financing of trade activities implies that banks are either part of the game or they are more interested in speculative activities, or both. Either way, absent a more integrated financial sector into the economy, the financial sector fails to contribute optimally to the process of economic growth.

### 2.3 The Labour Markets

Similar to product and financial markets, the labour market in Burundi does not function as a competitive market. This subsection aims to briefly discuss the main features of the labour market, to highlight the determinants of wages in the modern private sector and to draw the implications for growth.

***The Main Features***

Burundi's economy is essentially agriculture based. Out of 3 million active people, 84% work in the agriculture and livestock sector, with only 4.6% active in the modern public and private sector. The informal labour market in rural areas is limited. Only 24% of households employ paid labour, often without a clear wage contract. Even in the modern sector, given the way recruitments are carried out in both public and private institutions, it is not clear that there is a proper labour market in Burundi. Despite the fact that there are legal texts that should govern the functioning of the labour market, very few in Burundi abide by these rules. The matching of demand and supply is done more informally than through the allocative function of an open and competitive market.

Information on Burundi's manufacturing sector illustrates the informality of the labour market. The World Bank administered a survey of 120 manufacturing firms in 1993 through its Regional Programme on Enterprise Development (RPED).[10] Information was collected on firm history, entrepreneurship, investment, credit, labour, production, infrastructure, etc. In this framework, about 500 workers were interviewed and responded to a range of questions regarding their recruitment, their education, their working conditions, etc. The results show that recruitments are normally done through informal channels that privilege direct relations between prospective employees and firm owners as well as their workers. The data show that firms recruited only about 20% of employees through formal channels, namely job advertisement and recruitment agencies. About 75% of workers were recruited as follows: 26% through owners' family members and friends; 20% through door-to-door searches; 15% through workers' family members and friends; and 14% through word-of-mouth. The remaining 5% were recruited through other channels. Therefore, instead of promoting efficiency through a transparent and competitive recruitment process, these practices privilege non-economic factors such as friendship and kin group connections. As in the public sector, securing a job in the private sector depends not only on what you know but also whom you know.

Thus, allocation of skills among sectors is not determined by relative wages. There are no transparent information systems that guarantee an optimal allocation of labour. Moreover, in a context

[10] Private firms account for 92.5% of the sample.

where employment is dominated by the public sector with its fixed wages, the concept of market equilibrium can be misleading. Given that economic opportunities are limited and public employment is a major source of accumulation through indirect benefits such as subsidized credit and housing, free or subsidized transportation, frequent international travels, and other rents extracted through corruption and patronage, the conditions in the labour market reflect largely political rather than economic fundamentals. These choices have important economic and social consequences. For example, large parts of the population are excluded from participation in public employment by direct ethnic and regional selection, or indirectly by discriminatory access to education as the last section discusses in details.

Education is very expensive – unaffordable by most households. Household data show that one child in secondary school costs a poor household 12% of its poverty line per year or the equivalent of the household expenditure on health care, agriculture inputs, housing, clothing and transport. Therefore, there is a high cost barrier to education of children from poor households. As a result, child labour is relatively high in regions with few state sponsored schools. EP1998 data show that 30.6% of children between 7 and 14 years of age were active. This rate is lowest in the regions where school infrastructure is highest, with the lowest rate in Bujumbura at just 1.7%. Therefore, more factors than economic fundamentals alone must be taken into account to explain the labour market in Burundi.

***The Determinants of Wages in the Modern Private Sector***

Although recruitments do not appear to be based on economic considerations, wages seem to be determined by economic factors. However, this does not mean that economic factors alone explain compensation packages. In addition to wages, private sector employment entitles workers to a number of additional benefits. For example, 55% of workers in the sample can borrow from their firms, interest free. Moreover, most workers receive allowances for housing, transportation, food, health care, etc. These fringe benefits are sometimes substantial. Table 5 presents results of an earnings regression that uses worker-level information as well as the characteristics of the firms they work for. Given that worker-level information on non-wage benefits is not available, the following results may be biased, as such allowances could be more important in determining the relationship between employees and their firm or employer. For example, it is known that most firms prefer to give low wages but high allowances to help their workers evade taxation. Allowances are also usually determined by firm management and can vary across workers within the same category and at the same level of competence, whereas an external authority, usually the government, usually determines the level of basic wages. Nevertheless, we estimate a wage equation to get a general idea of its main determinants.

**Table 5: Earnings function for workers in Burundi's manufacturing sector**

Dependent variable is log of monthly wage in Burundi francs

| **Variables** | **Model 1** | | **Model 2** | | **Model 3** | |
|---|---|---|---|---|---|---|
| | Coefficient | t-test | Coefficient | t-test | Coefficient | t-test |
| Constant | 4.833 | 12.71*** | 7.241 | 45.63*** | 5.061 | 11.66*** |
| Age | 0.761 | 6.99*** | … | … | 0.694 | 5.36*** |
| School | 0.841 | 16.59*** | 0.821 | 15.01*** | 0.823 | 15.58*** |
| Tenure | … | … | 0.164 | 4.06*** | 0.055 | 1.23 |
| Size | 0.114 | 3.96*** | 0.142 | 4.73*** | 0.109 | 3.72*** |
| Firmage | -0.082 | -2.59*** | -0.151 | -3.91*** | -0.111 | -2.92*** |
| Formal | 0.147 | 1.49 | 0.241 | 2.27** | 0.178 | 1.72* |
| Bujumbura | 0.151 | 1.91* | 0.168 | 1.99** | 0.167 | 2.06** |
| Metal | 0.236 | 2.49** | 0.198 | 1.92* | 0.218 | 2.18** |
| Textiles | 0.125 | 1.31 | 0.098 | 0.96 | 0.101 | 1.02 |
| Food | 0.153 | 1.74* | 0.132 | 1.41 | 0.143 | 1.57 |
| Foreigner | 0.000 | 0.70 | 0.000 | 0.67 | 0.001 | 1.08 |
| Public | 0.003 | 2.91*** | 0.003 | 2.73*** | 0.003 | 2.98*** |
| Recruit | 0.014 | 0.18 | -0.034 | -0.43 | 0.025 | 0.33 |
| Adjusted R-sq. | 0.561 | | 0.547 | | 0.577 | |
| Number of observations | 426 | | 400 | | 399 | |

| | | | |
|---|---|---|---|
| Cook–Weisberg heter. test | $Chi^2$ (1) = 8.87 | $Chi^2$ (1) = 3.86 | $Chi^2$ (1) = 8.87 |
| Ramsey O.V. test | F (3, 410) = 16.76 | F (3, 384) = 8.59 | F (3,382) = 13.90 |

***, **, * show significance at 1, 5 and 10% probability level, respectively. The variables are the log of wage (dependent variable) and, following the order in the table: log age of the worker (Age), log of the number of years of schooling (School), log of the number of years the worker has worked for the current firm (Tenure), log of firm size, proxied by the number of permanent employees (Size), log of the age of the firm (Firmage) and a number of dummies: a formal/informal sector dummy with value 1 when the sector is formal and zero otherwise; a location dummy with value 1 for firms located in Bujumbura and zero otherwise; three sectoral dummies: metal, textiles and food if the firm is in these sectors (wood work is the omitted category of firms), and two ownership dummies (Foreigner and Public) which represent the majority ownership of the firm (Burundi private ownership is the omitted category). We have also added a dummy variable (Recruit) to test whether the way workers are recruited has a significant impact on their wage. It takes value 1 if the worker was recruited through job advertisement or through a recruitment agency and zero otherwise.

The coefficients should be interpreted with caution: they appear to be much higher than results on other African countries. One problem with the data is that the dependent variable is wages, which does not include many other benefits as already remarked. A second factor is that the sample is dominated by bigger firms in the formal sector in the capital city, Bujumbura, where workers are more educated and earn relatively higher wages. Despite these limitations, the main message of the findings is that workers' wages are driven by the same factors that drive wages elsewhere. The main factors are workers' education, age or tenure,[11] and the size and the age of the firm. Different dummies are also included to control for firm characteristics. For example, firms in Bujumbura appear to offer better wages than those in the interior, and formal firms offer higher wages than informal firms, even after controlling for firm size. One interesting finding is the fact that workers hired through informal and formal channels do not seem to earn different wages. The reason may be that once workers are recruited, their wage is determined on the basis of government labour laws. However, differences may be noticeable once allowances are taken into account, especially those at the discretion of the employer.

These results have some implications for economic growth. Notwithstanding our caution regarding the interpretation of the coefficients, we can note that, first, the results confirm the argument of a dual economy: rural versus urban and formal versus informal. Since Burundi is essentially rural, policies that marginalize the rural economy can only have a detrimental impact on growth. Second, given that schooling is the most important variable explaining the level of wages and that the latter is an important source of monetary income in a context of limited formal employment opportunities, unequal access to education has a strong effect on social inequality. Third, the fact that workers recruited through informal channels do not seem to earn more than those recruited through more formal channels should not mislead. Although workers in both categories may earn the same wages, the fact is that those recruited informally occupy positions that could have been taken by others, who might remain unemployed or opt for lower paid jobs. In addition, the fact that employees recruited informally tend to pledge their loyalty to the individuals who recruited them rather than to the firms that employ them creates an incentive problem that may penalize their firm's performance. In the end, individuals may benefit from informality but on the whole, the economy at large loses.

## 3. FIRMS, HOUSEHOLDS AND GROWTH

The microeconomic constraints that firms and households face in Burundi largely follow from the discussions in the previous sections. The contribution of the manufacturing sector in the process of the country's economic growth depends in a large measure on the determinants of firm growth and how the environment in Burundi facilitates or hampers this process. On the other hand, as households in

[11] Models 1 and 2 show the substitutability of age and tenure variables, suggesting that age usually captures the worker's experience or tenure. The influence of tenure disappears once both variables are included in the same model (model 3).

developing economies are also production units, the same analysis will be carried out at household level.

### 3.1 Opportunities and Constraints to Firm Performance

After a brief presentation of the determinants of firm growth in Burundi, this subsection discusses three interrelated constraints facing firm development in Burundi. These are the small size of the domestic market and the difficulty of accessing external markets, the legal framework supporting firm activity, and the risks associated with Burundi's geographic and political environment. Owing to the lack of statistical data it is not possible to present a discussion by subperiods. The limited microeconomic information available covers only the last of the three subperiods of the study. Therefore, the following discussion is issue rather than time based.

#### *Determinants of Firm Growth*

Firm growth is assessed on the basis of regression results derived from the 1993 RPED microeconomic data. Among the main factors explaining firm growth in Burundi are the firm's age, its size, its location and whether it is formal or informal.[12] The elasticity of firm size with respect to age is -1.39, consistent with the models of learning. Size and growth have a negative and significant relationship, with an elasticity of 0.04. This goes against Gibrat's law, which stipulates that firms grow following a random drawing from a distribution of growth rates. In Burundi, it appears that smaller firms grow faster than larger ones. Formal firms also appear to be able to grow faster than informal ones. The formal status of firms increases their annual growth rate by 0.31, implying that visibility and legitimization help in an environment where firms compete over the distribution of scarce resources.

