

Ndikumana, Léonce

Working Paper

Fiscal policy, conflict, and reconstruction in Burundi and Rwanda

WIDER Discussion Paper, No. 2001/62

Provided in Cooperation with:

United Nations University (UNU), World Institute for Development Economics Research (WIDER)

Suggested Citation: Ndikumana, Léonce (2001) : Fiscal policy, conflict, and reconstruction in Burundi and Rwanda, WIDER Discussion Paper, No. 2001/62, The United Nations University World Institute for Development Economics Research (UNU-WIDER), Helsinki

This Version is available at:

<https://hdl.handle.net/10419/52990>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



United Nations
University

WIDER

World Institute for Development Economics Research

Discussion Paper No. 2001/62

Fiscal Policy, Conflict, and Reconstruction in Burundi and Rwanda

Léonce Ndikumana*

August 2001

Abstract

The ethnic conflicts in Burundi and Rwanda have severely weakened the economies and worsened the structural fiscal imbalances of these countries. Government revenue has declined due to the erosion of the tax base and tax administration capacity. At the same time, governments have shifted the allocation of resources from capital and social expenditures to military and security spending. This paper argues that there is a strong connection between a military-intensive fiscal policy stance and the lack of political legitimacy. A narrow-based regime tends to increase spending on security to increase its chances of survival. This strategy has dire social and economic consequences. In the long run, the economy may be caught in a “militarized poverty trap.” Fiscal stability is therefore contingent upon institutional reform aimed at establishing accountable and democratic governance.

Keywords: fiscal policy, conflict, sub-Saharan Africa

JEL classification: O23, O55, H56

Copyright © UNU/WIDER 2001

* Department of Economics, University of Massachusetts, Amherst, MA 01003; ndiku@econs.umass.edu

This study has been prepared within the UNU/WIDER project on New Fiscal Policies for Growth and Poverty Reduction which is directed by Tony Addison.

UNU/WIDER gratefully acknowledges the financial contribution to the project by the Government of Italy (Directorate General for Development Cooperation).

Acknowledgements

First draft presented at the project meeting in Helsinki, Finland on November 17, 2000. The author is grateful for comments from Tony Addison, Karin Kronlid, and other participants to the meeting. He appreciates stimulating feedback and helpful suggestions from James Boyce.

Tables and figures appear at the end of this paper

Effective states have learned how to maintain their legitimacy, and their legitimacy helps keep them effective. (Goldsmith 2000: 18)

Introduction

Fiscal policy in Burundi and Rwanda poses particular challenges to national leadership as well as the donor community. These two countries are poor and have been plagued by chronic ethnic conflicts since the eve of their independence.¹ The ethnic crisis of the early 1990s has resulted in the collapse of the economy and has weakened administrative capacity. Fiscal crisis has been, by and large, a result of the crisis of production and trade. While Rwanda is slowly rebuilding its economy and its tax base, Burundi continues to slump into economic distress as violence continues amid sluggish peace negotiations.

One of the most challenging tasks of fiscal policy is the management of public expenditures. First, authorities must allocate public money between capital expenditures and recurrent expenditures. Second, they must decide on the allocation of funds between military expenditures and civilian expenditures. This decision poses particular challenges in countries in conflict or evolving from conflict like Rwanda and Burundi. Military expenditures typically increase during conflict and tend to remain high even after conflict is apparently resolved. At the same time, revenues are low during and after conflict. This implies that higher military expenditures are afforded at the expense of lower investment in socially productive sectors and higher budget deficits.

The relationship between military expenditures and conflict is complex and can run both ways. During conflict, military expenditures rise as governments build up their security apparatus to restore domestic security. The buildup of the military apparatus can precede conflict as governments preemptively prepare for potential external aggression or internal dissidence. In turn, high military expenditures may indirectly fuel conflict in the context of an ethnically polarized political system. When the political system is dominated by a particular ethnic group or region, as it is the case in Burundi and Rwanda, the expansion of the military apparatus affects the balance of power among social groups. A stronger military implies higher political leverage for the ruling group and further alienation for the disenfranchised segments of the population, especially when the security apparatus is used for repressive and oppressive purposes. Consequently, the military buildup can increase the social divide and indirectly fuel conflict.

High military expenditures also have important implications for discrimination with regard to access to national resources. In Burundi and Rwanda, like in other labor-surplus countries, the military constitutes a source of lucrative employment. If access to the military is restricted along ethnic or regional lines, expansion of the military implies expansion of employment opportunities only for members of the ethnic or regional entities in power. This form of discrimination can cultivate frustration and discontent, thereby worsening the social divide.

¹ For a background on ethnic conflicts in Burundi and Rwanda, see, among others, Prunier (1995), Lemarchand (1994), and Reyntjens (1995a, 1995b).

This paper investigates various ways in which fiscal policy relates to conflict and discusses the role of fiscal policy in post-conflict reconstruction and poverty reduction in the cases of Burundi and Rwanda. Section 1 examines the scope and magnitude of the macroeconomic and fiscal crisis. During the 1990s, Burundi and Rwanda have experienced both political crisis and economic distress. However, the evidence suggests that the economic crisis predates the onset of the ethnic conflicts of the early 1990s. These conflicts have exacerbated the economic decline whose causes are inherent to the structural weakness of these economies and political instability arising from ethnicization of the political process.

Section 2 discusses the motivations for high military expenditures by a regime that must choose between military expenditures and productive investment. The section discusses the role of state legitimacy and incentive structures for expenditure management and tax policy. In the absence of the appropriate “carrots and sticks”, a narrow-based regime optimizes by selecting a combination of high military expenditures and low social expenditures. In the long run, economic growth is retarded and the country is caught in a “militarized poverty trap”.

Section 3 examines how aid, debt, and debt relief relate to fiscal policy in post-conflict reconstruction. Rebuilding the economy after conflict necessitates a sizeable influx of foreign aid and a reduction of the debt burden. However, the benefits from increased aid flows and debt relief largely depend on how the funds are allocated and how they are managed. It is imperative that an important share of international assistance be allocated to poverty reduction programs and to rebuilding economic infrastructure. Moreover, reconstruction programs will be sustainable only if external funding stimulates (i.e., “crowds in”) domestic resource mobilization instead of substituting (i.e., “crowding out”) domestic resources (Boyce 2000).

Section 4 discusses the role of fiscal policy for poverty alleviation and highlights recent policy developments in Burundi and Rwanda. The current Rwandan regime has taken important steps toward fiscal policy reform that promise to yield positive results in the near future. However, the task ahead is still enormous. The situation in Burundi is more complex; the picture is bleak for the near future unless a viable negotiated settlement to civil war is reached soon.

Section 5 concludes with a summary of the main findings and highlights the main policy implications.

1 Anatomy of a macro-fiscal crisis

1.1 Aggregate macroeconomic performance

The decade of the 1990s has been characterized by both a deterioration of the politico-social conditions and the acceleration of economic decline in Burundi and Rwanda. However, the evidence shows that the decline in economic performance predates the onset of the 1993 ethnic crisis in Burundi and the 1994 genocide in Rwanda. To a large extent, the causes of the decline in economic performance are structural; ethnic

upheaval amplified economic decline in the context of an already fragile macroeconomic environment.

After a relatively steady growth in the second half of the 1970s, income in Rwanda has declined since the early 1980s (Figure 1). From 1970 to 1979, per capita GDP increased by about 2% annually. The following decade, the growth rate dropped to 0.25% before turning negative (-5%) in the 1990s. The decline in income was exacerbated by the 1994 genocide as agriculture and manufacturing production collapsed. Per capita income declined by a record 40%, from \$225 in 1993 to just \$154 in 1994 (Table 1). Since 1995, income has increased as agricultural production resumed following the resettlement of the internally displaced population and the return of refugees starting in 1996.

In Burundi, income has stagnated since the 1970s and started to decline in the early 1990s (Figure 1 and Table 2). The ongoing ethnic crisis that started in October 1993 has prolonged and exacerbated the downfall of output. Unlike earlier episodes of ethnic violence (like in 1972) that caused only a temporary shocks to output, the current conflict has caused a larger decline in production because it has lasted longer and therefore prevented economic recovery.

The ethnic crisis in Burundi and Rwanda has negatively affected all sectors of the economy, especially those that rely most on high technology and skilled labor as well as export-oriented activities (IMF, 2000a). For example, output in the transport and telecommunication sector in Rwanda declined by over three-fourths in 1994. Manufacturing production decreased by 35% in 1993 in Burundi, and by 35% in 1994 in Rwanda. Agricultural exports declined by 73% in 1994 in Rwanda and by 20% in 1993 in Burundi, while coffee exports plunged by 94% in 1994 in Rwanda and by 43% in Burundi.²

However, as pointed out earlier, the decline in production on the aggregate and sectoral levels preceded the ethnic crisis of the 1990s and was only worsened by it. As Figure 2 shows, food production in Rwanda was basically stagnant in the 1980s, and started declining towards the end of the decade. In Burundi, the crisis has reversed the slow but steady increase in food production experienced from the 1980s. While food production is increasing since 1995 in Rwanda due to improvement in internal security, it is still declining in Burundi as a result of poor security conditions.

1.2 Fiscal crisis

1.2.1 Low and falling fiscal revenues

Just like aggregate economic decline, the fiscal revenue crisis in Burundi and Rwanda does not originate from the ethnic crises of the 1990s. There are three important

² The statistics reported here should be interpreted with caution. The data on production is generally plagued by severe measurement problems. Food production, part of which is non-market production, is subject to even more measurement problems than production of export crops.

categories of factors that contributed to the revenue crisis: structural factors, policy and institutional factors, and the effects of civil war.

The two main structural factors that constrain tax revenues in these two countries are the weakness of domestic aggregate demand and the lack of diversification of the production system. In both countries, incomes are so low that the amount of taxes that can be potentially levied without discouraging consumption and investment is naturally low. The manufacturing and cash crop sectors are the key generators of tax revenue. Underdeveloped before the crisis, the manufacturing sector suffered a major setback due to ethnic violence. The cash crop sector has not recovered from the crisis. Because of the lack of diversification, tax revenue is heavily dependent on taxation of international trade, which constitutes over 20% of current revenue (Table 3). Since the 1980s, trade tax revenues have declined as a result of the decline in both the volume of trade and the average rate of taxation on international trade (see Figure 3 for Burundi).³ This implies that measures intended to lower tariffs in the context of trade liberalization may further depress government revenues at the same time that these two countries need higher government resources to finance reconstruction programs.

With respect to the fiscal impact of conflict, Burundi and Rwanda differ significantly from other 'post-conflict' countries whose export earnings are less dependent on labor-intensive products (like agriculture) and more dependent on capital-intensive products (like minerals and oil). In mineral or oil exporting conflict-prone countries (like the Republic of Congo), export revenues are likely to fluctuate less following population displacement. In such countries, tax revenues from international trade will be less affected by conflict and fiscal recovery will be easier after conflict than in the case of agriculture-dependent countries like Burundi and Rwanda.