Firms located in Bujumbura grow faster than others. This is because resources and markets are unequally distributed, with a high concentration in the capital city, Bujumbura. Firms in Bujumbura enjoy the best infrastructure, larger output markets, and cheaper and higher quality inputs. Being located in Bujumbura increases the expected growth rate by 0.13. The main result from these findings is that firm growth is a learning process that is spread over time. In this light, the environment within which firms evolve is a crucial determinant of the quality and the extent of the growth process. Hence, institutional factors play a crucial role in determining firm performance and hence economic growth. A major factor constraining the growth of the manufacturing sector is the fact that almost all manufacturing infrastructure is located in Bujumbura, despite the fact that most economic activity is agriculture-based and rural.

#### *Size of Burundi Markets*

Burundi's domestic market is very small. With 6 million people who are among the poorest in the world, Burundi is one of the smallest economies in Africa. What about the country's external markets? Under colonial rule, Burundi's manufacturing sector was designed to serve Burundi, Rwanda and the Kivu region in Eastern Congo. The provision of European imported goods became difficult during the Second World War, so Belgium decided to establish import substitution manufacturing firms in Bujumbura, the administrative and economic capital of Rwanda and Burundi. Emphasis was put on the processing of agricultural products within the region. In this regard, firms established during the time were tailored to meet the demand of this relatively large market. When Congo and Rwanda became independent in the early 1960s, Burundi lost half of its Eastern Congolese export market and some of its Rwandan market leaving Burundi's manufacturing sector with excess capacity. By 1962/63, capacity utilization in the manufacturing sector had been reduced to 25–50% (Ngaruko, 1993).

The oldest firm in Burundi's 1993 RPED sample was created in 1947 and 13 firms or 11% of the sample were established before 1960. In support of the idea that pre-1960 firms were established to serve a larger market, firms created before 1960 have an average production capacity of 240 kilowatts

[12] Empirical results in this paragraph are based on Sleuwaegen and Goedhuys (1998).

per firm relative to 98.5 kilowatts for firms created after 1960.[13] Therefore, market size has been a determinant of firm size, other things being equal. However, although they maintained their pre-1960 size (no growth), it also appears that these firms are still among the biggest in Burundi, suggesting that the collapse of the economic union had a limited impact on them. In fact, by 1993, these firms were, on average, more active than the group of firms created after 1960. Their average capacity utilization was 87% in comparison to 66% for the post-1960 firms. In addition, 33% of firms in the first group were exporting, relative to 13% in the second group.

We conjecture that this difference in performance may be the result of two different managerial cultures. Pre-1960s firms were created and run by Belgians. After independence, these firms were either run by their owners who decided to stay or taken over by Burundian managers who had worked under the original owners. On the other hand, post-1960 firms were mostly created by the government or by former politicians who converted into business to put to use their valuable political networks but without managerial experience or expertise.[14]

These figures suggest that it will be difficult for Burundi to develop its manufacturing sector if it relies on its insignificant national market. Given that the country is landlocked, transportation costs increase production costs, depending on the level of imported inputs used in the production process. This constraint limits firm competitiveness in international markets. One opportunity for the country to increase its exports could be to devise a strategy targeting regional markets. Since Burundi is signatory to a number of regional trading blocs, firms should strive to take advantage of the preferential provisions offered by such bodies to increase their businesses across the region.[15] Recent experience with governance failure in the region does not bode well for a quick achievement of this objective, however. Mistrust among the leaders, their nationalist short-sightedness and egoistic interests have undermined attempts to establish regional markets. Paradoxically, political crises have sometimes allowed bypass political barriers and succeed where political voluntarism had failed. For example, during the refugee crisis in Eastern Congo in 1994–1996, some factories in Burundi were operating at full capacity 24 hours a day to meet the increased demand for products such as blankets and other basic commodities by NGOs operating in the refugee camps.

***Regulatory Framework Supporting Firm Activity***

As a consequence of the policies pursued by different governments, an inappropriate regulatory framework has hampered firm efficiency, affecting the process of growth. This is illustrated by a weak legal system that fails to enforce commercial contracts and property rights, and high risk that increases uncertainty.

Burundi does not offer a properly functioning legal system that can credibly enforce commercial contracts. Although a lack of data on this subject does not allow any strong statements, discussions held with commercial bank officials in Burundi point out the weakness of the legal system. For example, it appears that when a defaulting borrower is taken to court, cases can take up to ten years to be settled. It was reported that judges tend to sympathize with the plight of defaulting borrowers at the expense of “those silly bankers”.[16] This increases the cost of lending, which partly explains the large interest rate spreads observed in Burundi. Given the high cost and unreliability of the legal system, 86% of firms interviewed in 1993 preferred to settle their conflicts with clients through direct negotiations while only 15% of the conflicts were taken to courts.

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[13] It has not been possible to compute firm size in terms of the number of workers or the amount of start-up capital because these data were systematically missing for firms established before 1960.

[14] Ngaruko and Nkurunziza (2000) note that a number of post-independence economic operators who temporarily and rapidly prospered were not necessarily the best “businessmen” but rather a group of former politicians or high ranking bureaucrats who used their connections in the country’s political and bureaucratic structure to make a fortune. This is illustrated by the fact that a change in government in Burundi is always accompanied by change in the configuration of the business sector: new faces in politics bring new faces in business.

[15] Attempts to create regional institutions include the Communauté Economique des Pays des Grands Lacs (CEPGL), Communauté Economique des Pays d’Afrique Centrale (CEAC), and the Common Market for Eastern and Southern African States (COMESA). Of the three institutions, only the last one functions at some level of normalcy.

[16] Personal discussions with Burundi bank managers.

This pattern is not particular to Burundi. In Kenya commercial disputes take between four and ten years to be resolved (Adeola and Olugboyega, 1999: 46). In a study covering Burundi, Cameroon, Côte d'Ivoire, Kenya, Zambia and Zimbabwe, Bigsten et al. (2000) found that 80% of firms settle their disputes through direct negotiations. A similar result was found in the case of Madagascar (Fafchamps and Minten, 1999). The cost associated with the resolution of conflicts arising from business disputes is one of the factors that limit market transactions in these economies. As a result, the lack of strong legal institutions discourages risk taking without which economic activity cannot thrive. It particularly limits intertemporal trade, especially credit. For example, RPED data show that in 1993, only 56% of firms had ever applied for a loan and 44% had ever been successful.

In addition to legal institutions, firms also need government business support services. If well administered, these services can be used to foster the development of the manufacturing sector. As already discussed in the case of import licences, government discretionary measures have often not been used in a transparent way and have tended to favour some firms. For example, there are tax and duty exemptions provided for in the Investment Code. By 1993, 31% of firms in the RPED sample had applied for the benefits. Successful firms represented 60% of the applicants, or 19% of the total sample. What is striking is that as for credit, smaller firms not only applied less, but they were also less successful than bigger ones when they applied. This suggests a different treatment of small relative to big firms, even by government institutions. The importance of returns to size when dealing with government institutions is also highlighted by Gauthier and Gersovitz (1997). They show that in Cameroon, large firms are more able to save through tax evasion than smaller firms because they are powerful enough to lobby tax administrators.

**Risk and Uncertainty**

Economic risk is particularly high in Burundi. It is narrowly associated with the small size of the private manufacturing sector, economic policy, geographical location and political instability due to recurring wars. Risk due to economic policy is illustrated by instability in the exchange rate. Between January 1985 and December 2000, the national currency lost 540% of its value relative to the American dollar when converted at the official exchange rate. At the parallel market exchange rate, the loss amounted to 445%.[17] Exchange rate volatility increases uncertainty about future prices and costs, limiting firms' involvement in medium- and long-term activities. Firms refrain from investing and when they invest, they require high discount rates. The problem is even more pronounced when exchange rates are controlled by government. Because devaluations increase the cost of imports and since they are unpredictable by essence, firms face unexpected additional costs that may affect their capacity to honour commitments towards banks and suppliers. In Burundi, just between 1990 and 1993, successive devaluations resulted in a 60% loss in the currency's value. This cost was further exacerbated by the decision by the government to levy taxes over imported commodities prior to their sale, aggravating firms' cash flow problems. As a result, 53% of firms failed to pay their loans in time, while 40% failed to pay at all.

Burundi also faces risk associated with its geographical location. Landlocked, the country is fully dependent on its neighbours' wrecked roads, ports and railroads for the conduct of its international trade. As a result, firms in Burundi have to invest in large stocks of raw materials to minimize the cost of supply interruptions. By tying otherwise productive resources into large stocks, firms incur substantive opportunity costs. RPED data show that on average, firms held inventories of raw material worth 39% of the value of their yearly production or the equivalent of 87% of their raw material needs for a year.[18] Considering only firms that imported inputs in any proportion, the percentages jump to 61 and 122, respectively.[19] Therefore, Burundi's geography and the poor infrastructure in neighbouring

[17] Detailed analysis of the parallel market for foreign currency in Burundi and the determinants of the premium may be found in Nkurunziza (2001).

[18] Although this figure might appear too high, it is consistent with the fact that under circumstances prevailing in the early 1990s, it took 1.5 to 6 months to ship cargo just from Dar –es Salaam to Bujumbura (Nkurunziza, 1997: 29).

[19] These high values are explained by the fact that out of 27 firms that imported raw materials, 22% kept inventories that were far more in excess of 100% of their annual raw material costs.

countries impose additional constraints to the country’s manufacturing sector and its economic performance.

Although the impact of war-related risk on the manufacturing sector has never been investigated, some statistics suggest a negative correlation between manufacturing production and violent conflict. For example, after the death of more than 200,000 people in 1972, manufacturing production recorded a negative growth rate of -2.3%. Moreover, after the 1988 Ntega and Marangara political crisis in the second half of the year, data on manufacturing production show a decline of 2% in 1989. The most dramatic decline in manufacturing has been recorded in the 1990s. On average, manufacturing production has declined by 13% per annum between 1993 and 1997 (World Bank, 2000). In 1994, one year into the current political crisis, a sample of 84 firms surveyed showed that 45% had kept their pre-crisis size or had reduced it by less than 10%; 15% shrank by 10 to 25%, whereas 21 declined by more than 25% (MPDR, 2001). Increase in short-term lending relative to medium- and long-term is also characteristic of high uncertainty.

Rather than war itself, its recurrence and its long-term impact increase uncertainty about the future. Even a one-time war has a strong persistence effect, let alone a recurring war. War recurrence increases beliefs that it will recur again (Collier and Hoeffler, 2001), eroding the credibility of government announcements about its capacity to sustain long-term peace. This lack of credibility is one of the most important deterrents of investment in countries at war or recovering from it (Collier and Pattillo, 2000). It is also evident that wars have negative long-term implications. War economies are by essence short-term oriented. Even when war ends, postwar economies inherit destroyed infrastructure, all kinds of disruptions including social disorder, a pattern of resource allocation penalizing productive sectors by diverting resources to war financing, dis-saving, portfolio substitution in favour of foreign assets, degradation in moral standards, activity choices skewed towards the short term, etc. Most of these problems have a strong persistence effect (Collier, 1999).

In view of these factors, it is not surprising that Burundi witnessed disinvestment rather than investment in the 1990s. The rate of gross investment declined from 17.5% in 1990 to a mere 5.6% in 1998 (Burundi, MPDR, 2001). It is interesting to note how investors were caught by surprise in 1993 when the current war, now in its ninth year, started. About 30% of the firms interviewed in the first half of 1993 had made additional investment in plant and equipment in 1992–1993. War erupted six months after the survey was carried out. This rate of firms investing is equal to the one in Kenya in the same period. The fact that a “normal” number of firms invested just a few months before a war of unprecedented proportion broke out suggests that firm managers failed to anticipate the crisis. It would be interesting to study to what extent the long period of war has affected investors’ beliefs about Burundi’s economy.

### 3.2 Households and Economic Growth

While the previous sections have provided a review of the constraints facing manufacturing firms and the economy in general, the aim of this subsection is the analysis of the environment constraining households, the latter’s responses and their preferences over policies. Since households act also as firms, their activity has a direct impact on growth. In this light, constraints to household production are also constraints to economic growth.

#### *Environment Facing Households*

As agriculture dominates household activity and income, welfare is affected by exogenous factors such as weather, but also by government policy that shapes the structure of incentives within the economy. Burundi is endowed with generous weather that allows three production seasons in a year: twice in the highlands during the rainy season (October to May) and once in the marshlands during the dry season (June to September). As a result, although land pressure has been increasing owing to population growth, soil fertility and good weather have, in general, limited food shortages. Soil conservation has been based on traditional but efficient production technology associating farming with cattle breeding. Consequently, until the 1980s, in peacetime, Burundi farmers were able to produce enough food to feed the population, unlike many countries in Africa traditionally dependent on food aid.

However, the lack of appropriate incentives and of a support environment, in addition to government policies skewed against the rural sector, has hampered the development of a rural economy, failing to capitalize on the country's agricultural potential. A few statistics illustrate the negligence of the agriculture sector. The rate of fertilizer use in Burundi is among the lowest in Africa, at a mere 3.7 kg/ha compared with an average 14.9 kg/ha for sub-Saharan Africa. Moreover, weaker linkage from industry to agriculture relative to stronger linkage from agriculture to industry is an illustration of the persistence of a discriminatory policy against the agriculture sector. In Burundi, the agriculture sector provides 11% of its production to industry but the rate from industry to agriculture is only 0.4% (Ngaruko and Nkurunziza, 2000). These figures are symptomatic of predatory policies pursued by the different governments in Burundi.

The lack of a basic market infrastructure in rural Burundi has been a major cause of market failure and probably the single most important factor that has affected production in rural areas. As de Janvry et al. (1991: 1401) remark, "a market fails when the cost of a transaction through market exchange creates disutility greater than the utility gain that it produces, with the result that the market is not used for the transaction". The low density of market networks in rural Burundi, in addition to distortions introduced by the government in the marketing of agricultural products, has resulted in market failures and a retreat of peasants into subsistence production. According to the EP1998, farmers in rural areas need to walk an average of one hour to get to the nearest marketplace, while it takes them 30 minutes to reach the nearest grocery. Twenty percent of households in the sample require more than an hour to walk to the nearest marketplace and 12% to the nearest grocery. Adding the fact that there is only one market day per week in many rural areas, and that there are no storage facilities, especially for perishable agriculture produce, farmers have no incentive to produce marketable surpluses, a process that locks them into a subsistence economy.

While more access to communication infrastructure could help integrate markets in different parts of the country, infrastructure is either inexistent or poor, especially during periods of insecurity. For example, with three mainlines per 1,000 persons, Burundi has not only the lowest telephone density in Africa but the few lines are also concentrated in urban areas. A wider network of telecommunication across the country could help integrate markets by allowing information exchange on prices, supply and demand in different parts of the country. Electricity is concentrated in cities and all households in rural areas and most of them in the cities depend on fuel wood to meet their energy needs. This dependency on wood as the unique source of energy is not only inefficient but it also has far reaching environmental consequences. During the current war, the electricity infrastructure, a symbol of urban privileges, has been a target of rebel sabotage. Security is precarious in many places, and roads have not been maintained because of insecurity and shortage of resources. Infrastructure problems are not limited to war-torn Burundi, however. Even relatively peaceful countries like Nigeria, Kenya and Uganda report that infrastructure is a major factor hindering economic activity, especially manufacturing (Collier and Gunning, 1999; Reinikka and Svensson, 1999). Many of the constraints affecting firms also affect households. Government predatory policies, the lack of financial and insurance markets and, additionally, high taxation through seignorage, which tends to be particularly high during periods of political instability (Cukierman et al., 1992), constrain heavily household activities.

To these difficulties have been added the burdens of civil wars. The direct impact of the first four wars (1965, 1972, 1988 and 1991) on the economy was relatively limited owing to their short duration. It is the last episode that broke out in 1993 that has had an unprecedented impact. It has been the longest, the deadliest and the most destructive in economic terms.[20] Not only has it disrupted production, it has also wiped out an important part of human and physical capital. Many Burundi professionals have either been killed or left the country. As discussed in the first section, 31% of livestock have been wiped out. Physical and social infrastructure has been extensively damaged or completely destroyed. As a result, war has had a devastating impact on economic performance.

GDP has declined since the early 1990s, recording four consecutive years of negative growth between 1993 and 1996. Generally, all macroeconomic indicators have worsened as a result of war. At household level, there has been a dramatic increase in poverty. In 1993, just before the war, 40%

[20] See Nkurunziza and Ngaruko (2002b) for details on war duration and why the last episode has been different from the previous four.

of the population lived below the monetary poverty line; by 1998, this proportion had increased to 60%, a rise of 50% in just five years. Other indicators such as infant mortality and life expectancy have dramatically worsened.

Although these figures are informative, they cannot translate the level of rural populations' agony, and the long-term impact of war on the populations. For example, as a result of the crisis, 22.5% of household heads countrywide have become widowed. Seventy-seven% of household heads admit to have been directly affected by the crisis, of which 57% have been strongly affected. Twenty-eight% have lost close relatives, while another 23% have been displaced by the fighting. Therefore, in addition to the more direct economic impact of the crisis on households, its psychological impact may be the most important long-term factor that will have to be overcome to rebuild Burundi's society and its economy. Under such circumstances, it is irrelevant to talk about the contribution of households to economic growth when they are fighting for physical survival. Only when the war is over and Burundians believe in a better future will they move on and refocus on their economic security.[21]

***Household Response***

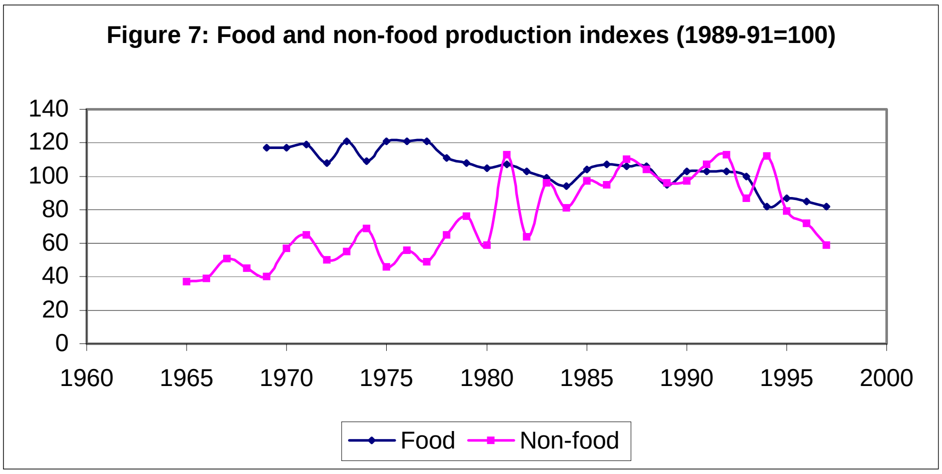
The picture depicted above shows that households face an adverse environment. Households have responded in the expected way. They have reduced their agricultural production to reduce exposure to government, as the decline in the contribution of agriculture to GDP has shown in Figure 2. In line with de Janvry et al. (1991), households have also responded by shying from market exchange. Survey data show that at the national level producers consume on average 64% of their own food production. In regions where climatic conditions permit diversified production, this average is as high as 80%, suggesting that market transactions are higher in regions where specific staple foods cannot be grown. Farmers' preference for self-sufficiency is also consistent with the findings of Cukierman et al. (1992) that the risk of fiscal and monetary taxation tends to increase in countries like Burundi experiencing political instability. In addition, the fear of market exposure and ensuing taxation has induced most households to transform their surpluses into in-kind savings as suggested by Ghosh (1986).

More specifically, a general tendency towards household diversification is illustrated by the following figures. According to household survey data, 80% of households in Burundi produce beans, 72% produce sweet potatoes, 64% produce banana, 58 % produce maize and 52% produce cassava, despite the fact that different ecological zones are far more conducive for the production of different products.[22] The only factor that tends to limit the portfolio of household production is ecology. Within the same ecological zone, the level of diversification is even higher. For example, in the Western Plateaus ecological zone, the rates are: 93% for beans, 91 for sweet potatoes 86 for banana, 71 for cassava, 66 for coffee and 56 for maize. Every household tends to produce a bit of everything. The result of excessive diversification and political instability has been a drop in the productivity of the agriculture sector as a whole (Figure 3), and a drop in the production of food.

Figure 7 summarizes household responses to this unfavourable environment by comparing food and non-food production indexes over a period of 35 years. The index of food production per capita declined from 120 in 1970 to about 100 in 1990 and 80 in 1997. From the early 1970s until 1993, the per capita food production index remained consistently higher, despite a steady growth in population of about 3%, than the average for Africa. During the 1970s and the 1980s the average annualpercentage growth for the non-food production index was at least twice Africa's average (World Bank, 1998). This picture changed in the 1990s when the country plunged into civil war. Per capita food production index declined from 103 in 1990 to 85 in 1996, while the African average declined from 99 to 96 over the same period. The non-food production index declined from 107 in 1991 to 72 in 1996, against an increase in the African average from 101 to 108 over the same period. Several other indicators of welfare followed the same pattern, translating into increasing pressure on rural households and a deterioration in their living standards (World Bank, 1998).