The institutional constraint to fiscal revenue creation in Burundi and Rwanda is twofold. First, these countries have weak tax administration capacity. They lack both skilled manpower and the appropriate technology for collecting taxes. Second, both systems appear to be excessively lenient, granting widespread tax exemptions to public enterprises, diplomatic missions, non-governmental organizations, and private investors often on questionable grounds. In 1997, tariff exemptions in Burundi amounted to 21% of total imports (IMF, 2000b: 22).⁴ These exemptions carry a high opportunity cost given that taxes on imports represent a large fraction of total fiscal revenues: about 12% of total revenues in Burundi and 23% in Rwanda in 1998. The Rwandan new regime has embarked on major reforms of the fiscal system that include, among other measures, a significant reduction in tax exemptions (IDA and IMF 2000). These measures should improve tax collection in the coming years.

The third factor that contributes to the fiscal revenue crisis in Burundi and Rwanda in recent years is the ethnic conflicts that have disrupted economic activity. Following the genocide in Rwanda, not only the tax base collapsed, but also tax administration capacity was eroded. In 1994, the volume of taxes collected declined by a staggering

³ The data on taxes for Rwanda are missing for the 1980s. But the data for the 1970s and the 1990s indicate that the tax-to-trade volume ratio has decline even more for Rwanda than for Burundi (see Table 3).

⁴ Exemptions to unspecified beneficiaries represented 29% of total exemptions in 1997. These are exemptions to entities other than diplomatic missions, government entities, NGOs, and "investments".

75%, including a 81% decline in individual income tax and excise tax and a 70% decline in tax on international trade (IMF 2000a: 72). With the resumption of production following improvement in internal security, tax revenue has recovered progressively, reaching and exceeding the pre-genocide level (Table 4).

In Burundi, the economic embargo imposed on the Buyoya regime following the July 1996 military coup had severe effects on government revenue by reducing the volume of international trade.⁵ The volume of taxes on international trade declined by 41% in absolute terms and by 34% as a percentage of GDP (IMF 2000b: 21). Tax revenue is likely to continue to decline as long as political instability prevails.

1.2.2 Public expenditures: a crisis of (mis)allocation

In examining the expenditure dimension of the fiscal crisis, we must pay attention not only to the levels and trends of government expenditures, but also and most importantly to the distribution of expenditures across sectors. From a sub-Saharan African (SSA) standard, Burundi and Rwanda do not stand out as having oversized governments compared to other countries in conflict or evolving from conflicts. Total public expenditures in Burundi and Rwanda are lower than the average for the SSA region (Table 6).⁶

The fiscal crisis in Burundi and Rwanda has been characterized by a marked shift in the allocation of resources away from capital and social expenditures towards military/security expenditures. Burundi and Rwanda have among the highest ratios of military expenditures to total government expenditures in sub-Saharan Africa (Tables 6 and A2). Military expenditures exploded in the 1990s due to ethnic violence (Figure 4). In Rwanda, the increase in military spending was sparked by the invasion by the Rwanda Patriotic Front (RPF) in 1990. From an average of just over 5,000 in the 1980s, the army personnel increased to 30,000 in 1991 (World Bank 2000a). Military expenditures increased by 122% in 1990 and 41% in 1991 (Table 4).

The outbreak of violence in 1993 in Burundi also caused an increase in military spending. The military personnel increased by 31% in 1994, 29% in 1995, and a record 40% in 1997. The share of military expenditures in government expenditures rose from an average of 7% in the 1980s to 12.5% in 1994 and continued to increase by about 20% annually over the 1994-1997 period.

The heavy investment in the defense apparatus has come at great economic and social costs, especially marked by a large decline in capital expenditures. Capital expenditures in Burundi declined by 22% in 1994, 33% in 1995, and 45% in 1997. As a result of the economic embargo in 1996 and the ensuing general deterioration of the economy, both

⁵ For details on the context, motivation, and effects of the economic embargo, see Ndikumana (2000).

⁶ In general, SSA countries do not have larger governments than countries in other developing regions. Table A1 in the appendix presents various indicators of government expenditures, size, and revenues. SSA's averages are not systematically higher or lower than those of other regions. Goldsmith (2000) finds that while African governments are not larger than in other developing countries, they do tend to perform much below their capacity and "leave many important things undone." Nonetheless, the fact that African states are as inefficient as other states in other developing regions gives little comfort for the large majority of the population that lacks access to basic social services.

domestic and foreign funding of capital expenditures dried up. The volume of domestic funding declined by 59% while external funding dropped by 29% (IMF 1997: 20). Capital expenditures in Rwanda were at an all-time low of 16% of total government expenditures in 1994, down from an average of about 33% in the 1980s (Table 4). Under the post-genocide regime, capital expenditures have increased steadily.

Another important aspect of fiscal policy that merits attention is the management of the civil service. Ethnic conflict has resulted in massive losses in human capital. In rebuilding the civil service, these countries must pursue two equally important and interdependent objectives. The first is to promote discipline, professionalism, and competence in the civil service. This may involve redesigning incentive structures, including compensation schemes, to make public sector jobs attractive to skilled workers. The second objective is to depoliticize public employment practices by instituting hiring and promotion procedures that are based on merit, transparency, and equal opportunity for all citizens. While overrepresentation of particular ethnic groups in state employment may be common in sub-Saharan Africa, this practice has been carried to an extreme in Burundi and Rwanda. In the pre-conflict period, discrimination in public employment disenfranchises certain segments of the population, alienating them from the economic system. The Tutsi under the Hutu regimes in Rwanda and the Hutu in Burundi throughout the post-independence period were subject to this discriminatory practice in public employment. Alienated segments of the population can be easy targets for political mobilization by opposition movements, which can fuel social tensions and even generate violence in the absence of peaceful mediation mechanisms. In contrast, equitable public employment policies can serve as a tool for reconciliation and a signal of the end of the era of political exclusion. Equity is a critical element of social justice and can serve as a credible sign of commitment to peace building on the part of the post-conflict regime.

Government expenditures in social sectors are lower in Burundi and Rwanda compared to other African countries (Tables 6 and A2 and Figure 4). For the 1985-1997 period, expenditures on education represented 2.9% and 3.3% of total government expenditures in Burundi and Rwanda, respectively. The average for SSA was 4.9% for the same period. Expenditures on health also are low and basically stagnant since the 1970s.

Because of low investment in social sectors, the coverage of social needs is mediocre in both countries. A large fraction of the population does not have access to health care, drinking water, and other basic needs. Burundi and Rwanda have low primary school enrollment rates compared to other developing countries. In Burundi primary enrollment declined drastically since the beginning of the ongoing conflict. The ratio declined from 54% in 1990 to just 38% in 1995 and 36% in 1997. Primary enrollment is higher in Rwanda (70% in 1995) and it has been higher even in the past: In 1980 and 1990, the rate was 59% and 66% for Rwanda, compared to 20% and 54% for Burundi. While the enrollment rates are rising in Rwanda with the improvement in security, no progress can be made in Burundi as long as violence continues.

1.2.3 Macroeconomic consequences of fiscal imbalances

In the 1990s, Burundi and Rwanda have experienced large budget deficits (Tables 4 and 5). From 1992 to 1997, the deficit increased from -5% to -14% in Rwanda. To meet higher spending, governments have resorted to higher monetary financing of the deficit. The Burundian government frequently forced the Central Bank to loosen monetary

policy rules and to keep interest rates artificially low to ease government borrowing from the banking sector. In 1997, the financing of government budget was based on an increase in the statutory limit of government advances from the central bank from 10% to 25% of previous year's revenue (IMF 1997: 11). The monetization of the deficit has added upward pressure on inflation, already fueled by supply-side bottlenecks due to the collapse of production and international trade.

2 Fiscal policy in politically fragile societies

2.1 Military expenditures and state legitimacy

An important factor of military-intensive fiscal policy is the lack of political legitimacy of the state. A state that lacks political legitimacy has strong incentives to invest in the security apparatus, which is used to oppress, suppress, and repress the demand for political openness. State legitimacy need not be contested explicitly to induce high spending in security. A non-democratic regime is likely to invest in security as a preemptive measure to position itself favorably in the event of contestation of its power.

The cases of Burundi and Rwanda are unique illustrations of the links between military expenditures and state legitimacy.⁷ Post-independence regimes lacked legitimacy, having gained power by force. Second, these regimes were and are still dominated by one ethnic group and are therefore inherently exclusive. Indeed exclusion along ethnic lines is a perennial feature of governance in Burundi and Rwanda (see Ndikumana 1998, 2000; Ngaruko and Nkurunziza 2000; Uvin 1998). Exclusion breeds frustration, and frustration eventually incites resentment, which can lead to violent opposition in the absence of peaceful conflict resolution mechanisms. This cycle of exclusion-oppression-violence is well anticipated by the regime, which preemptively invests in building a strong repressive apparatus.

Regional monopolization of power is another important feature of post-independence governance in Burundi and Rwanda. In Burundi, the south has had the monopoly of the control of the military and the government. The monopolization of the socio-political system has allowed the South to also control the economy through patronage, corruption, and rent-seeking (Ndikumana 1998; Ngaruko and Nkurunziza 2000). In Rwanda, regional monopoly of power was a central feature of the Habyarimana regime. Access to political and economic privileges was reserved primarily to members of the *akazu* (literally meaning "house" or "household"), Habyarimana's entourage, predominantly those from Habyarimana's native prefecture.

The threat to state legitimacy induces increases in military expenditures. Prior to 1990, Rwanda had a relatively small army. The regime had probably underestimated the importance of the armed opposition from the exiled Tutsi population, which under the RPF, proved its military strength during the 1990 invasion. This invasion led the

⁷ For Rwanda, the foregoing analysis is particularly relevant for the pre-genocide era. There may be important differences with respect to the international context as well as government's ideology and agenda between the pre and post-genocide regimes.

Habyarimana regime to quickly build up its military. From 1990 to 1994, the size of the military personnel increased five fold, from 6,000 to 30,000 (World Bank 2000a). In the past, the Rwandan regime had counted on assistance from its political allies, especially France, in the case of any attack from outside. It is indeed assistance from France that eventually saved the regime during the 1990 invasion by the RPF.

Over time, the state legitimacy-military expenditures dynamics can degenerate into a vicious cycle of high social tension and excessive military spending. As summarized in Figure 5, a regime that takes power by force inherits questionable rights to rule (thus lack of legitimacy), causing high insecurity, which induces the regime to invest in military/security apparatus to maximize its chances of survival. High military expenditures “crowd out” social spending, creating frustration via deprivation among the disenfranchised population. Frustration can breed social tension and can serve as a fertile ground for violent opposition. Opposition induces the incumbent regime to increase the use of force in suppressing the demand for change, which perpetuates illegitimacy and high security expenditures. Failure of the incumbent regime to negotiate with the opposition peacefully or to contain the opposition can result in a violent change of regime, which sets off yet another cycle of lack of state legitimacy, high military expenditures, high social tension, instability, and possibly violence.