[21] For example, the fact that many Burundians, among them many of the most highly trained professionals, have preferred to seek refuge outside the country is an important dimension of Burundi's economic future. Whether they will choose to go back to the country once war is over cannot be known now.

[22] The North and East are more productive in beans and sorghum; the West in cassava; the South in peas and maize, etc.




As the figure suggests, despite high levels of taxation and other predatory policies, government efforts to increase the production of cash crops yielded some result. It is important to note that this policy was highly coercive, however, and monitoring by government agents was essential to its success. As a result of the collapse of government services in the countryside due to war in the 1990s, the cash-crop sector lost momentum. Peasants resisted these coercive policies in different ways. Prior to the war a study undertaken in the Rusizi plains where most of the country's cotton is produced showed that farmers were forced to plant cotton on their prime land. In addition to coffee and tea, cotton was important to government because it was exported and generated foreign currency. However, peasants in the cotton-growing region surveyed preferred growing tomatoes, which generated three times more income than cotton. But as they did not have the opportunity to choose what to grow and as monitoring by government agents was regular, farmers adopted "cheating" strategies by growing tomatoes under the cover of the wide cotton leaves; this combination reduced the yields of both cotton and tomatoes (Nkurunziza, 1987).

In his discussion of government policy towards coffee production, Kaburahe (2001) notes that government extension agents behaved as policemen. In many cases, the same extension worker was the area representative of the single party, the administrator of the area and an informer of the state security apparatus. Such individuals tended to confuse their role as agriculture extension agents with their political roles, using their power to impose their choices on unconvinced farmers. Hence, forced specialization by government failed because it was ill advised, ignored the basic cost–benefit economic principle, was not incentive compatible and, above all, was biased against the food sector, which is of more direct interest to farmers. In a recent survey in one of Burundi coffee producing regions, Kaburahe (2001) reports that one hectare of potatoes generated revenue six times higher than revenue from a hectare of coffee, yet coffee required two to three times more labour than potatoes (Kaburahe, 2001). The following table gives a rough comparative picture of the relative productivity of different crops.

**Table 6: Land and labour returns for main crops (1985)**

| **Crops** | Average yield (kg/ha) [1] | Price 1985 (Fbu/kg) [2] | Income (000Fbu/ha) [3=1*2] | Work days [4] | Daily income [5=3/4] |
|---|---|---|---|---|---|
| Food crops | | | | | |
| Corn | 800 | 41.9 | 33.5 | 232 | 144.5 |
| Sorghum | 780 | 33.4 | 26.1 | 177 | 147.2 |
| Rice | 1,410 | 30.0 | 42.3 | 590 | 71.7 |
| Wheat | 410 | 40.0 | 16.8 | 274 | 61.2 |
| Beans | 800 | 46.5 | 37.2 | 210 | 177.1 |

| | | | | | |
|---|---|---|---|---|---|
| Peas | 550 | 82.6 | 45.4 | 210 | 216.3 |
| Sweet potatoes | 5,240 | 10.1 | 52.9 | 372 | 142.3 |
| Cassava | 6,370 | 21.1 | 134.4 | 342 | 393 |
| Potatoes | 5,750 | 18.9 | 108.7 | 435 | 249.8 |
| Palm oil | 2,520 | 7.9 | 19.9 | 244 | 81.6 |
| Groundnuts | 790 | 74.5 | 58.9 | 240 | 245.2 |
| Bananas | 11,240 | 11.0 | 128.6 | 253 | 488.7 |
| | | | | | |
| Industrial crops | | | | | |
| Coffee | 240 | 160 | 38.4 | 500 | 76.8 |
| Dry tea | 731 | 17 | 12.4 | 526 | 23.6 |
| Cotton | 1,185 | 35 | 41.5 | 255 | 162.6 |

Source: World Bank (1988).

Generally speaking, for the same quality of land and even taking into account the different levels of taxation of the different crops in the table, food crops are much more productive than industrial crops. Despite the fact that banana is many times more productive than coffee in the central plateau region, banana cultivation has been fought by government agents on the grounds that it harms coffee production, especially when banana plants are near coffee stands. Some government zealots would not hesitate to cut down the bananas to “clear the air” for coffee trees. Cash crops such as coffee and tea are not only less profitable but they also degrade the soil and imply a high opportunity cost as they foreclose the land where they are planted for many years. In comparison, food crops rotate quickly and free up land for new crops every season. More generally, many peasants feel that growing cash crops under the prevailing market conditions amounts to waste of production factors (land and labour), especially in a country where land is so scarce. This is a clear instance where, by privileging the production of export crops that generate more public revenue, the priorities of the state have been set in opposition to farmers’ interests.

As already discussed, the high transaction costs associated with participation in market exchange lead peasants to prefer self-sufficiency and to limit, given the level of government coercion, cash crop production to amounts that allow them to purchase the commodities they can not produce themselves (Ghosh, 1986). In the end, both cash crop and food production suffer, frustrating the potentially important contribution of the agricultural sector to the process of economic growth. One of the results of these policies has been a deep government alienation of farmers in Burundi. In the euphoric mood following the democratic election in 1993, farmers in some regions manifested their displeasure with previous governments by cutting down their coffee trees, an offence that had been punishable by a long jail sentence under the previous regimes.

Outside the agricultural sector, housing modernization has traditionally been an important activity with a positive impact on economic growth. It involves job creation through masonry work, provides a monetary source of income and hence constitutes a basis for activity diversification. Housing modernization has also been seen as a form of investment in rural areas. Together with livestock accumulation and land, housing investments have been households’ indirect ways of preserving wealth from the vagaries of government policy and other forms of extortion. The current war has changed this picture. Rural households have particularly suffered frequent raids by rebels who destroy houses and steal livestock. The resulting population displacements have acted as an enormous disincentive for investment in land, housing or livestock. For example, 77% of households interviewed in 1998 admitted having been affected by the crisis, of which 16% lost all their capital and household durable goods. As a result, there has been a shift of preferences towards monetary assets, in spite of an increase in inflationary taxation. The continuation of war has, therefore, curtailed rural investments, another way in which the environment facing households has had a detrimental impact on economic growth.

***Preferences over Policies***

Rural Burundians mistrust their government for many reasons. First, over the years, rural Burundians have carried the brunt of the country’s tragic experiences in which the government has been a major actor. Hence, questions regarding rural Burundians’ perceptions of anything involving the government are usually treated with suspicion. Second, government predation and the coercive nature of its policies have implied that rural households attempt, as much as possible, to conceal their wealth as well as their preferences. Having known only authoritarian regimes, both under the monarchy and under the three republican regimes, they have rarely been permitted to voice their personal opinions. This traumatic experience has made rural populations suspicious of anything coming from strangers. The picture is similar in the cities, albeit with the added confusion arising from rampant ethno-economic politicking.

The first time Burundians were given a genuine chance to express their preferences was when they overwhelmingly voted for the country's self-determination in 1961, showing the importance they attached to freedom. Also, until the first half of the 1980s, the Catholic Church had successfully established parallel institutions of education and social emancipation outside the realm of government controls. Discussion and prayer meetings, literacy programmes and recreational activities were regularly organized and used as avenues for information exchange. These programmes were successful because they constituted the only space for free expression left for many in rural Burundi. In the cities, the government controlled all the media in a typical one-party political system. The government finally closed down these structures in rural areas, causing a row with the Catholic Church that led to the expulsion of a large number of missionaries from the country and the nationalization of almost all church-run schools. The government's extreme suspicion of its own citizens did not leave room for free expression and preference revelation.

The second opportunity for Burundians to express their preferences freely was in 1993 when they voted in a truly democratic and multiparty election. They showed their displeasure with past policies by overwhelmingly voting out the ruling party that had dominated politics since the early 1960s. FRODEBU, a young party with a new breed of politicians, was seen by many as an opportunity to force change in a peaceful transition in a country where regime changes had always been carried out through the barrel of the gun. Unfortunately, as soon as they took power, FRODEBU leaders engaged in a witch hunt filling government posts with their own clients to reward their loyalty. After only four months in power, the democratically elected regime was deposed in a bloody military coup in which the leadership of the new party was decapitated by killing its senior members and forcing most of the survivors into exile. To date, the population is still paying the price for having exercised its democratic right in 1993. The fact that the choice of the majority was frustrated by the killings that followed these elections comforts the view of those who think that the preferences of the largest part of the population in Burundi have no place in the country's political discourse.

In a nutshell, therefore, although it is difficult to tell for sure the population's preferences over policies since they have been given very few opportunities to voice their desiderata, we can make inferences based only on the 1993 elections.[23] In 1993, Burundians rejected past government policies that viewed the rural sector only as a source of rents. Some reactions also such as the cutting down of coffee trees and the growing of tomatoes under the cover of cotton leaves were methods of expressing peasants' disapproval of government measures. The gulf separating Burundians and their political leaders has been revealed by events in the 1990s, which have shown the level of political greed and politicians' total lack of interest in the plight of the populations they all claim to represent. It is only very recently that Burundians have started to voice shyly but openly how they feel cheated by the country's political class.

In view of the bleak picture depicted in the first three sections, the last section discusses the logic underlying government behaviour. The section argues that it is government policy choices that are responsible for the catastrophic economic performance.

## 4. POLITICAL ECONOMY

Here we review of Burundi's political evolution over the period 1960–2000, with special emphasis on how political factors affected economic growth. Government's obsessive controls over the economy

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[23] The 1961 elections were held in a particular context and for a particular reason: accession of the country to self-determination.

have transformed markets into political institutions. The resulting politicization of the economy has undermined market efficiency and market development as a basis of economic growth.

### 4.1 Political and Economic Evolution

Post-colonial political history corresponds to the three-period trajectory delineated in the first section. The political evolution within each period is non-linear, however, particularly during the first and the third periods, which are characterized by political instability. In this section, we focus on four elements: the duration of different forms of governments, the duration of different political regimes, the dates of major policy changes and the periods of the signing of particular international agreements.

***The Forms of Governments between 1960 and 2000***

When Burundi became independent from Belgium on 1 July 1962, it was a monarchy. The struggle for independence had assembled politicians from the two major ethnic groups, the Hutu and the Tutsi, in UPRONA party, which won legislative elections in September 1961. As this party was largely built on democratic values and included Hutus as well as Tutsis in its leading bodies, expectations were that Burundi would evolve towards a parliamentarian monarchic regime.The assassination of Prince Louis Rwagasore in October 1961, the leader of UPRONA, and the political crisis that followed his death had changed the political atmosphere in the country. King Mwambutsa IV, a weak leader, succumbed to intrigues and political games, sometimes making catastrophic partial decisions. The early 1960s saw the emergence of a crisis fuelled by a merciless political competition along ethnic lines.