2.2 Trade-off between security expenditures and social expenditures

A narrow-based regime, whether from an ethnic, regional, religious, or on any other dimension, often tends to maximize its chances of remaining in power by heavily investing in security. Such investment is intended to produce “security”, which is a “good” from the regime’s perspective, but may be a “bad” from the society’s perspective, especially when security is used for repressive purposes. Expenditures on security carry a high opportunity cost because they compete with expenditures on productive infrastructure and social service provision.⁸

It is important to note that some expenditures classified as “security” may indeed be helpful in increasing security for the general population. The breakdown of the rule of law and order has adverse effects on everyone, and can be harmful for the poor who cannot defend themselves or afford private security. Hence, measures to restore the rule of law can have a progressive impact. Nevertheless, in the cases of Burundi and Rwanda, the security of the poor—and the security for all for that matter—has not necessarily been the motivation for spending on security. The security apparatus usually serves the interests of the regime, and is often used for repressive purposes.

In the following analysis, expenditures on security/military are considered as consumption, yielding utility for the regime. The economy produces output, which is spent on security while the residual is used to finance expansion of social and physical capital stock. The conditions for optimality are derived to illustrate the behavior of a

⁸ Knight, Loayza and Villanueva (1996) explore the links between military expenditures and economic performance in a large sample of developing and developed countries. They investigate the benefits of cuts in military spending for economic growth (“peace dividend”). Their results indicate that these benefits can be potentially large.

myopic regime seeking to maximize its chances of survival. The regime maximizes a utility function which includes military/security expenditure (m) as one of the arguments. The other arguments are ignored for the sake of simplicity. Social and physical capital are lumped together into one composite capital stock, h , which depreciates at the rate of δ .⁹ If both the utility function and the production function are nicely behaved (monotonic and concave) then a solution to the optimization problem exists. The problem can be written as follows:

$$\max U = \int_0^{\infty} e^{-\rho t} u(m(t)) dt \quad (1)$$

$$\text{such that } \dot{h}(t) = f(h(t)) - m(t) - (n + \delta)h(t) \quad (2)$$

The present-value Hamiltonian for the above problem is (dropping the t argument for notational simplicity):

$$H = e^{-\rho t} u(m) + \lambda(f(h) - m - (n + \delta)h)e^{-\rho t} \quad (3)$$

The first-order conditions for optimality are:

$$\dot{h} = f(h) - m - (n + \delta)h \quad (4) \equiv (2)$$

$$\frac{\dot{m}}{m} = \frac{u'(m)}{u''(m)} [f'(h) - (n + \delta + \rho)] \quad (5)$$

The solution set to the above problem implies a trade-off between military expenditures and accumulation of social and physical capital. Typically, a regime with weak legitimacy tends to choose a situation of high expenditures on security. Consequently, social capital is depleted following the law of motion in equations (2) and (4). The well being of the society would be enhanced if the regime chose a situation in which military expenditures are low and gradually declining, allowing social capital to increase, thus increasing economic growth. Such a situation is illustrated in the phase diagram in Figure 6 by point D (for desirable). This figure summarizes the optimality conditions in equations (4) and (5). Along the vertical line at $h = \hat{h}$, m is constant ($\dot{m} = 0$); m increases ($\dot{m} > 0$) on the left of this line, and m decreases ($\dot{m} < 0$) on the right of the line. Along the curve $\dot{h} = 0$, social capital stock is constant; it increases below this curve and decreases above this curve.

One important question is how to induce a regime to choose the socially desirable solution where resources are shifted from military expenditures towards social capital accumulation. When the regime is facing a binding budget constraint, the negative effects of military expenditures on social capital are exacerbated, especially because the

⁹ In practice, allocation of resources between physical capital stock and social services can also be problematic. Seeking to achieve faster economic growth, governments may choose to allocate disproportionately high resources into physical infrastructure to the detriment of social services. Such pro-infrastructure bias can be motivated by a government's desire to be seen as "strong reformer", which earns high marks from international lending institutions.

government may find it more difficult to obtain external funding for military expenditures than securing assistance for socially productive investments. The issue here is *ex ante fungibility* of aid.¹⁰ The regime therefore gives priority to security expenditures for on-budget expenses, hoping for external funding for social programs. When the expected external funding for social programs does not materialize, the country ends up in a high military expenditures-high poverty trap. Note that even when external assistance is forthcoming, this may induce the regime to further increase security spending to the detriment of social expenditures, owing to *ex post fungibility* of aid. This may cause external funding to dry out in the future if donors find it unacceptable that their resources are used to fund the buildup of the security apparatus.

Without the right incentive structure, a narrow-based regime is likely to choose a situation like S (for security-seeking) in Figure 6, where social capital is depleted as the military/security apparatus is built up. The appropriate incentive structure that can lead the regime to select a socially desirable combination (m, h) typically includes “carrots” and “sticks”. Under a narrow-based regime, domestic political pressure plays little role in the incentive mechanism. If anything, domestic political pressure tends to push the regime to choose a (high m , low h) situation to maximize its *force de frappe* to contain the opposition. It is therefore necessary that the “carrots” and “sticks” be engineered or at least supported by a third party, like the donor community. The donor community has a high leverage through development aid. The optimal move by the donor community is not to turn off the resource tap but to use aid to induce socially desirable choices by the regime in order to enhance social development.

However, the ability of the donor community to influence the behavior of a regime is constrained by the divergence among individual donors’ preferences and priorities. Motivations for aid consist of a complex mixture of developmental, humanitarian, and strategic goals. These goals are donor-specific and may even compete against each other (see Murshed 2000). The success of post-conflict reconstruction may depend on the ability of donors to speak with one voice, at least for key issues such as poverty reduction.

Burundi and pre-genocide Rwanda fit fairly well the model-regime described above. First, these countries have been ruled by narrow-based regimes, controlled by one ethnic group, with a high regional concentration of power. Second, these regimes came in power by force and thus have weak legitimacy. To maximize their chances of survival, these regimes have typically invested heavily in the military/security apparatus, especially in the most recent decades as armed opposition increased. This pro-military attitude has serious negative social consequences and hampers long-run economic growth.

Governance structures must change in Burundi and Rwanda for these countries to achieve long-run stability. In Burundi, efforts for a peaceful settlement have produced few tangible results so far. But a speedy conclusion of the process is definitely not desirable either if it means overlooking hard questions of power sharing, security, citizens’ rights, and broad-based development. The case of Rwanda is more complex.

¹⁰ See McGillivray and Morrissey (2000) for a survey of the literature on the impact of aid on fiscal behavior of the government. The authors discuss the issue of aid fungibility as it affects fiscal behavior.

While the country is making visible progress in the areas of internal security and economic reform, the political process remains opaque.

2.3 Tax policy and incentive structure

Tax revenue collection depends, among other things, on three important factors: the capacity to tax, the incentives to tax, and the incentives to pay tax. The discussion in Section 1 highlighted the weakness of tax administration capacity in Burundi and Rwanda, which was exacerbated by ethnic crisis. In this sub-section, incentives to tax and to pay taxes are discussed in the particular context of the ethnically polarized states of Burundi and Rwanda to show how bad politics constrains tax collection.

In Burundi and Rwanda as in other countries (developed as well as underdeveloped), governments seek to maximize tax collection while minimizing the political costs of taxation. Political costs of taxation include the risk of disenfranchising the political and business elite on which the regime counts for political support. The pervasive tax exemptions in Burundi and Rwanda are probably a symptom of the reluctance to levy tax on political clients. Even when tax laws are officially enacted, they are not effectively enforced, partly due to political clientelism. From the taxpayer's side, the objective is to minimize tax payments. This can be accomplished either by lobbying for low tax rates or simply through tax evasion. Tax evasion is made easier when the taxpayer is also a political client for the decision maker. Ultimately tax policy suffers from conflicts of interest among decision makers.

Effective taxation requires state-society reciprocity in which the population is rewarded for tax payment via public service delivery. Tax collection is a difficult task, even in administratively advanced countries. However, tax collection is relatively easier when the population feels that taxes are used to finance socially productive programs that are accessible to the larger majority of the people. This requires state institutions that are owned by the people through a process of democratic governance. Democratic governance enhances state legitimacy, which in turn can contribute to increasing the effectiveness of tax collection and public service delivery. As Goldsmith (2000: 18) puts it, "effective states have learned how to maintain their legitimacy, and their legitimacy helps keep them effective." To be effective, fiscal policy reform must go hand in hand with institutional reform aimed at establishing transparent and accountable governance structures.

3 External funding and fiscal policy in conflict and post-conflict settings

3.1 Aid flows

The 1994 genocide in Rwanda attracted generosity among the donor community, materialized by substantial inflows of aid. Official aid increased from \$47 per capita in 1993 to \$115 in 1994 and \$110 in 1995; but the volume of aid has declined since 1996 (Table 4). Note, however, that even during the years leading to the genocide, the Habyarimana government had received generous amounts of foreign aid (see Figure 8).

From an average of roughly \$230 million per year in the 1980s, official development aid rose to \$356 million per annum in the 1990-1992 period.¹¹ Higher amounts of foreign aid were flowing in even as evidence on massive abuses against human rights and deepening social/ethnic division was mounting, in an environment that eventually set the stage for the 1994 genocide.

The situation in Burundi is different from that of Rwanda in one special respect: the 1993 ethnic crisis attracted little attention from the donor community. The volume of aid declined since 1994, and dropped further following the 1996 economic embargo imposed on the Buyoya regime. Without significant external funding, it will be difficult for these countries to achieve the rates of economic growth that are necessary to raise the living standards of the population and eventually overcome aid dependency. In its recent report, the United Nations Commission on Trade and Development (UNCTAD) concludes that to overcome underdevelopment and aid dependence, Africa will need higher levels of foreign funding, which can raise national incomes and tax revenues, thereby reducing the need for further foreign aid in the future (UNCTAD 2000). Unfortunately, observers often lament the fact that “much of aid continues to go to middle-income countries that do not need it” (World Bank 1998: 4).

3.2 Debt relief, an important ingredient for reconstruction

As Burundi and Rwanda struggle to overcome the legacy of chronic civil strife and rebuild their economies, they also face a heavy load of foreign debt. In 1998, the stock of debt was \$1.12 billion for Burundi and \$1.23 billion for Rwanda. Debt ratios in these countries, especially in Burundi, are considerably higher than the average for Sub-Saharan Africa (Table 7). The average debt stock to GNP ratio for the 1995-1998 period was 119% for Burundi compared to 73% for sub-Saharan Africa. The debt service to exports ratio for the same period was 39% for Burundi and 20% for Rwanda, compared to 15% for the sub-continent. External borrowing increased considerably from the second half of the 1970s and exploded in the 1980s (Table 7 and Figure 8). From the 1970s to the 1980s, net debt flows increased from an annual average of \$18 million to \$89 million in Burundi and from \$27 million to \$64 million in Rwanda. Debt inflows continued to rise in Rwanda in 1990s, while they declined in Burundi.

The heavy debt burden constitutes a major handicap for development in general. The issue is even more pressing in the context of post-conflict reconstruction when these countries need to focus their scarce resources to providing badly needed social services and rebuilding the economic infrastructure.

Rwanda has made the list of the countries that qualified for debt relief through the Heavily Indebted Poor Countries Initiative (HIPC). The debt relief for Rwanda amounts to \$810 million in debt service or a 71% reduction in net-present-value debt. The country must take advantage of this “millennial” gesture and increase its investment in economic infrastructure and improve social service provision. However, debt relief must

¹¹ The aid figures reported here are in real 1995 US dollars. Nominal values are converted to real values using the US producer price index from the *International Financial Statistics*

not be considered as a substitute for aid. The country needs sustained aid flows to carry out its reconstruction efforts.

The case of Burundi poses a peculiar dilemma to the international lending and donor community. The country is one of the 27 Severely Indebted Low-Income Countries (SILIC) in sub-Saharan Africa. Its debt ratios are higher than those of Rwanda and many other African countries that have been approved for debt relief under HIPC (Table A3). Among the 18 African countries that qualified for debt relief, only Zambia has a higher debt service to exports ratio than Burundi (59% and 38% respectively), and only 6 countries have a higher total debt to GNP ratio (Guinea-Bissau, Madagascar, Mauritania, Mozambique, São Tomé and Príncipe, and Zambia). The evidence shows that Burundi's debt burden is not sustainable.

Should Burundi qualify for debt relief under special conditions? Does Rwanda deserve debt relief more than Burundi? These are some of the important questions that the donor community must confront. However, before Burundi can be considered for debt relief, some important policy questions must be raised. The most critical question is whether the current regime in power in Burundi can write a credible proposal for a broad-based and poverty-reducing development program that deserves support from the international community. The key word is "broad-based". The "new" Buyoya regime is definitely not equipped to fulfill this task. The monolithic military regime is incapable of the consensus-based decision-making that is necessary for the conception of a broad-based development agenda. In the absence of a consensus-based governance structure, the only alternative is a benevolent central authority that can promote a nationalistic development agenda. Such authority is also inexistent in Burundi for the moment.

So, what should the donor community do in the case of Burundi? In the short run, the donor community can make a significant difference by supporting the peace negotiation process. The donor community must come in with a hand that is not only generous with respect to financial aid but also firm in promoting a responsible attitude on the part of all leaders in the negotiation process. The leaders must show clear commitment to the interests of the people and the nation.

4 Fiscal policy, poverty alleviation, and post-conflict reconstruction

In Burundi and Rwanda like in other countries in conflict or evolving from conflict, fiscal policy must move beyond the conventional goals of macroeconomic adjustment and countercyclical stabilization and pay more attention to potential effects of fiscal policy on poverty alleviation. In other words, fiscal policy must have a clear social mandate. In fact, application of conventional fiscal policy prescriptions may actually exacerbate poverty in post-conflict countries. In particular, aggressive public expenditure compression can worsen the poverty situation in the post-conflict episode. Countries evolving from conflict need to rebuild economic and social infrastructure damaged by war. The emphasis must be not on reducing government expenditures, but on the reallocation of public money into socially productive investments (Addison and Ndikumana 2000). In particular, governments must shift expenditures away from security/military to revitalize education, health care, and other social services.

Rwanda has embarked on an economic reconstruction program including important fiscal reforms.¹² The two main objectives of tax reform are to reduce the country's dependence on international trade tax and to increase efficiency in tax collection. If carefully implemented, the steps taken in fiscal reform will prove productive in the near future. The establishment of the Rwandan Revenue Authority (RRA) has provided a framework for improvement in the assessment of tax liabilities and arrears. It is necessary to preserve and strengthen political and budgetary independence of the RRA and to maintain efficiency-enhancing incentive mechanisms (higher pay rates and other indirect benefits) that stimulate effort and accountability for the RRA staff. The reduction (even cancellation) of tax exemptions will also contribute to improving tax collection. Along with its efforts to increase revenue collection, the government must establish specific fiscal incentives to encourage private investment. This can help in the diversification of the economic activity, thereby broadening the tax base.

A noteworthy feature of the Rwandan reconstruction program is the explicit integration of poverty reduction monitoring in its budgetary system (IDA and IMF 2000). To alleviate poverty, the government seeks to increasing agricultural productivity, improving gender equity, and ameliorating social services infrastructure and delivery. The government has established an institutional framework (including a *Poverty Observatory* unit within the Ministry of Finance) for monitoring progress in social services delivery. There is reason for hope that there will be light at the end of the fiscal adjustment tunnel.

While Rwanda forges ahead with economic reform and social reconstruction, Burundi is still struggling with ethnic violence and sectarian politics. The Burundian economy continues to deteriorate and poverty continues to rise, even as the government continues to build its military apparatus. In the meantime, issues of economic and social reform do not seem to be regarded with much urgency among the rival leaders in the peace negotiation process (Ndikumana 2000). There is a real danger that the country can degenerate in a vicious cycle of increasing insecurity and deepening poverty.

5 Conclusion

This paper has investigated various ways in which fiscal policy relates to conflict and its role in post-conflict reconstruction. The paper focused on public expenditure management, emphasizing the allocation of public money between military/security expenditures and socially productive investments. Most of the findings and conclusions are applicable to other developing countries, especially those in conflict or evolving from conflict.

The relationship between fiscal policy and conflict is complex. Using the cases of Burundi and Rwanda, this paper has argued that bad public expenditure management, especially military-intensive fiscal policy can be socially destabilizing through various channels, including predation, exclusion, oppression, repression, and political and economic alienation. The buildup of the military/security apparatus is economically and politically costly. Higher military expenditures are associated with depressed social

¹² See Box 1 in the appendix for some details.

services and underinvestment in public infrastructure. Politically, military-intensive management of public money implies a deepening of the socio-political gap between the ruling group and disenfranchised segments of the population. When the security apparatus is used for oppressive and repressive purposes, this fuels social tensions and sows the seeds for violent conflict.

The cases of Burundi and Rwanda are an illustration of the complex relationships between economic performance and ethnic conflict. The experience of these two countries shows that while ethnic conflict can cause economic collapse, economic distress also can fuel ethnic conflict. Evidence from these two countries shows that the conflicts of the 1990s accentuated the collapse of two economies whose ailments have deeper-seated structural roots. These economies are not robust to shocks, their production system is not diversified, and most importantly, development policy has neglected the rural sector even though it constitutes the basis for the livelihood of the majority of the population.

Fiscal policy in post-conflict reconstruction must have a clear poverty alleviation dimension. The success of this agenda depends on four important factors. First, total public expenditures must increase systematically and remain high for a sustained period to jump-start the economy, thereby raising aggregate demand and incomes, and broadening the tax base. Second, as public expenditures increase, resources must be shifted away from military/security towards economic infrastructure and socially productive investments, such as education, health care (especially preventive care), drinking water supply, nutrition programs, etc. The revitalization of the rural sector is key to economic progress in Burundi and Rwanda. Third, government revenues must increase to meet higher public expenditures and minimize deficits. The increase in fiscal revenues will require investment in administrative capacity (human capital and technology), reform of the tax system and enforcement of accountability to minimize leaks, and broadening the tax base through economic diversification. Fourth, the reconstruction agenda needs to be supported by higher external funding in the form of development aid and debt relief. However, foreign resources must explicitly target poverty alleviation programs. Moreover, external funding must be a complement as well as a stimulant for domestic resource mobilization; aid must “crowd in” rather than “crowd out” domestic resources.

The strategies for reconstruction and poverty reduction discussed in this paper will be impossible to implement without a stable developmental state. Reconstruction must go hand in hand with efforts to establish a new governance system that is broad-based (non-sectarian) and democratic. Development assistance partners can use their leverage to enforce accountability in the management of public money and to foster reform of the governance structure.

References

- Addison, Tony and Léonce Ndikumana (2000). "Overcoming the fiscal crisis of the state", forthcoming in Tony Addison (ed.), *Underdevelopment, Transition, and Reconstruction in Sub-Saharan Africa*.
- Banque de la République du Burundi (1990). *Rapport Annuel 1990*. Bujumbura: BRB.
- Boyce, James (2000). "Peace conditionality: External assistance and war-to-peace transitions", forthcoming, International Institute for Strategic Studies, Adelphi Papers. Oxford: Oxford University Press.
- Goldsmith, Arthur (2000). "Sizing up the African state," *Journal of Modern African Studies*, 38(1), 1-20.
- IDA and IMF (2000). "Rwanda: Preliminary Document on the Enhanced Initiative for Heavily Indebted Poor Countries." Washington, DC: IDA and IMF (July).
- IMF (2000a). "Rwanda: Recent economic developments," Washington, DC: IMF Staff Country Report No. 4 (January).
- IMF (2000b). "Burundi: Statistical annex," Washington, DC: The IMF (April)..
- IMF (1999). *International Financial Statistics*, Washington, DC: The IMF (December, CDROM edition).
- IMF (1997). "Burundi: Recent economic developments," Washington, DC: IMF Staff Country Report No. 97/114.
- Knight, Malcolm, Norman Loayza and Delano Villanueva (1996). "The peace dividend: Military spending cuts and economic growth," IMF Staff Papers 43(1), 1-37.
- Lemarchand, René (1994). *Burundi: Ethnocide as Discourse and Practice*. New York: Cambridge University Press.
- McGillivray, Mark and Oliver Morrissey (2000). "Fiscal effects of aid," paper prepared for the UNU/WIDER project on New Fiscal Policies for Growth and Poverty Reduction.
- Murshed, Mansoob (2000). "Conditionality and endogenous policy formation in a political setting," paper prepared for the UNU/WIDER project on New Fiscal Policies for Growth and Poverty Reduction.
- Ndikumana, Léonce (2000). "Towards a solution to violence in Burundi: A case for political and economic liberalization". *Journal of Modern African Studies* (September).
- Ndikumana, Léonce (1998). "Institutional failure and ethnic conflicts in Burundi". *African Studies Review*, 41(1), April 1998, 29-47.
- Ngaruko, Floribert and Janvier D. Nkurunziza (2000). "An economic interpretation of conflict in Burundi," *Journal of African Economies*, 9(3), 370-409.
- Prunier, Gérard (1995). *The Rwanda Crisis: History of a Genocide*. New York: Columbia University Press.
- Reyntjens, Filip (1995a). *Rwanda: Trois Jours Qui Ont Fait Basculer l'Histoire*. Bruxelles: L'Harmatan.

- Reyntjens, Filip (1995b). *Burundi: Breaking the Cycle of Violence*. London: Minority Rights Group.
- SIPRI (ed.), SIPRI Yearbook. *Armaments, Disarmament and International Security*, Oxford: Oxford University Press for the Stockholm International Peace Research Institute, various issues 1980-2000.
- UNCTAD (2000). *Capital Flows and Growth in Africa*. Geneva: United Nations.
- Uvin, Peter (1998). *Aiding Violence: The Development Enterprise in Rwanda*. West Hartford: Kumarian Press.
- World Bank (2000a). *World Development Indicators 2000*. Washington, DC: The World Bank.
- World Bank (2000b). *Africa Data Base 2000*. Washington, DC: The World Bank.
- World Bank (2000c). *Global Development Finance 2000*. Washington, DC: The World Bank.
- World Bank (1998). *Assessing Aid: What Works, What Doesn't, and Why*. New York: Oxford University Press.