Two major factors explain how individual interests came to aggregate along ethnic and regional lines: the lopsided Belgian colonial polity and the so-called "social revolution" in neighbouring Rwanda, a country with a similar ethnic configuration. The Hutu versus Tutsi distinction existed before colonization, and to a large extent, the Tutsi ethnic group enjoyed relatively more economic privileges and political power. However, this state of play was institutionally regulated through sophisticated rules that tempered the exclusion of Hutus. Dividing the population in order to control it more effectively, the colonial power institutionalized the domination of Hutus by Tutsis through extremely rigid rules. At the same time, it implemented policies clearly biased against the Hutus.

For example, in the 1920s, there were 27 Hutu chiefs governing Hutus as well as Tutsis in their constituencies; in 1945, after a colonial administrative reform implemented from the 1920s, there were no more Hutu chiefs (Reyntjens: 1994; Nkurunziza and Ngaruko, 2002b). Belgian social scientists carried out a large programme of research to "demonstrate" that Tutsis were a superior race similar to Europeans and that they were born to rule, while Hutus were seen as inferior (de Lespinay, 2000). It is ironic that many Hutus and Tutsis were made to believe this colonial propaganda, which has shaped the relations between the two groups, to date.

The colonial education policy reflected the colonizers' objectives. For every Hutu student admitted by the colonial institute, there were 5 Tutsi students in 1932, 15 in 1945, 3 in 1954 and 2 in 1959 (Lemarchand, 1970). Not surprisingly, at independence in 1962, a number of Tutsi leaders believed they had special prerogatives to rule the country.

The second factor relates to the impact of the Rwandan 1959 bloody social revolution, which removed Tutsis from political leadership. While this revolution, carried out with the help of Belgians, was considered by radical Hutu leaders in Burundi as the model to replicate, most Tutsi leaders viewed it as the scenario to avoid by all means. Again, this fact is still driving many within Burundi's political elites in the two groups.

The political mess that marked the end of the Belgian colonial saga in Central Africa is explained by the Belgian colonial model. Throughout Africa, independence of Belgian colonies was the most improvised and hence the messiest. Following the end of Second World War, an anti-colonial international order supported by the two big winners of the war arose, compelling the ruined West European colonial powers to envision the end of colonialism. In the British and French colonies, the momentum created by international pressure resulted in the planning of their withdrawal from colonies as early as 1945. In contrast, by as late as 1958, Belgium was still considering a 33-year timetable for political autonomy audacious. It was not until 1959, just one year before they precipitously left Congo, that the term independence could be shyly used in official language. Rather than preparing their colonies for autonomy, the Belgians undertook a divisive campaign intended to play groups against others in order to delay independence. As a result, in the early 1960s, whereas British and French colonization ended peacefully, Belgian colonization ended in blood and political disorder. In Congo, many Belgians were targeted, and a number of them were killed. Others fled so hastily that they left their assets unattended behind them. These included a few factories, houses and cars.

In Burundi, many signs pointed to the involvement of the Belgians in the assassination of the father of the country's independence, Prince Louis Rwagasore. He was assassinated less than a month after his pro-independence party had defeated pro-Belgian anti-independence parties in the September 1961 elections. Fearing similar anti-Belgian reprisals in Burundi, most Belgians left the country hastily. The ensuing gap in qualified labour caused a severe drop in capacity utilization of industrial units as mentioned earlier. At the time, not only were few Burundians able to replace the Belgians in skilled and technical positions, but also there were few who were able to purchase the Belgians' assets at a fair price. Unlike France and Britain, Belgium never allowed the emergence of a middle class of entrepreneurs in Burundi. Part of these assets became de facto state property.

Rwagasore's assassination resulted in a sharp ethnic crisis within UPRONA, the majority party supposed to lead the first four-year term in post-colonial Burundi. In the ensuing disorder and instability, it was easier for political elites to seek an immediate gain than speculate on some uncertain long-term or even medium-term economic growth. Looking back at this period today, it is obvious that the way these elites appropriated the assets is irregular in many respects. However, in the context of the volatile situation of the early 1960s, regularity, like growth, was of little concern to politicians. Unfortunately, it is retrospectively clear that this episode set the standards for political competition and economic management for the following decades. All the regimes that succeeded each other never questioned this anomaly. They shied from condemning and redressing these mistakes as they were also playing similar games. For example, in the 1980s, a powerful minister of public works from the province of Bururi decided to distribute almost for free most of the beautiful colonial houses taken over by the state to his friends and to politically connected individuals. The successive crises that have rocked Burundi over the last four decades are ingrained into this competition for political leadership devoid of accountability, the best conduit through which rents can be appropriated.

The country experienced its first civil war in 1965. This violent conflict was triggered by a coup d'état by Hutu leaders attempting to stop their political marginalization. As the coup failed, it was followed by a bloody repression that claimed the lives of many senior Hutu politicians, resulting in de facto elimination of the Hutus from the political scene. In the countryside, Hutu peasants reacted by killing scores of Tutsis in the central province of Muramvya before the army moved in to carry out a repression against the Hutus that claimed thousands of lives. It was in the aftermath of this politically volatile period that Captain Michel Micombero, a young Tutsi officer from the Southern province of Bururi, staged a military coup in November 1966. He deposed the centuries-old monarchy and replaced it with a (military) republican regime.

Military rule put an end to the shaky democratic institutions that had been inherited from Prince Rwagasore but did not manage to restore political stability. On the contrary, its policies exacerbated the crisis. The Micombero government dissolved parliament and established a single-party repressive system. The Tutsi ethnic group, specifically its members from the southern province of Bururi, dominated this and subsequent regimes. From Micombero's coup in 1966, the presidents, key ministers and their advisors, as well as the army commanders, have all been from Bururi. By the early 1970s, Hutus and non-Bururi Tutsis had been sidelined in the control of the country's political and economic institutions. As a result, those opposed to the Bururi regime were not only Hutus but also Tutsis from the rest of the country. Tutsis from Bururi colluded to marginalize the traditionally influential Tutsis from Muramvya, as the latter region had been the cradle of monarchic institutions deposed by Micombero.

In this context, a large number of Tutsi leaders from Muramvya were imprisoned in 1971 after being accused of plotting to overthrow the Bururi military regime. Afterwards, in a coup attempt in April 1972, Hutu rebels massacred a large number of Tutsi families, particularly in the south of the country. In the repression that followed, about 18% of the Hutu population either perished or fled to foreign countries. Almost all educated Hutus with secondary or university education were physically eliminated. The 16-year period that followed the 1972 mayhem was relatively calm, but it was during the same period that two bloodless palace coups led by officers from the same commune of Rutovu in the province of Bururi arranged for the replacement of Micombero by Colonel Jean-Baptiste Bagaza in 1976 and the latter by Major Pierre Buyoya in 1987.

Despite the elimination of Hutu and the non-Southern Tutsi threats, political fights went on among the ruling elite, this time within a narrow intra-ethnic and intra-regional space. Fights opposed political leaders from Matana commune to those from Rutovu commune, both in the same Bururi province. In the late 1980s, in-fights were between the Bayanzi and the Bashingo clans of Bururi Tutsis. The period 1972–1988 was an era of drastic discrimination against the Hutus and non-Bururi Tutsi. Its main manifestation was through the privileges enjoyed by Bururi Tutsis in accessing primary, secondary and university education, including access to overseas scholarships, relative to Burundians from other regions; this policy has persisted to this date. Illustrating this extreme concentration of high education among people from Bururi, Jackson (2001) notes that Mugamba commune of Bururi province (out of a total of 114 communes nationwide) accounts for 15% of the 6000 students of the University of Burundi. The fact that the latter was the country's single institution of higher education until the creation of the new private University of Ngozi, which numbered fewer than 500 students in 2000, shows clearly how state institutions have been captured by the ruling elite. Through these barriers to education, non-Bururi Burundians were prevented from assuming any substantial administrative, economic or political power.[24]

Thus, retrospectively, it appears that distributive politics that marginalized a large part of the population in Burundi has had a negative impact on economic performance.[25] Group identity became the overarching thread along which policies were decided not only in domestic politics, but also in foreign policy. For example, in the early 1960s, suspicion mounted between Rwanda and Burundi as the leaders in the two countries were from different ethnic groups. The decision to end the monetary integration between Rwanda and Burundi in 1964 and the subsequent loss of the Rwandan market by Burundian industry was a result of this mistrust. To some extent, even the loss of the East Congolese market resulted from the suspicion between Burundi and Congolese leadership, with Burundi accusing Congo of hosting Paul Mirerekano, a key Hutu opponent, while Congo accused Burundi of involvement with its southern secessionists such as Gaston Soumialot.

An interesting question is why the donors acquiesced in the lopsided pro-Bururi allocative policies. Since the 1960s, the doctrine underlying international development assistance was that the new sovereign state nations would be entrusted with domestic allocation of aid provided by the international community, regardless of their internal institutions and governance standards. Accordingly, foreign aid was used to leverage distributive politics as shaped by domestic actors. Insofar as the agenda of the donors was not compromised (containment of communism, buying off diplomatic support in international institutions, etc.) the groups in power could use foreign aid as they wished, regardless of the impact on growth (Herbst, 2000: 97–132). Conditioning external assistance to "good" domestic policies is a very recent phenomenon that has not, even today, gained universality.

### *Patterns of Rent-Sharing since the 1970s*

While the interests of political actors aggregated along ethnic lines soon after independence, this changed from the early 1970s when interests opposed Tutsis from Bururi and Tutsis from the rest of the country. A second though less severe fracture was observed. This regional fracture was

[24] Pritchett and Filmer (1999) have shown, in a detailed multi-country study, that access to education increases wealth and that wealth increases the level of education. The implication is that lack of access to education perpetuates poverty, especially in countries like Burundi where access to education opens the doors to the civil service, the best and almost only opportunity to escape poverty.

[25] Properly conducted distributive politics can have a positive impact on social cohesion, an essential ingredient of economic prosperity. Azam (1995) has shown that one of the key reasons why Côte d'Ivoire under Houphouet Boigny was peaceful and prosperous was his ingenuity in the use of distributive politics. He was keen to tax cocoa and coffee producers from his own ethnic group based in the South to finance development projects in the poor North and the rest of the county. The high instability that has characterized Côte d'Ivoire a few years after the death of Houphouet Boigny suggests that Azam is probably right. The problem in Burundi is that it is those who do not produce who tax those who produce and, above all, resources benefit only the small group of those controlling power.

consolidated after the 1972 massacres. Behind this merciless competition for political leadership, important economic benefits were at stake. Given Burundi's limited natural resources, political factions fighting for the control of the state focused on controlling public institutions, particularly the public administration, which has become the centre of a system of rent sharing. In this regard, the rationale for major policy choices has evolved around the role of the public sector. We illustrate this on the basis of three facts: the role of public employment and wages; the role of state-owned enterprises; and the role of the army.