Table 1
Some aggregate indicators for Rwanda

Indicator	Average 1980s	1990	1991	1992	1993	1994	1995	1996	1997	1998
GDP per capita (at 1995\$)	317	292	277	285	255	154	201	221	213	227
% annual change		-4.7	-5.2	3.0	-10.6	-39.7	30.8	10.2	-3.9	6.7
CPI	28.9	34.1	40.8	44.7	50.3	Na	100.0	107.4	120.3	127.8
% annual change		4.2	19.6	9.6	12.4	Na	na	7.4	12.0	6.2
Food production (index 1989-91=100)	98.0	100.4	96.9	92.8	82.5	66.4	72.9	75.8	79.9	81.6
% annual change		-2.2	-3.5	-4.2	-11.1	-19.5	9.8	4.0	5.4	2.1
Manufacturing value added (million 1995 \$)	215	233	193	193	160	104	204	235	274	303
% annual change		-1.9	-17.3	0.0	-16.9	-34.7	94.8	15.1	16.6	10.4
Coffee exports (metric tons)	32824	45579	37642	33851	29667	1800	8248	15900	11820	Na
% annual change		27.3	-17.4	-10.1	-12.4	-93.9	358.2	92.8	-25.7	Na
Agricultural exports (million \$)	94	95	85	60	52	14	41	39	38	na
% annual change		-15.9	-10.2	-29.2	-13.0	-73.2	197.2	-5.7	-2.8	na

Sources: World Bank (2000) World Development Indicators 2000; World Bank (2000) Africa Data Base 2000; IMF (2000) "Rwanda: Recent economic developments," IMF Staff Country Report No. 4.

Table 2
Some aggregate indicators for Burundi

Indicator	Average 1980s	1990	1991	1992	1993	1994	1995	1996	1997	1998
GDP per capita (at 1995 \$)	194	206	211	207	191	179	163	146	143	147
% annual change		0.6	2.2	-1.8	-8.0	-6.0	-9.2	-10.3	-1.7	2.7
CPI	41.9	60.0	65.4	66.6	73.0	83.8	100.0	126.4	165.8	186.5
% annual change		7.0	9.0	1.8	9.7	14.9	19.3	26.4	31.1	12.5
Food production (index 1989-91=100)	87.8	102.5	105.0	107.7	106.2	89.8	97.8	98.4	97.3	91.8
% annual change		10.8	2.4	2.6	-1.4	-15.4	8.9	0.6	-1.1	-5.7
Manufacturing value added (million 1995 \$)	119	156	162	172	141	134	105	88	85	87
% annual change		9.6	4.2	6.4	-18.2	-4.6	-21.8	-16.4	-2.8	2.0
Coffee exports (metric tons)	29355	33501	41163	39991	22770	28732	28500	13400	31700	na
% annual change		15.2	22.9	-2.8	-43.1	26.2	-0.8	-53.0	136.6	na
Agricultural exports (million \$)	94	69	88	66	53	113	96	32	81	na
% annual change		-4.8	27.2	-24.6	-20.0	113.0	-15.3	-66.4	152.4	na

Sources: World Bank (2000) World Development Indicators 2000; World Bank (2000) Africa Data Base 2000; IMF (2000) "Burundi: Statistical annex," Washington DC (April).

Table 3

International trade and tax from international trade

Burundi					
Year	Trade taxes (% of current revenue)	Trade taxes (% of volume of trade)	Real exports (% of GDP)	Real imports (% of real GDP)	Real volume of trade (% of real GDP)
1990	19.2	10.1	8.4	22.2	30.7
1991	23.5	13.4	9.7	22.2	31.9
1992	23.6	13.0	11.4	21.4	32.8
1993	20.9	11.0	10.1	22.9	33.1
1994	25.6	14.2	8.9	25.4	34.3
1995	26.3	12.6	12.9	27.3	40.2
1996	17.2	13.7	7.1	14.3	21.4
1997	15.7	6.5	14.4	18.4	32.8
Average 1970s	46.0	18.5	9.8	21.9	31.6
Average 1980s	30.9	13.1	9.4	27.1	36.5
Average 1990s	21.5	11.8	10.4	21.8	32.1
Rwanda					
Year	Trade taxes (% of current revenue)	Trade taxes (% of volume of trade)	Real exports (% of GDP)	Real imports (% of real GDP)	Real volume of trade (% of real GDP)
1990	25.7	13.4	10.6	10.2	20.8
1991	31.8	11.8	10.0	19.3	29.3
1992	31.1	12.0	8.7	18.7	27.4
1993	27.8	7.9	8.2	23.7	31.9
1994	36.6	2.2	6.4	53.8	60.2
1995	38.5	8.3	5.2	26.0	31.2
1996	29.2	9.0	6.4	23.6	29.9
1997	31.8	8.8	7.4	30.0	37.4
Average 1970s	52.6 (1974-79)	29.8	9.5	8.7	18.2
Average 1980s	na	na	10.9	12.6	23.5
Average 1990s	31.6	9.2	7.8	25.7	33.5

Sources: *World Development Indicators 2000*; IMF (2000a); Banque de la République du Burundi (1990).

Table 4
Rwanda: Government revenue and expenditures

Indicator	Average 1980s	1990	1991	1992	1993	1994	1995	1996	1997	1998
Government expenditures (% of GDP)	na	18.9	19.9	20.1	24.4	16.0	20.6	22.1	19.5	18.6
% annual change	na	na	5.1	0.9	21.2	-34.3	28.8	7.3	-11.8	-4.6
Tax revenue (% of GDP)	na	9.5	9.8	9.3	Na	0.6	6.4	8.4	10.3	10.4
% annual change	na	na	2.6	-5.1	Na	Na	966.7	31.3	22.6	1.0
Capital expenditures (% gvt. expenditures)	32.6	33.1	37.3	25.9	Na	16.5	39.9	41.3	42.1	36.1
% annual change	na	1.6	12.7	-30.7	Na	Na	141.8	3.5	1.9	-14.3
Education expenditures (% of GDP)	3.1	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
% annual change	na	-6.3	-0.1	0.1	-0.3	0.2	1.0	-1.4	0.1	0.5
Health expenditures (% of GDP)	na	1.9	na	na	Na	Na	na	na	2.1	0.4
% annual change	na	na	na	na	Na	Na	na	na	na	na
Military expenditures (% gvt. expenditures)	4.1	19.8	27.9	21.7	18.9	25.7	34.9	23.1	22.2	na
% annual change	na	122.5	40.9	-22.2	-12.9	36.0	35.8	-33.8	-3.9	na
Budget deficit (% of GDP)	-2.5	-5.3	-3.2	-5.5	-6.9	-19.1	-8.0	-24.5	-13.8	-18.4
% annual change	na	61.3	-40.3	74.5	26.0	175.1	-58.1	206.3	-43.7	33.3
Aid per capita (US \$)	31	42	51	48	47	115	110	69	29	43
% annual change	na	23.6	20.7	-5.4	-1.2	142.8	-4.3	-36.8	-58.1	48.5

Sources: World Bank (2000) World Development Indicators 2000; World Bank (2000) Africa Data Base 2000; IMF (2000) "Rwanda: Recent economic developments," IMF Staff Country Report No. 4.

Table 5
Burundi: Government revenue and expenditures

Indicator	Average 1980s	1990	1991	1992	1993	1994	1995	1996	1997	1998
Government expenditures (% of GDP)	na	na	28.7	33.6	31.2	28.4	30.6	27.7	24.0	na
% annual change	na	na	na	17.0	-7.1	-9.1	7.7	-9.5	-13.4	na
Tax revenue (% of GDP)	na	na	16.3	16.3	15.7	17.0	17.9	14.2	12.7	na
% annual change	na	na	na	0.1	-4.2	8.4	5.7	-21.0	-10.3	na
Capital expenditure (% gvt. expenditures)	na	na	41.0	45.0	43.1	33.4	41.7	27.9	15.3	25.3
% annual change	na	na	na	9.8	-4.2	-22.5	24.9	-33.1	-45.4	65.9
Education expenditures (% of GDP)	2.7	3.3	3.4	3.5	4.2	3.9	3.7	3.0	3.0	3.0
% annual change	na	1.9	3.5	4.3	18.4	-8.1	-3.2	-19.1	0.0	0.0
Health expenditures (% of GDP)	na	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.5	0.6
% annual change	na	na	6.2	-3.1	9.4	-1.3	13.5	7.6	-4.3	-57.8
Military expenditures (% gvt. expenditures)	7.2	8.7	8.1	7.8	8.7	12.5	15.1	20.6	25.8	na
% annual change	na	-5.4	-6.9	-3.7	11.5	43.7	20.8	36.4	25.2	na
Budget deficit (% of GDP)	-4.8	na	-3.3	-7.1	-3.8	-3.2	-3.0	-7.8	-5.5	na
% annual change	na	na	na	114.7	-45.9	-16.2	-6.5	159.5	-29.6	na
Aid per capita (US \$)	33	48	46	54	37	52	47	18	9	12
% annual change	na	23.9	-4.9	17.4	-31.7	40.5	-9.8	-62.2	-50.4	33.4

Sources: World Bank (2000) World Development Indicators 2000; World Bank (2000) Africa Data Base 2000; IMF (2000) "Burundi: Statistical annex," Washington DC (April).

Table 6

Government size and performance: Burundi and Rwanda compared to other conflict African countries, 1985-1997

Country / Period	Expenditure (G) % of GDP	Deficit % of GDP	SOE % of GDP	Military expenditures % of G	Education expenditures % of GDP	Wage bill % of G	Health expenditures per capita (US \$)	Aid % of G	Aid per capita ^a (US \$)	Tax revenue % GDP	Tax on trade (% of revenue)
Entire period of 1985-1997											
Burundi	NA	NA	NA	14.3	2.9	NA	NA	NA	38.2	16.1	25.5
Rwanda	NA	NA	NA	19.6	3.3	NA	NA	NA	52.5	NA	NA
Congo, Rep.	NA	NA	NA	10.2	5.7	NA	NA	NA	76.3	NA	16.5
DRC	13.7	-4.4	6.5	20.7	0.9	31.9	NA	43.9	10.4	18.5	36.2
Ethiopia	24.1	-6.6	12.3	22.6	2.7	37.4	3.9	47.9	16.9	23.1	17.5
Mozambique	NA	NA	NA	24.1	3.4	NA	NA	NA	62.4	NA	NA
Sierra Leone	13.7	-5.1	7.1	17.2	1.1	20.9	NA	110.4	32.0	28.9	40.5
Sudan	NA	NA	NA	54.9	NA	NA	NA	NA	26.2	NA	NA
Uganda	NA	NA	NA	25.8	2.4	NA	NA	NA	32.8	NA	NA
SSA	28.1	-3.7	17.9	11.8	4.3	29.1	4.0	44.5	27.5	22.9	30.8
Sub-period of 1992-1997 (1985-91 not reported in this table)											
Burundi	29.2	-5.1	NA	15.1	2.8	25.2	6.3	73.1	35.9	15.6	21.5
Rwanda	20.4	-12.9	NA	24.4	3.3	26.5	NA	NA	69.6	6.9	32.5
Congo, Rep.	35.0	-9.8	10.8	9.6	6.1	35.6	51.8	30.7	93.8	13.1	16.5
DRC	11.8	-5.3	3.8	27.7	0.8	36.7	NA	39.6	4.7	21.6	31.5
Ethiopia	NA	NA	NA	11.2	2.8	NA	3.9	NA	16.6	NA	NA
Mozambique	NA	NA	NA	13.9	3.4	NA	NA	NA	71.8	NA	NA
Sierra Leone	17.1	-5.2	10.1	24.8	1.0	19.2	NA	129.9	42.0	34.3	41.2
Sudan	NA	NA	NA	51.6	NA	NA	NA	NA	12.6	NA	NA
Uganda	NA	NA	NA	17.8	2.1	NA	NA	NA	38.8	NA	NA
SSA	29.3	-3.8	18.7	11.5	4.9	29.8	6.8	40.2	27.9	23.4	29.8

Source: Author's computations using data from *World Development Indicators 2000*; *Africa Data Base 2000*; IMF (2000) "Burundi: Statistical annex," Washington DC (April); IMF (2000) "Rwanda: Recent economic developments," IMF Staff Country Report No. 4; Banque de la République du Burundi (1990).