Unlike most African bureaucracies (Republic of Congo, Ghana, Gabon, Zambia, Cameroon, etc.), Burundi's public sector is relatively small. Since independence, while many African governments used public employment to leverage populist policies aimed at providing revenue to a maximum number of people, Burundi's public sector has remained elitist. This was the result of the choice by successive governments to reserve the relatively high paying jobs for their political clients. In Burundi, the mean income of a civil servant puts him among the richest 6% of the population,[26] against an average of 13% in sub-Saharan Africa, 30% for the Middle East and North Africa region, 33% for Asia, 40% for Latin America and the Caribbean, 76% for Eastern Europe and the former USSR, and 63% for OECD countries. Hence, individuals in the highest civil service jobs are among the richest Burundians.[27] This explains why ethnic politicking has a high payoff in Burundi. Table 7 provides information on the ethnic identity of those in the highest public employment.

**Table 7: Ethnic disparities in public senior civil service posts in 1987**

| | Hutu* | Tutsi* | Twa* |
|---|---|---|---|
| Office of the President | 1 | 98 | 0 |
| Central committee of single party (UPRONA) | 2 | 50 | 0 |
| Administration of single party | 3 | 52 | 0 |
| Ministers | 5 | 13 | 0 |
| Ministerial cabinet directors | 1 | 17 | 0 |
| Ministry permanent secretaries | 0 | 40 | 0 |
| Province governors | 2 | 13 | 0 |
| Ambassadors | 1 | 21 | 0 |
| Embassy diplomats | 0 | 88 | 0 |
| Army barrack commanders | 0 | 20 | 0 |
| Army high ranking officers | 2 | 398 | 0 |
| Army sergeant and privates | 30 | 11,970 | 0 |
| State owned company directors | 5 | 252 | 0 |
| Hospital directors | 1 | 19 | 0 |
| University lecturers | 10 | 80 | 0 |
| Secondary school directors and inspectors | 6 | 89 | 0 |
| Prosecutors | 0 | 66 | 0 |
| Magistrates | 5 | 92 | 0 |
| High Court presidents | 1 | 7 | 0 |
| Judiciary police officers and inspectors | 0 | 400 | 0 |

Note: Hutus, Tutsis and Twas reportedly represent 85%, 14% and 1% of the population, respectively.
* Even though it is difficult to ascertain the accuracy of these statistics, they carry a non-controversial message, that the Tutsi have dominated all government institutions.
Source: Ntibazonkiza (1993).

The reality is that more disaggregated data on some of these positions, with names of the incumbents provided, not only confirms this pattern but also unveils the regional pattern, confirming Bururi's dominance. Hence, while it is accurate to say that the Tutsi dominated the civil service in 1987 on the basis of Table 7, it would be more accurate to say that those Tutsis were mainly from Bururi. The dominance of Bururi Tutsis is explicit especially in two sectors: the state owned corporations and the army. From independence to the mid 1970s, political leaders in Burundi paid little attention to the economy. The two kings that ruled the country until 1966 and Micombero later

[26] The%ile would be even smaller if illegally acquired income is taken into account.
[27] In Burundi's tiny private sector, it has also been noted that many private businesses are owned by former senior civil servants and politicians who use their connections to make money.

adopted multi-year economic development plans that were hardly followed. The country's leadership invested its energies in political and ethnic intrigues to reinforce their grip on assets left by the colonial power and on foreign aid. Until the mid 1960s, these assets were shared among the ruling elites, from both the Hutu and Tutsi groups. Even though the massacres of Hutus and elimination of non-Bururi Tutsis from public service resulted in new redistributions to the benefit of Southern Tutsis, there were few assets left for further distribution. There was a need to innovate to meet the needs of the new generations of southern Tutsi elites.

The policies adopted by the country's political class in the mid 1970s responded to this need. They included heavy interventionism. The government embarked on an active economic policy programme, which raised the share of public investment in total investment from 5.6% to 42.8% between 1971 and 1980. To implement this programme, the country borrowed massively from both the domestic financial market and from external sources. As a result, coupled with sustained economic growth in the 1970s was an increase in the country's indebtedness. The funds served mainly to extend the bureaucracy, notably by creating more state corporations. As Nyamoya (1998) notes, from 1977 to 1982, about 100 state owned companies were created. Managed by cronies with no managerial skills whose main motive was to cater for the needs of their friends and relatives, most of the corporations experienced cash flow problems accommodated by massive injections of subsidies. Their main role was to accommodate the younger members of the Bururi elite. The data in Table 8 support this view.

**Table 8: Ethnic and regional distribution of public corporations' managers (%)**

| Ethnic group<br>region of origin | Tutsis | Hutus | Twa | TOTAL |
|---|---|---|---|---|
| Bururi province | 60 | 3 | 0 | 63 |
| Remaining 14 provinces | 29 | 8 | 0 | 37 |
| TOTAL | 89 | 11 | 0 | 100 |

Source: Based on data from *La Lumière*, a Burundian weekly, and reported in International Crisis Group (2001).

Although they produced only 9% of the country's GDP in 1990, state firms accounted for 31% of formal sector employment and 25% of outstanding domestic credit, and benefited from 3.4% of GDP in financial flows from the government (World Bank, 1998). By 1995, equity capital of 36 such firms with majority state participation represented 20% of the country's GDP, but overall, these corporations posted a net loss equivalent to 6% of GDP or 14% of government revenue, excluding grants (IMF, 1997). As a result, it is not surprising that the country's budget recorded huge deficits, especially when revenues from coffee exports started to decline in the 1980s. These losses and subsequent government transfers are just illustrations of the ways used to transfer resources from taxpayers, including farmers, to bail out firms that served group rather than national interests. The corporations' privileged access to government resources, including foreign currency, and their ethnically and regionally biased employment policies are additional avenues for rent sharing. By espousing the logic of rent-seeking, the successive governments traded off growth for transfers. In so doing Burundi leaders instituted a self-perpetuating system in which integrity and legality have been so repeatedly compromised that the leaders have a strong incentive to maintain the status quo.

The picture of government control of economic activity would be incomplete if it is not contrasted with the dynamics in the private sector. One could argue that those controlling the public sector are not necessarily the same controlling the private sector, suggesting some type of specialization. The answer is simple: There is no private sector in Burundi. Using the data on private investment as a measure of private sector involvement in economic activity, the picture in Table 9 is clear. In the period during which massive investments in the public sector were undertaken (1975–1984), private investment was ten times lower at a mere 1.5% of GDP compared with 9.9% of GDP for sub-Saharan Africa. It should be noted that on average, private investment is higher than public investment in other African countries. In the subsequent period, there was some increase in private investment but it remained lower than 3%, whereas public investment remained systematically higher than the African average.

**Table 9: External borrowing, domestic savings and investment (% of GDP)**

| | Burundi | | | Sub-Saharan Africa | | |
|---|---|---|---|---|---|---|
| | 1975–84 | 1985–89 | 1990–98 | 1975–84 | 1985–89 | 1990–98 |
| Investment | 15.6 | 16.3 | 11.9 | 17.8 | 16.3 | 17.0 |
| Public | 14.1 | 13.6 | 9.6 | 7.9 | 7.0 | 6.1 |
| Private | 1.5 | 2.7 | 2.3 | 9.9 | 9.3 | 10.9 |
| Domestic savings | 4.1 | 3.3 | -2.9 | 23.9 | 20.2 | 16.1 |
| Net long-term borrowing | 4.8 | 7.5 | 4.7 | 3.0 | 2.4 | 1.0 |

Source: The World Bank (2000).

Another striking fact in Table 9 is the exceptionally low level of domestic savings. Compared with the rest of Africa, Burundi almost does not save anything. This is true for both the most unstable period (1990–1998) when the country dis-saved and for normal peaceful periods (1975–1989). Hence, it is not surprising that Burundi's external debt has been, over the last three decades, much higher than the average of the rest of Africa. These data suggest that the state has suffocated the private sector and that the economy has become dependent on foreign financial resources. One interesting conclusion from this information is that since Burundi is so dependent on the international community, foreign aid could be used as a leverage to force fundamental political changes that will otherwise never be initiated spontaneously by the members of the ruling class since this choice is not incentive compatible (Nkurunziza and Ngaruko, 2002a). Indeed, the leadership has ensured that the status quo is guaranteed by maintaining a strong army.

The army is at the core of Burundi politics. In Burundi, he who controls the army controls the country. The army plays a prominent role as both an actor and guarantor of the mechanism of rent collection and distribution within the elite group. Public expenditures allocated to the army rose by more than 100% between the mid 1970s and the mid 1980s, reflecting a reinforcement of the institution that protects the predatory system. The army also acts as a distributive machine, given that from the early 1970s, it has been overwhelmingly dominated by southern Tutsis at all levels. According to the International Crisis Group (2001), out of 37 highest command positions within the army, all of them are held by Tutsis, 27 of whom (or 73%) are from Bururi province.

These figures imply that policies that privilege public servants, the army or state-owned enterprises over the rest of the population target a specific group within the population. Supporting this view is the process that led to the assassination of President Melchior Ndadaye, democratically elected in June 1993. These elections had brought to office a Hutu dominated government, with relatively few members from Bururi. While attempts by the new government to reform the system of rent-seeking were also, at least to some extent, motivated by self-interest, those opposing change precipitated the country into chaos four months after the new regime was in power. Ndadaye, the first civilian, first Hutu and first non-Bururi president Burundi had had since the demise of the monarchy in 1966, was murdered by the Bururi dominated army on 21 October 1993, together with most of his party's senior leadership, to create a constitutional vacuum.

Among the factors that led to these targeted assassinations and the resulting civil war, four are worth noting (Reyntjens, 1994): First, the new government's plan to reduce bid bonds by 80%, to allow small businessmen, including many Hutus, to benefit from privatization of state-owned enterprises threatened some traditionally well established interests. Second, the attempt to reconsider the conditions under which the Belgian firm Affimet had been authorized to refine and export gold under an export processing zone licence a few weeks before the June 1993 elections annoyed influential people both from the firm itself since it was going to lose its privilege, but also those from the previous government who had been involved in the deal. Third, the attempt by returning Hutu refugees to recover their property including houses and land, some of them confiscated by powerful barons, that they had left in 1972 was obviously too sensitive. Fourth, the intention of the President to reform the army did not please those who felt their privileges were threatened. It was obvious that the Bururi civilian and military oligarchy felt most threatened by these measures in view of the benefits they stood to lose. It is therefore important to note that regionalism has economic benefits, which explains its endurance.

**Table 10: Economic benefits underlying regionalism**

| Variables | Bururi province | Average 15 provinces | Standard deviation | Rank of Bururi province |
|---|---|---|---|---|
| Per capita income (1998) in US PPP$ | 444 | 328 | 99 | 2 |
| Food prod. per cap (tons) | 0.41 | 1 | 0.15 | 14 |
| Per capita tax (1999) | 268 | 366 | 90 | 14 |

Source: Data on the first two variables are from: Ministère de la Planification du Développement et de la Reconstruction and UNDP (1999). Data on per capita tax are from Ministère de l'Administration du Territoire et du Développement Communal (2001).