G = total government expenditures; SOE = state-owned enterprises (the figures show the activity of SOE as % of GDP).

Table 7
Some debt indicators for Burundi and Rwanda, 1970-1998

Burundi	1970-79 average	1980-89 average	1990-94 average	1995-98 average
Total debt stock (million, constant 1995 \$)	71	566	1074	1106
Net flows on debt (million, constant 1995 \$)	18	89	64	11
Total debt service (million, constant 1995 \$)	10	31	42	32
Total debt/ GNP (EDT/GNP%)	8.2	44.8	97.2	118.8
Debt service/ exports (TDS/XGS %)	NA	23.5	41.1	38.7
Interest payments/ exports (INT/XGS%)	NA	9.6	14.5	11.8
Grant element (% of total debt)	48.0	61.7	79.7	22.7
Rwanda	1970-79 average	1980-89 average	1990-94 average	1995-98 average
Total debt stock (million, constant 1995 \$)	95	463	897	1091
Net flows on debt (million, constant 1995 \$)	27	64	55	73
Total debt service (million, constant 1995 \$)	5	19	19	20
Total debt/ GNP (EDT/GNP%)	9.0	21.8	46.0	66.5
Debt service/ exports (TDS/XGS %)	2.2	10.0	16.7	20.0
Interest payments/ exports (INT/XGS%)	0.3	4.6	8.7	8.7
Grant element (% of total debt)	65.8	69.0	61.7	82.1
Sub-Saharan Africa	1970	1980	1990-94 average	1995-98 average
Total debt stock (million, constant 1995 \$)	NA	84530	207864	227730
Net flows on debt (million, constant 1995 \$)	5188	13994	6282	3615
Total debt service (million, constant 1995 \$)	NA	9296	11965	14875
Total debt/ GNP (EDT/GNP%)	NA	23.5	72.4	72.9
Debt service/ exports (TDS/XGS %)	NA	7.2	13.8	14.7
Interest payments/ exports (INT/XGS%)	NA	3.8	6.6	5.3
Grant element (% of total debt)	47.5	21.7	46.8	45.1

Source: Global Development Finance 2000. Nominal debt values are deflated into real using the US PPI (from the International Financial Statistics, December 1999 CDROM edition).

Table A1

Government size and performance: SSA vs. other developing regions, 1985-1997

Region/Period	<i>Expenditure (G) % of GDP</i>	<i>Deficit % of GDP</i>	<i>SOE % of GDP</i>	<i>Military expenditures % of G</i>	<i>Education expenditures % of GDP</i>	<i>Wage bill % of G</i>	<i>Health expenditures per capita (US \$)</i>	<i>Aid % of G</i>	<i>Aid per capita^a (US \$)</i>	<i>Tax revenue % GDP</i>	<i>Tax on trade (% of revenue)</i>
1985-1997											
Asia	24.3	-2.5	14.8	12.8*	4.0*	21.2	19.3	21.8	5.2	28.6	18.1
Dev. America	20.8	-1.7	15.8	11.7*	3.5	27.1	140.4	11.0	8.1	32.3	16.3
Middle East	37.9	-5.4	9.0	31.8	4.4*	32.9	25.5	2.6	11.5	10.2	11.9
SSA	28.1	-3.7	17.8	12.0	4.3	29.1	4.0	44.5	27.5	22.9	30.8
1986-1991											
Asia	25.2*	-3.1*	14.5	12.9*	4.0*	22.4	11.4	21.5	5.6	28.4	20.1
Dev. America	20.0	-2.4	14.8	13.8*	3.4	27.6*	59.2	12.6	7.9	29.9	17.4
Middle East	40.8	-3.9*	8.7	37.9	4.4	33.8	43.5	2.2	12.2	10.1	8.4
SSA	27.4	-3.4	17.4	12.8	3.9	29.0	1.3	47.7	28.3	22.8	30.9
1992-1997											
Asia	23.4	-1.6	15.3	12.6*	4.0	19.7	29.1	22.9	5.0	28.7	16.1
Dev. America	21.4	-0.7	16.8*	9.6	3.5	26.8	233.3	10.0	8.6	34.5	14.9
Middle East	35.6	-6.8	9.4	26.7	4.4*	32.7*	13.3	2.9	10.6	10.9	15.1
SSA	29.3	-3.7	18.7	11.5	4.9	29.8	6.8	40.8	27.9	23.8	29.8

Source: Author's computations using data from *World Development Indicators 2000*.

Notes: The * on a mean indicates that the mean is not statistically different from SSA's mean at the 5% significance level.

^a The means for aid and health expenditures per capita are weighted averages; all other means in the table are simple means.

G = total government expenditures; SOE = state-owned enterprises (the figures show the activity of SOE as % of GDP)

Table A2

Military expenditures and other aggregate indicators for sub-Saharan African countries, averages 1985-1997

Country	Military expenditures (% of G)	Capital expenditures (% of G)	Government expenditures (G) (% of GDP)	Budget deficit (% of GDP)	Growth of per capita GDP 1985-1997 (annual %)	GDP per capita 1997 (at 1995 US \$)
Mauritius	1.3	17.1	22.7	-1.3	4.6	3860
Côte d'Ivoire	4.1	8.5	25.1	-1.2	-1.4	796
Ghana	4.3	18.5	14.9	-0.7	1.4	392
Malawi	4.4	25.2	30.3	-6.3	0.0	165
Swaziland	6.1	26.1	27.0	0.3	2.1	1425
Equatorial Guinea	6.2	na	na	Na	5.0	887
Madagascar	6.8	37.4	17.4	-3.5	-1.6	236
Guinea	7.0	50.5	21.5	-3.2	1.2	582
Niger	7.1	na	na	Na	-2.0	205
Zambia	7.9	25.4	34.1	-15.0	-1.9	405
Guinea Bissau	8.1	63.7	50.4	-19.2	1.7	246
Kenya	8.1	14.3	28.0	-4.0	0.0	336
Mali	8.1	2.6	28.2	-6.3	0.1	265
Senegal	8.7	na	na	Na	-0.5	564
Lesotho	8.9	37.1	56.3	-2.0	4.5	515
Gabon	10.0	42.5	29.9	-0.8	0.1	4649
Congo, Rep.	10.2	na	na	Na	-2.1	815
Benin	10.3	na	na	Na	0.0	387
Cameroon	10.7	24.1	18.8	-2.0	-4.9	631
Tanzania	10.7	20.1	na	Na	-0.1	172
South Africa	10.7	7.6	30.5	-5.2	-0.8	3967
Botswana	10.9	18.8	33.4	10.8	3.5	3554
Nigeria	11.4	39.0	19.3	-5.2	1.2	258
Togo	11.4	31.6	34.8	-2.9	-1.8	345
Central African Republic	12.5	na	na	Na	-2.2	331

Table A2 (continued)

Military expenditures and other aggregate indicators for sub-Saharan African countries, averages 1985-1997

Country	Military expenditures (% of G)	Capital expenditures (% of G)	Government expenditures (G) (% of GDP)	Budget deficit (% of GDP)	Growth of per capita GDP 1985-1997 (annual %)	GDP per capita 1997 (at 1995 US \$)
Mauritania	12.8	na	Na	Na	-0.2	475
Zimbabwe	12.8	9.5	30.7	-6.8	0.2	700
Chad	13.4	61.4	21.6	-3.8	-0.5	219
Burundi	14.3	34.4	Na	Na	-2.7	143
Gambia	14.6	34.2	23.6	-0.8	-0.9	347
Burkina Faso	15.3	24.0	14.6	0.4	0.5	250
Sierra Leone	17.2	27.2	13.7	-5.1	-4.5	153
Rwanda	19.6	33.1	Na	Na	-4.6	213
Congo, DRC	20.7	14.3	13.7	-4.4	-8.2	127
Ethiopia	22.6	19.3	24.1	-6.6	0.8	114
Mozambique	24.1	Na	Na	Na	2.8	172
Uganda	25.8	na	Na	Na	3.2	324
Sudan	54.9	na	Na	Na	2.6	288

Source: Author's computation with data from World Development Indicators 2000; IMF (2000) "Burundi: Statistical annex," Washington D.C. (April); IMF (2000) "Rwanda: Recent economic developments," IMF Staff Country Report No. 4.

G = total government expenditures; Countries are ranked by ascending order of military expenditures. Shaded countries are conflict or post-conflict countries.

Table A3

HIPC status and debt ratios for sub-Saharan African low-income countries

Country and status	TDS relief (million \$)	TDS/XGS	INT/XGS	INT/GNP	EDT/XGS	EDT/GNP
Approved for debt relief end-2000						
Benin*	500	8.0	3.4	1.1	243.3	76.1
Burkina Faso	700	11.3	4.1	0.8	295.2	53.6
Cameroon	2,000	22.1	10.5	2.9	424.0	116.5
Gambia*	91	12.1	2.8	1.6	201.2	114.7
Guinea	800	19.9	6.8	1.4	444.0	92.7
Guinea-Bissau	790	32.7	14.3	2.1	2697.3	404.5
Madagascar	1,500	14.7	5.8	1.4	524.2	122.8
Malawi	1,000	17.1	5.9	1.7	411.6	116.9
Mali	900	13.8	5.6	1.5	459.9	121.5
Mauritania	1,100	24.4	8.5	3.9	527.3	242.7
Mozambique	4,300	24.2	10.1	2.0	1433.6	269.7
Niger	890	17.9	4.1	0.7	483.6	83.3
Rwanda	810	17.8	7.8	0.6	980.5	68.9
Sao Tome and Principe	200	28.4	13.6	3.8	2231.6	615.6
Senegal*	900	19.0	6.8	2.3	250.1	84.2
Tanzania	3,000	17.8	6.8	1.4	575.4	117.4
Uganda	2,000	20.5	5.3	0.6	511.3	60.9
Zambia	3,800	59.3	14.5	6.2	532.2	210.2
Post-2000 decision						
Burundi		37.6	11.5	1.1	1337.1	121.4
Central African Republic		11.4	3.4	0.5	548.4	88.2
Chad*		9.6	3.6	0.7	330.3	65.2
Congo, Dem. Rep.		1.5	1.0	0.3	771.5	232.9
Congo, Rep.		11.1	6.2	5.2	371.5	302.8
Cote d'Ivoire		25.7	10.8	5.6	346.7	180.0
Ethiopia		20.5	5.9	0.9	1113.2	167.2
Sierra Leone		35.9	10.8	1.6	1046.8	153.4
Sudan		9.0	1.7	0.2	2574.3	229.1
Togo*		6.7	2.4	1.2	210.4	101.3
No decision date set as of end-2000						
Angola		21.1	7.2	8.6	260.3	336.9
Comoros		6.4	1.4	0.3	391.6	99.3
Eritrea**		0.4	0.4	0.1	25.3	9.9
Kenya*		24.8	8.1	2.5	234.9	72.0
Lesotho**		6.5	2.6	1.4	100.8	55.7
Nigeria		11.7	5.2	2.5	211.8	95.3
Zimbabwe*		26.4	8.1	3.2	172.0	68.7

Source: Global Development Finance 2000; World Development Indicators 2000. Countries with *, ** are moderately indebted and less indebted, respectively; all others are severely indebted (January 2000 classification). Data are missing for Somalia (severely indebted) and Liberia (not classified by indebtedness); both are in post-2000 decision category. Ghana (moderately indebted) is not seeking debt relief. EDT = total debt stock; TDS = total debt service; INT = interest payment; XGS = exports of goods and services; GNP = gross national product.

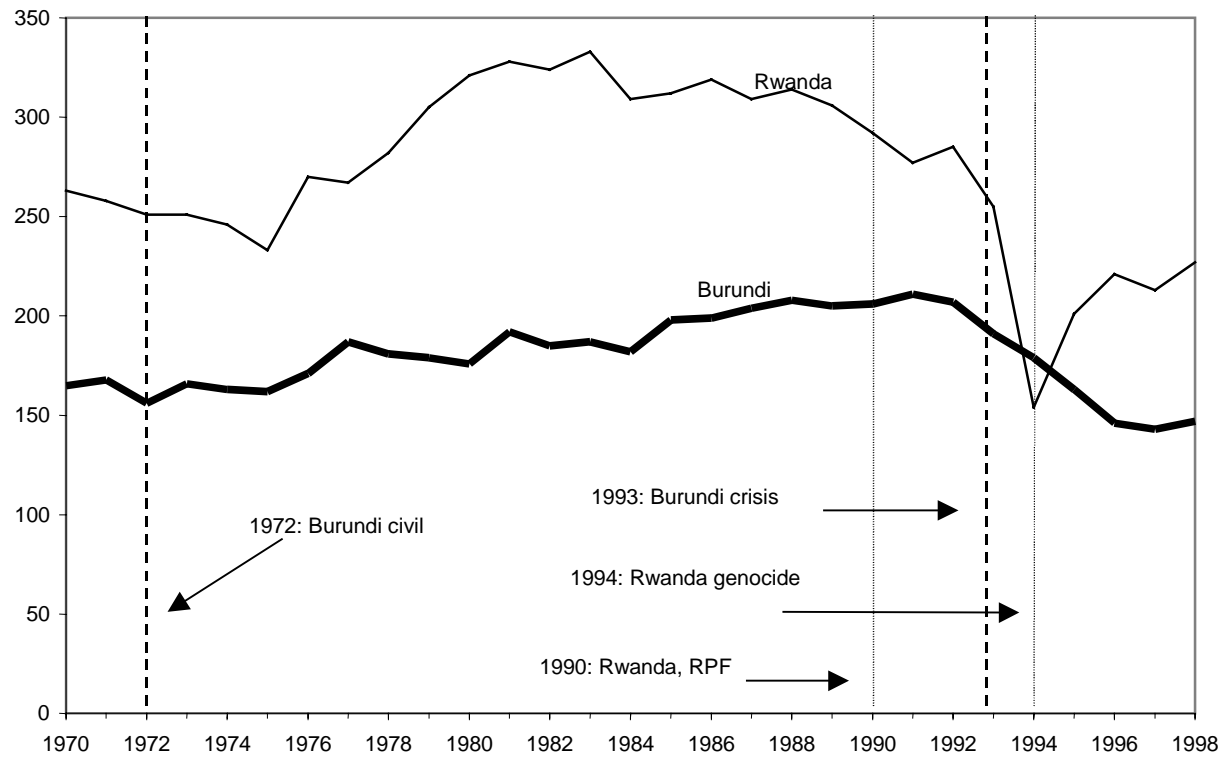
Box 1

Some important recent fiscal reform measures in Rwanda, 1997-1999

- 1997: Establishment of the *Rwanda Revenue Authority*, an autonomous institution, with its own budget. Its mission is to become a “professional organization characterized by integrity and efficiency and dedicated to upgrading the quality of service provided to the taxpaying public” (IMF 2000a). Operational since January 1998, the RRA is responsible for tax and customs administration, audit and investigation.
- 1998: Civil service reform was initiated. Its objectives include replacement of unqualified civil servants, removal of ‘ghost’ workers, adjustment (increase) in salaries.
- 1998: Establishment of an expenditure monitoring system, including monitoring of social sector budgets using selected performance indicators. A *Poverty Observatory* unit was established in the Ministry of Finance to monitor progress in meeting targets in poverty and social indicators. A social sector expenditure review was conducted in 1998/1999 focusing education, health, water supply, sanitation, and other social services. While the evidence from this survey and other sources shows widespread poverty, there is some evidence that budget allocations to social sectors are increasing: from 2.5% of GDP in 1997 to 3.8% in 1999 and 3.9% in 2000.
- 1998: Establishment of the *Central Project and External Financing Bureau* whose mission is to improve the coordination of investment within the Ministry of Finance. With assistance from the African Development Bank, the government established a 3-year rolling public investment program aimed at strengthening the preparation and monitoring of public investment projects.
- 1998: Beginning of progressive reduction in maximum tariff rates from 60% to 40% in 1998 and to 25% in 1999.
- 1998/1999: Increase in some taxes to offset the decline in tax revenue. These include the turnover tax rate (from 10% to 15%) and the excise tax rate.
- 1998: Coffee export tax converted into an ad valorem tax at 16%.
- 1999: Public enterprises subject to income tax.
- 1998-December 2001: target period for completion of privatization of public enterprises.

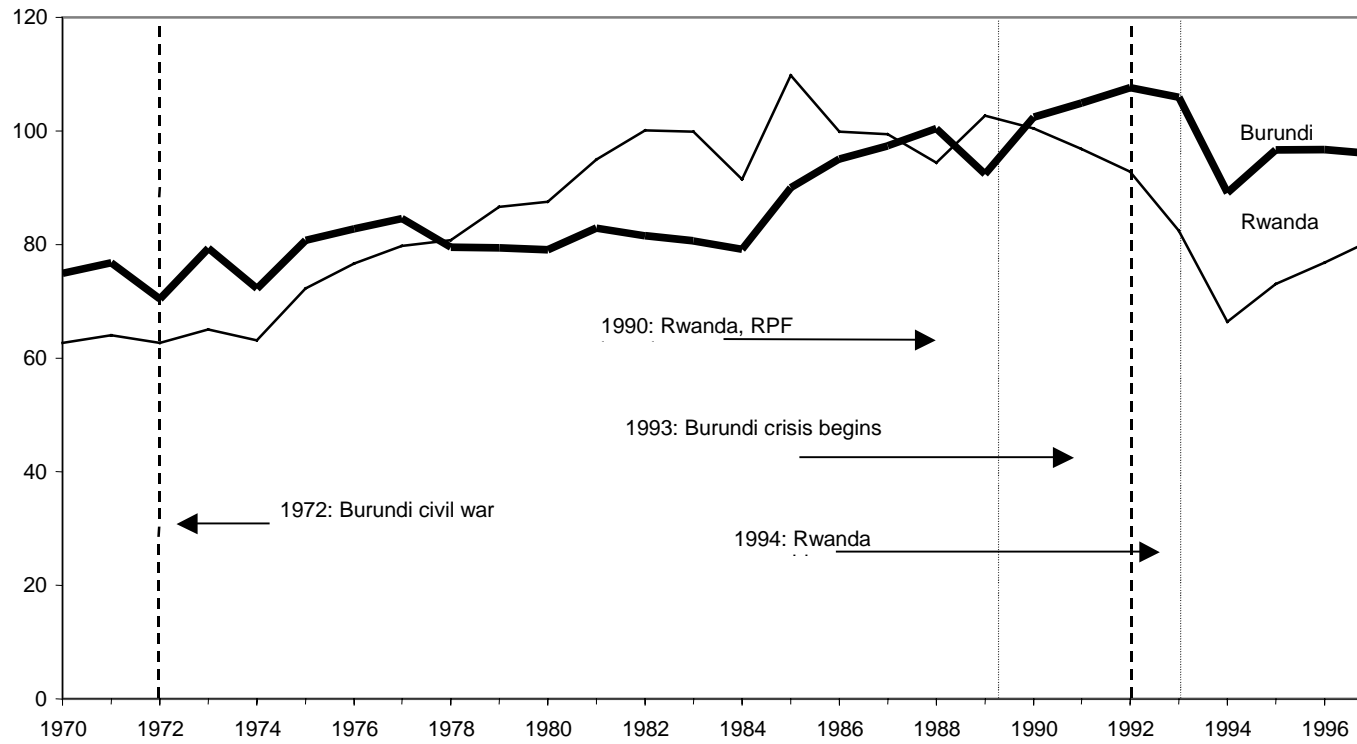
Source: IDA and IMF (2000) “Rwanda: Preliminary Document on the Enhanced Initiative for Heavily Indebted Poor Countries.” Washington D.C.: IDA and IMF (July); IMF (2000) “Rwanda: Enhanced structural adjustment facility”, Economic and Financial Policy Framework Paper for 1998/99, 2000/01; IMF (2000) “Rwanda: Recent Economic Developments”, IMF Staff Country Report No. 4 (January).