Table 10 shows economic inequality resulting from government's predatory policies. Though Bururi province ranks 14 in a total of 15 provinces in terms of its contribution to central government's tax revenue and in terms of food production per capita, the best indicator of production status in a subsistence agriculture economy, Bururi's income per capita puts it in the second place. As there is no other specific natural resource Bururi may claim to depend on to boost its per capita income, the ranking suggests that this province benefits from enormous transfers from the central government. In fact, unlike most of the remaining 14 provinces, Bururi has little cash crop production so its low per capita food production is not in any way compensated by other agricultural activities. The difference between Bururi and the rest of the country is significant, as the value falls outside the one standard deviation margin. If the domination of Bujumbura by Bururi elites is factored in, the difference in wealth between people from Bururi and those from the rest of the country becomes even more pronounced.

### 4.2 Government Economic Policy Choices

The process of rent collection and sharing illustrates how this system has been politically and economically organized to benefit some individuals while harming others.

***Public Service Policy***

Education policy has been used to filter access to public employment. This is done through skewed regional distribution of educational infrastructure, the quality of teachers, the types of schools and the distribution of students into different disciplines. According to Jackson (2001: 31–35), Bururi alone had 15% of all primary school teachers, more than those in four provinces taken together: Cankuzo, Muyinga, Rutana and Ruyigi. With 19% of the country's total number of students in secondary schools and distributed in 36 schools, Bururi boasts the highest rate of educational infrastructure in the country. Bururi students are also spread in all schools throughout the country but it is rare to see non-Bururi students in Bururi province. Together with Bujumbura, the capital city, the two provinces host 11% of the country's population but they account for 32% of all secondary school students. In contrast, the five least endowed provinces account for only 10% of secondary school students, almost half of the number for Bururi. Jackson notes that in the late 1980s, the government allocated about 60% of donor aid to education to Bururi (p. 35).[28]

Hence, it is normal that before the 1993 crisis, Bururi had attained a rate of primary school enrolment ratio of 99%, compared with the country's average of 70%. This contrasts with the achievements in other provinces, especially those in the North such as Kayanza, Kirundo and Muyinga that have never reached a rate of more than 60%. This information is confirmed by a 1998 household survey (hereafter EP1998).[29] Since the modern labour market is dominated by public

[28] These statistics are so shameful that, according to Jackson (2001), the Belgian minister for development cooperation, reacting to a government request for aid, asked for the number of colleges and students in Bururi in 2000 in order to send the required aid; he never got a response from the government.

[29] These figures are computed from the results of "Enquête Prioritaire 1998: Etude Nationale sur les Conditions de Vie des Populations" carried out by ISTEEBU (Institut de Statistiques et des Etudes Economiques du Burundi). This source will be subsequently referred to as EP1998.

employment, and given that access to public employment depends on the level of education,[30] by government design, those who are denied education in early age are denied access to most opportunities offered by the economic system.

Education is not the only sector where unequal allocation of resources to Bururi has been noted. Guichaoua (1991) reports that the Fifth Five-Year Plan allocated 66% of gross fixed capital formation to a geographical area comprising Bujumbura, the capital city and its surrounding areas, and the southern province of Bururi out of 15 provinces. Although Bururi was one of the poorest provinces in terms of infrastructure at independence, it has now become among the most endowed in education infrastructure (Nyamoya, 2001: 36), hospitals and other infrastructure, as Table 11 shows. These data suggest that public investment programmes were used to transfer resources from the rest of the country or from foreign aid to the regions where they most benefited the Bururi elite. Moreover, the inequalities illustrated in Table 11 are magnified by the fact that the Bururi Hutus are largely excluded from these benefits other than externalities provided by public infrastructure.

**Table 11: Factors underlying the benefits of regionalism**

| **Variables** | **Bururi province** | **Average 15 provinces** | **Standard deviation** | **Rank of Bururi province** |
|---|---|---|---|---|
| Overall school enrolment ratio | 0.39 | 0.245 | 0.105 | 1 |
| Teachers per classroom | 2 | 1 | 0.3 | 1 |
| Illiteracy rate | 57 | 64 | 5 | 2 |
| Population/hospital ratio (000) | 107 | 266 | 134 | 2 |

Source: Data on the first four variables are from: Ministère de la Planification du Développement et de la Reconstruction and UNDP (1999).

The regions that are the breadbasket of the country are the least represented in leadership and the ones that benefit less from state resources. For example young Burundians from the north, the east and the west have fewer schools than those in the south. Therefore, at a tender age, most of them engage in agriculture, trading and other productive activities, while in the south, young men and women of their age attend school to be prepared for future leadership. Those from the south who are not successful in schools enrol in the army or join their relatives in Bujumbura and in other regions where they work in menial jobs in government-controlled institutions.[31] The point is that rather than preparing future entrepreneurs, the education system has been shaped to prepare rent-seekers from public institutions. Even though reliable data on the contribution of education to economic growth is not available (we mentioned that the proxy of education by enrolment ratios is abusive), one can conjecture that politicization of Burundi's education system has had a negative impact on growth.

***External Trade Policy***

External trade contributed to the policy of patronage inaugurated in the 1970s as illustrated by government controls is the management of imports. Only officially licensed agents can import and/or export goods. Importers who have access to foreign currency from the over-valued official reserves have an advantage over those who have to buy hard currency in the parallel market. Since imported products are sold at the same retail price once they reach the country, it is obvious that the profit margins are wider for the first group of importers, given that prices should reflect more the parallel rather than the official rate. This is in stark contradiction with the official motive for controlling allocation of foreign currency, which is to guarantee low prices for strategic imports. Given that the central bank determines discretionarily the list of these products and the people who can import them,

[30] For example, every job in the public sector, up to district level, requires knowledge of French. Since the language is only taught in the formal education sector, those who do not attend school or those who do not go far enough are automatically excluded from job opportunities in the public sector.

[31] There is a story in Burundi about a manager who had just replaced a Southerner in a managerial position of a government institution in the North of the country. He realised that all the drivers, cleaners and night watchmen were from the South. He once asked the watchmen: Why did you come all the way from the South to be watchmen here? Do you mean there are no thieves in the South?

it can be easily inferred that the policy has been maintained to ensure that this source of rents remains under the control of those in power to benefit from it.

Greenaway and Milner (1990) have estimated the amount of rents associated with the distribution of quota import licences, on the basis of a sample of 33 imported commodities. They found that in 1984, discretionary allocation of import licences represented rent transfers of about 2 billion Burundi francs, the equivalent of 17% of government revenue. As these resources are diverted from use on public goods and services, these controls negatively affect society at large while benefiting a small circle of individuals. This circle includes a pool of former high-ranking civil servants turned businessmen who capitalize on their links with the government to make money. In this light, any relaxation in government controls erodes these privileges so reforms are usually resisted. For example, following the adoption of a structural adjustment programme in 1986, the country put in place trade liberalization measures, which culminated in the adoption of a system of Open General Licence (OGL) for both imports and exports in 1992. As a result of this easing in controls, the number of licensed importers grew from 145 in 1985 to 400 in 1991 (Nkurunziza, 1997). This increase by almost 200% in just six years could be interpreted as a measure of potential rents that had been captured by protected importers during the control regime.[32] Most of these controls were inherited from the import-substitution years in the 1960s and 1970s. While they were largely abandoned elsewhere including in Burundi's neighbouring countries, Burundi's elite maintained them, as they are an important source of economic benefits to them.

Likewise, the country's export sector has also been a victim of the lopsided policy. Burundi's exports are essentially cash crops, namely coffee, tea and cotton. Coffee accounts for more than 80% of total exports and provides a good example of how trade policy has served government policy at the expense of coffee producers. Although producer price stability has been the main justification of the government's intervention in the coffee sector through OCIBU, the government did not isolate peasants from fluctuating international prices. The correlation coefficient between producer and world prices stands at 0.90. This finding is in conformity with Bates (1983) who notes that "what was stabilized is the off-take of the marketing boards rather than incomes of farmers". The last subsection discusses a difficult but important question.

### 4.3 Why Have Burundi Leaders Behaved so Irresponsibly for so Long?

This question is not limited to Burundi. General Abacha in Nigeria and General Acheampong in Ghana ruined their economies for personal gain. Even civilian heads of state, including Kenneth Kaunda in Zambia and Nkrumah in Ghana promoted inefficient economic policies that promoted the interests of ruling elites. Nyerere's Ujama'a or African Socialism, although designed out of good intentions, proved an economic catastrophe for Tanzanians who are still paying the price. Therefore, the choice of inefficient economic policies is not confined to one country, one leader or one region. It appears to be an attribute of dictatorial regimes.

In Burundi, as discussions have shown, power is narrowly on the basis of region and ethnicity. Narrowly based governing elites tend to promote policies that distort the economy because they benefit from the distortions without incurring their cost. Adam and O'Connell (1999) show that when the elite group is small, economic distortions are largely borne by the non-favoured group, and a small distortion may have large payoffs for each member of the favoured group. Therefore, in the absence of political punishment of poor performers, narrowly based political elites have an incentive to distort the economy, especially when they are illegitimate and privilege immediate gain. To respond to the question why such illegitimate regimes can last for so long, we use insights from Humphreys and Bates (2002). The authors provide a framework in which a selectorate, which is a small group of citizens, enjoys monopoly power to change governments. The authors show that as long as an incumbent leader satisfies the selectorate's reservation utility, the criterion under which his performance is measured, the selectorate has no incentive to remove him from power. In Burundi, we have discussed how this selectorate was created and how it narrowed its membership to Bururi elite, using a strong army to quell any opposition to the group.

[32] Some of these liberalization measures have been reversed as a result of the current crisis facing the country.

Predictions of the two models evoked in the paragraph above fit Burundi's case discussed in the previous sections. More particularly, two results are worth mentioning. First, the probability of distorting the economy and engaging in predation is highest for governments at war. Second, regionally based governments engage more in predation and in disequilibrating macroeconomic policies. We have seen how households respond by retreating into subsistence agriculture. How do agents in other productive sectors respond? Faced with predatory leaders, citizens move their wealth outside the economy. But, fearing this, predatory governments impose restrictions, including on factor mobility, particularly capital. Narrow-based elites themselves may be the ones to engage more in capital flight as they live with a constant fear of losing their illegitimate power. It is therefore plausible to assume that in economies with strict controls on capital mobility, the largest part of capital flight may come from the elites. The case of General Abacha, his family and their associates is a clear illustration of this point. In Burundi, despite strict controls on capital mobility even before the current war erupted in 1993, capital flight was relatively high. Between 1985 and 1992 it represented 30% of total revenue.[33] This rate was higher than in Côte d'Ivoire (5%), Zimbabwe (13%), Mauritius (19%), Rwanda (20%) and Ghana (29%). The rate was, however, lower than in Chad (91%), Cameroon (58%), Uganda (57%), Nigeria (56%), Zambia (53%), Mozambique (52%), and Gabon (36%).[34]

It is probable that those involved in capital flight were chiefly members of the Bagaza regime before it was deposed in 1987, and subsequently, the Buyoya elites, for two reasons. First, strict capital controls that were in place meant that one needed the complicity of those enforcing the controls to violate them. Such complicity could be easily obtained by those in power and their associates. This hypothesis is plausible because data on the parallel exchange rate show no substantive increases until only the last two years (1991 and 1992) so the market was not widely used to make these transfers. In 1991/92, the opportunity to expatriate capital may have spread to non-elite members resorting to the parallel market to change their assets into foreign currency before expatriation. In the late 1980s and early 1990s, Buyoya relaxed many of the draconian controls Bagaza had put in place, including overseas travel that could have helped higher capital flight. Second, it is the members of the elite who had substantial capital to send abroad as most other Burundians lived in poverty. If these hypotheses were plausible, they would illustrate Adam and O'Connell's (1999) proposition, discussed above, that economic distortions benefit the elites. These distortions should not be confused with the taxes discussed by Azam (1995) in the case of Côte d'Ivoire.[35] There has been a pattern among the elites in Burundi since the beginning of the current war in 1993 to send their children to Europe or North America, including very young ones. The parents stay in Burundi, well protected by bodyguards from the army. Back home, they continue preaching that those in the country should keep fighting since it is others who bear the brunt of the war.[36]

To conclude this section, both theory and empirical results show why narrow-based governments behave irresponsibly. However, the behaviour makes sense once we understand the dynamics and motivations within the elite group. In the specific case of Burundi, it is too easy, ex-post, to wonder how Burundian leaders have been so "irrational" for almost four decades. We should not forget that this "irrational" system was put in place in the 1960s and survived four civil wars before the 1993 war broke out. It was a stable system.[37] It could have withstood the recent shocks (and we would probably not be questioning it) if the external events that destabilized the system had not taken place. These

[33] It is interesting to note that the rate jumped from 1 to 10 and 32% in 1985, 86 and 1987. The latter year was marked by a political regime change, whereas 1986 is the year when Burundi accepted to implement a structural adjustment programme. Is there any link? A number of Burundian investors expatriated their capital after the beginning of the war in 1993. Some went to Rwanda, Uganda and Kenya. Although we do not have statistics to back our claim, we think that capital flight was substantially higher after 1993.

[34] We thank Anke Hoeffler for providing the data from which we computed the averages.

[35] In his analysis, taxes are collected from rich members of the ruling ethnic group in the South to be invested in the poor North in projects that may be economically nonviable to maintain social cohesion.

[36] We are grateful to Paul Collier who hinted to us that capital flight could be a possible explanation why Burundi's political elite does not seem to care about political stability and economic efficiency.

[37] On the basis of the fixed point theorem, Ngaruko and Nkurunziza (2000) found that the period from 1960 to the late 1980s was characterized by two stable equilibriums (the period around the early 1960s and the period from early 1970s to late 1980s), and one unstable equilibrium (the mid 1960s to early 1970s).

include the wave of democracy that swept the continent in the early 1990s, the genocide in Rwanda, the war in Congo, etc. (see Ngaruko and Nkurunziza, 2000; Nkurunziza and Ngaruko, 2002a/b). What destabilized the system was not its implosion; its internal dynamics has remained relatively intact. The system was destabilized by unpredictable external shocks and it is still struggling to surmount their impact. A natural question is why the international community never exerted pressure on the Bururi elite, until very recently, to open up. We have already argued that the interest of the international community was not to have equitable governments in Africa but rather to have dependable governments it could use whenever needed. The case of Zaire under Mobutu is probably the best illustration of this fact.

## 5. CONCLUSION

This study has analysed the process of economic growth in Burundi over the period 1960–2000. The pattern of economic growth followed closely the country's political trajectory represented in three subperiods: 1960–1972, 1972–1988 and 1988 to date. Economic decline during the first subperiod was largely due to two main factors: First, decolonization resulted in the loss of Burundi's export markets in neighbouring Rwanda and Congo, which, together with Burundi, had formed an economic union under Belgian rule. The second factor is political instability, resulting from a legacy of high ethnic tensions from the colonial power at a time when different groups in the country were competing to control state institutions and some assets left by departing Belgians. These tensions resulted in two civil wars in 1965 and 1972, respectively. During the period 1972–1988, economic growth was fuelled by an increase in coffee export revenues in the second half of the 1970s and massive foreign borrowing. Large investments were undertaken by the state mostly in inefficient projects. During the third subperiod, economic decline was a result of three civil wars, a total economic blockade, the freezing of aid from international donors, and the collapse in investment and production infrastructure.

More specifically, the study explored four main economic factors to explain the patterns of economic growth in Burundi. First, farmers have been over-taxed through several means, including direct taxation, low cash crop producer prices, exchange rate policy and seignorage. This policy has prevented accumulation in agriculture and its transformation into a more productive sector. In a system where returns to investment have been appropriated by other groups, producers faced disincentives to domestic accumulation leading to stagnation (Benhabib and Rustichini, 1996). Second, while the industrial sector benefited from the massive external borrowing that took place from the mid 1970s, the process disconnected economic growth from an increase in productivity in agriculture (Figure 3). Third, the creation of state-owned enterprises resulted in bureaucratic expansion and predation that mostly benefited elites from the southern province of Bururi. Fourth, the ensuing public deficits increased fiscal pressure on private manufacturers to secure massive subsidies to be transferred to poorly-managed public enterprises. This pressure was transmitted to agriculture through export crop marketing boards.

As Hugon (1993) has remarked, an economic approach cannot, alone, explain the performance of a war economy such as Burundi's. Therefore, the study blended traditional macroeconomic growth analysis with microeconomic and institutional approaches to understand the process of economic growth in Burundi. This approach was necessary since in Burundi, more than economic factors, political factors generate macroeconomic variables used to analyse economic performance. For example, the tragic events of 1972 saw the country lose more than 200,000 of its most active labour force, wiping out part of its best human capital stock in just about four months. From an economist standpoint, this was a disaster but political imperatives prevailed over economic considerations. In the 1990s, in the war opposing rebels and the government, destruction of physical capital including health centres, administrative buildings, private residences and other non-military infrastructure has become the norm, especially by the rebellion. Given this picture, it would be too naïve to assume that economic growth in Burundi might just be predicted by values of physical and human capital, which are themselves endogenous to political variables. In this light, political economy appeared as a more powerful tool in explaining Burundi's economic performance.

The study has argued that Burundi's dismal economic performance is mainly a direct result of a failure of the country's governance. Ruled by dictators obsessed with controls, the country's economy has remained highly centralized with a myriad of economic controls. Monetary, exchange rate and other financial policies were put in place to control the allocation of resources. Even more directly, the creation of state corporations to oversee the marketing of agricultural and imported products was another way of ensuring that the government was in charge of the allocation of strategic products, including domestically produced food. The overarching objective of the policies was the government's desire to hold its grip over the different sources of economic rents. Different methods were used to distribute these rents among the ruling elite. For example, by creating a big number of state corporations and putting their management into the hands of those close to power, rent-sharing was one of the functions of state enterprises. Understandably, the rent-sharing system has not been concerned with efficiency and most of those firms have rarely been profitable.

Using discriminatory education policies, the country chose to limit its stock of human capital by filtering access to education to ensure that the system of rent-seeking was stable. Through strategic allocation of education infrastructure in the country and through other complex mechanisms, the leaders favoured those identifiable with their group, aware that education was the conduit through which Burundians could improve their living standards, as the earnings equation has suggested. Other policies included predation over farmers by offering them the lowest prices in the region; different forms of taxation, as well as a complete negligence of the agriculture sector, despite it being the backbone of the economy. Lack of a basic market infrastructure in rural areas and the inappropriate interventions in the agricultural sector have locked farmers into subsistence agriculture. On the whole, economic efficiency has been sacrificed in order to fulfil individual and group interests.

As a result, given that economic principles have been systematically disregarded in the management of the country's economy, it is not surprising that Burundi has performed so poorly. The policies pursued have led to recurrent wars and a generalized decline in the standards of living of the majority of Burundians. Currently, Burundi's per capita income is almost half its 1960 level. In addition to the huge number of lives lost due to five episodes of an endless civil war, the country has been caught in a cycle of construction, destruction and re-construction, both in terms of physical and human capital, and with an incalculable cost to the economy. The recurrence of war, with its accompanying destructions, has created extreme uncertainty, which in turn has affected economic activity through an extremely low level of private investment and high credit costs. Burundi's dismal economic performance has led to the conclusion that it will take 225 years to cut the country's poverty level by half, if Burundi's track record remains unchanged (Ali Ali, 2001).

The natural question following these discussions is how will Burundi recover from these long years of economic decline? What is shown in the study is that economic decline has been due to identifiable factors that could have been avoided. Most of the country's economic failure is attributable to poor governance. Therefore, without pretending to have a miracle solution to the deeply rooted problems facing the country, it is not appropriate to advocate economic measures in Burundi without deep political reforms. When the current war broke out in 1993, the country was seven years into a structural adjustment programme that had been hailed as a success in Africa.As the war raged, most of the gains made were lost in a few months. Radical political changes are needed to lay the basis for a stable and equitable system in which the fruits of economic activities will benefit first and foremost those who undertake them, namely Burundian farmers. If the leadership transforms its zero-sum political system into one based on reputation and predictability, politicians will become more accountable to the population. This change will ease government controls over the economy, setting the priorities from patronage to targeting the rural populations where more than 90% of their constituencies live.

To achieve this objective, there will be a need for confidence building between Burundi leadership and their populations. Burundians feel alienated from their leaders. Policies ignoring farmers' needs, such as forcing them into the production of crops that are not profitable to them, have been a mistake that will need to be redressed. In Burundi as elsewhere, economic agents such as households and firms respond to incentives so their contribution to the process of economic growth will in large measure depend on the structure of incentives government allows within the economy (Easterly, 2001), such as price incentives. Obviously, any effort to boost the country's economy will be futile unless the root causes of the long cycle of violence are addressed. In all the crises that have rocked the country since its independence, the major players have been politicians, although the population they claim to represent is the one that has been paying the price.

Therefore, more important than any economic considerations, the protection of human life and socio-economic integration of all Burundians without distinction on the basis of regional or ethnic background should be the basic principle guiding political and economic reforms. It remains to be seen whether the recent political "reforms" and the installation of a new "inclusive" interim government on 1 November 2001 will bring about such changes. As change is expected to be engineered by the same members of the old ruling class who are still very powerful, Nkurunziza and Ngaruko (2002a) argue that the efforts under way to create a more open and accountable political system are not incentive-compatible. Given their vested interests, the old ruling elite cannot credibly commit to change. In such a context, external pressure is needed to force change (Addison and Murshed, 2002).

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