Figure 1
Burundi and Rwanda: Real per capita GDP (constant 1995 US\$)



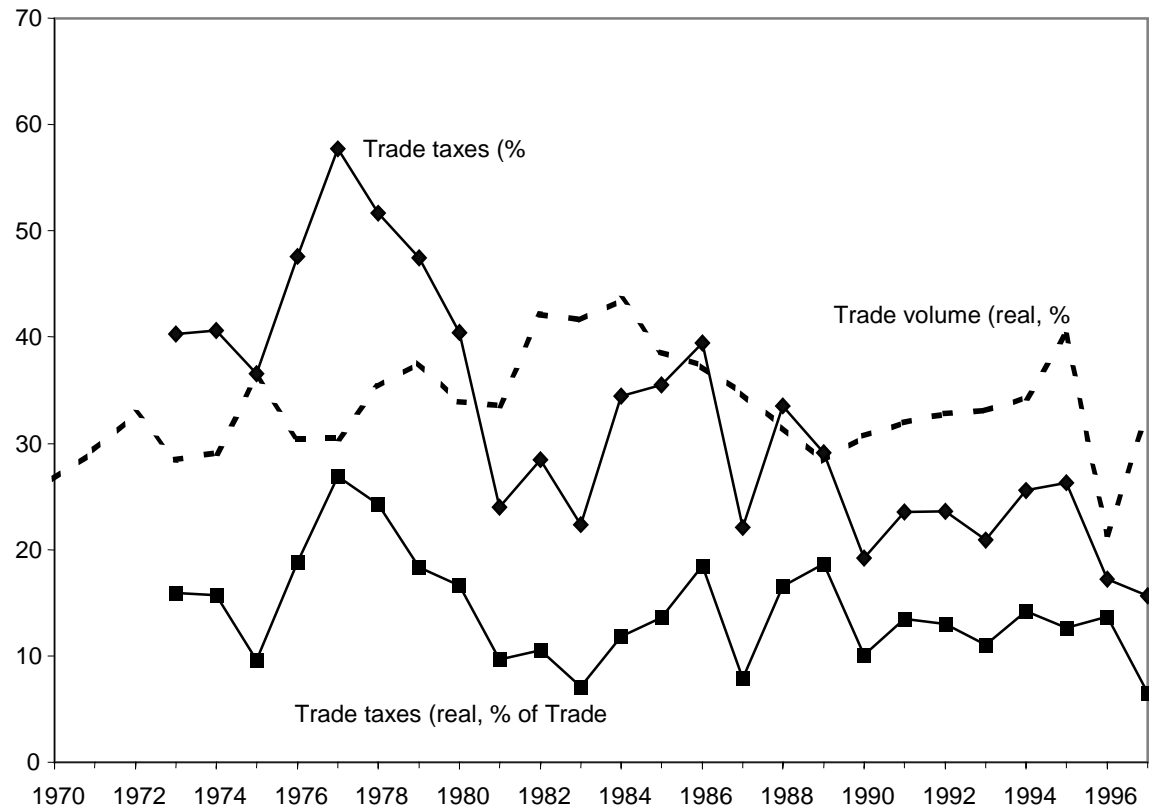
Source: *World Development Indicators 2000*.

Figure 2
Burundi and Rwanda: Food production 1970-1997 (index 1989-91 = 100)



Source: *World Development Indicators 2000*.

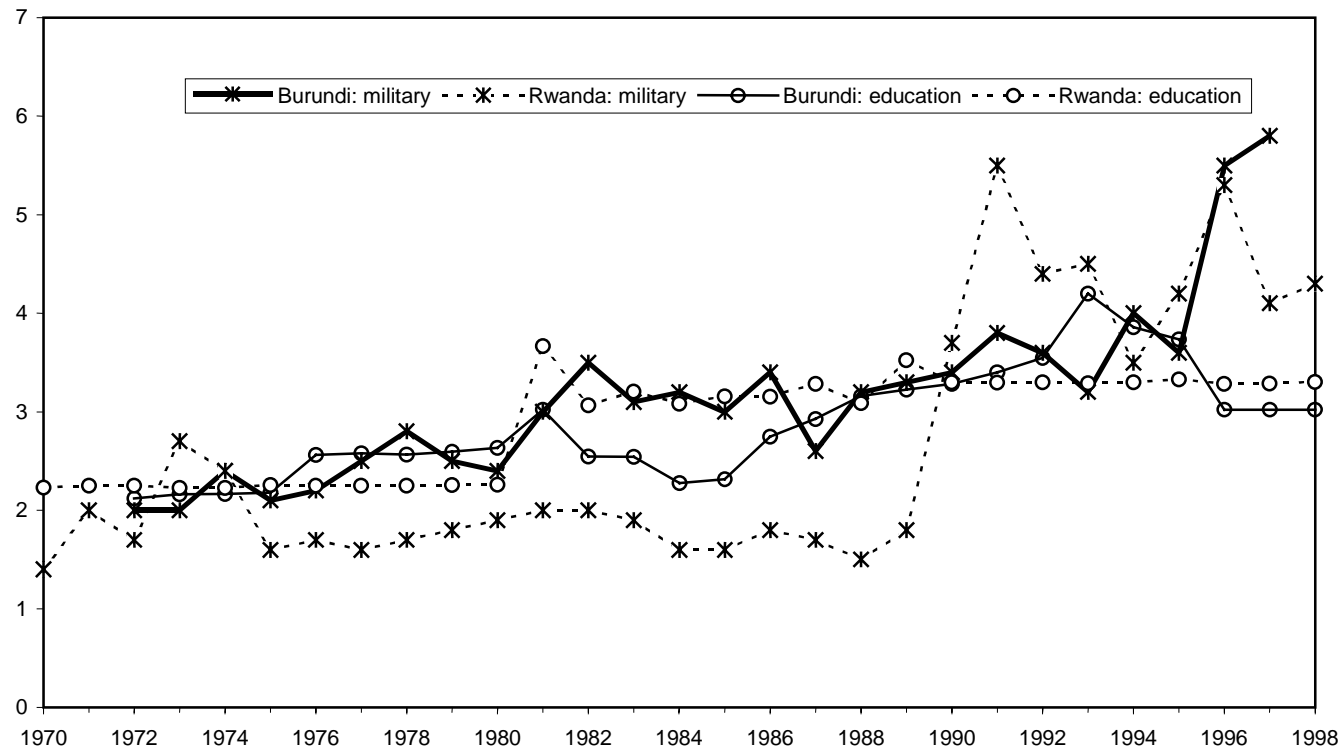
Figure 3
Burundi: Tax on international trade



Source: Author's calculations from World Development Indicators 2000; Banque de la République du Burundi (1990).

Figure 4

Burundi and Rwanda: Military expenditures and education expenditures (% of GDP)



Sources: Education: World Development Indicators 2000. Military expenditures: SIPRI Yearbook, various issues 1980 to 2000.

Figure 5

Military spending, state legitimacy and the cycle of instability

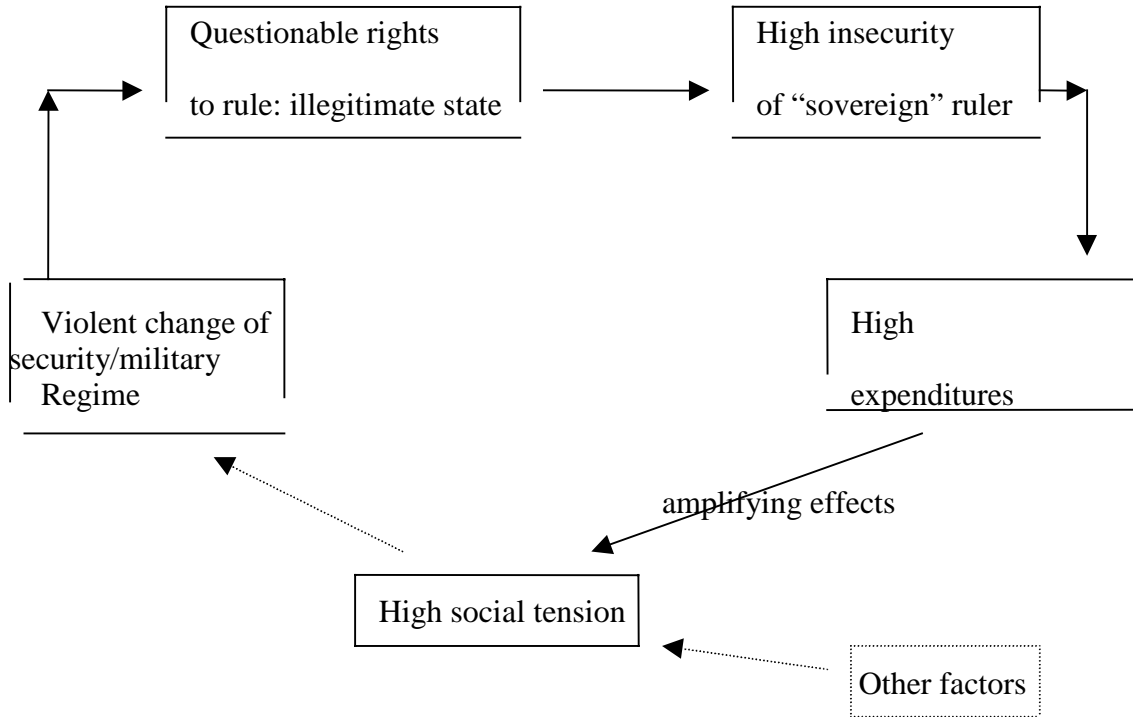


Figure 6:
Trade-off between military/security and social capital

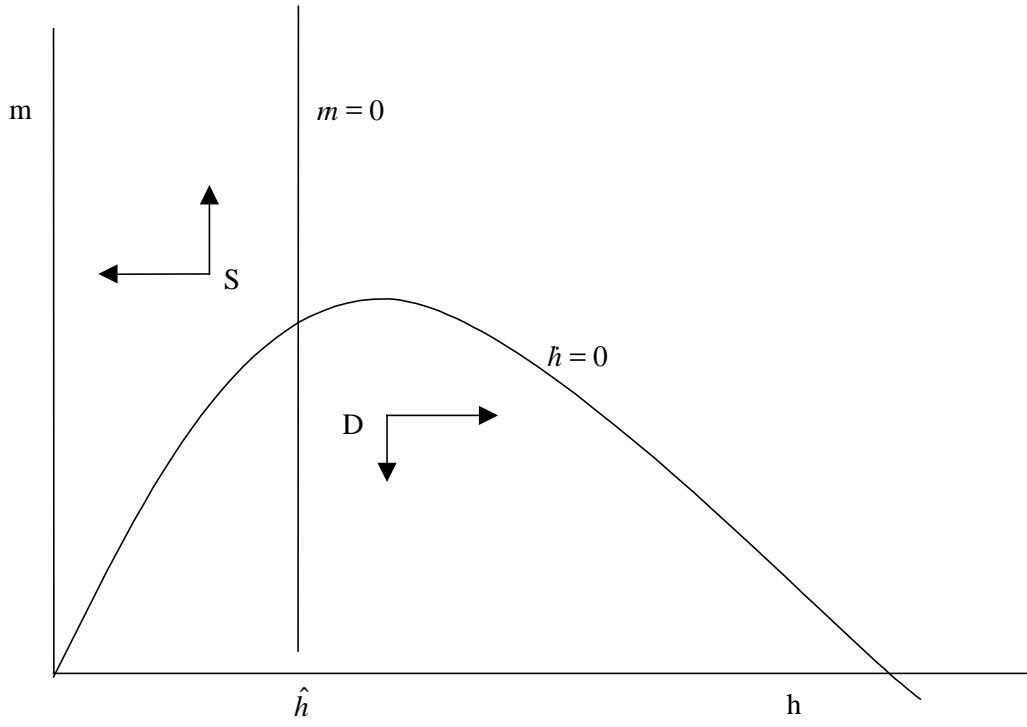
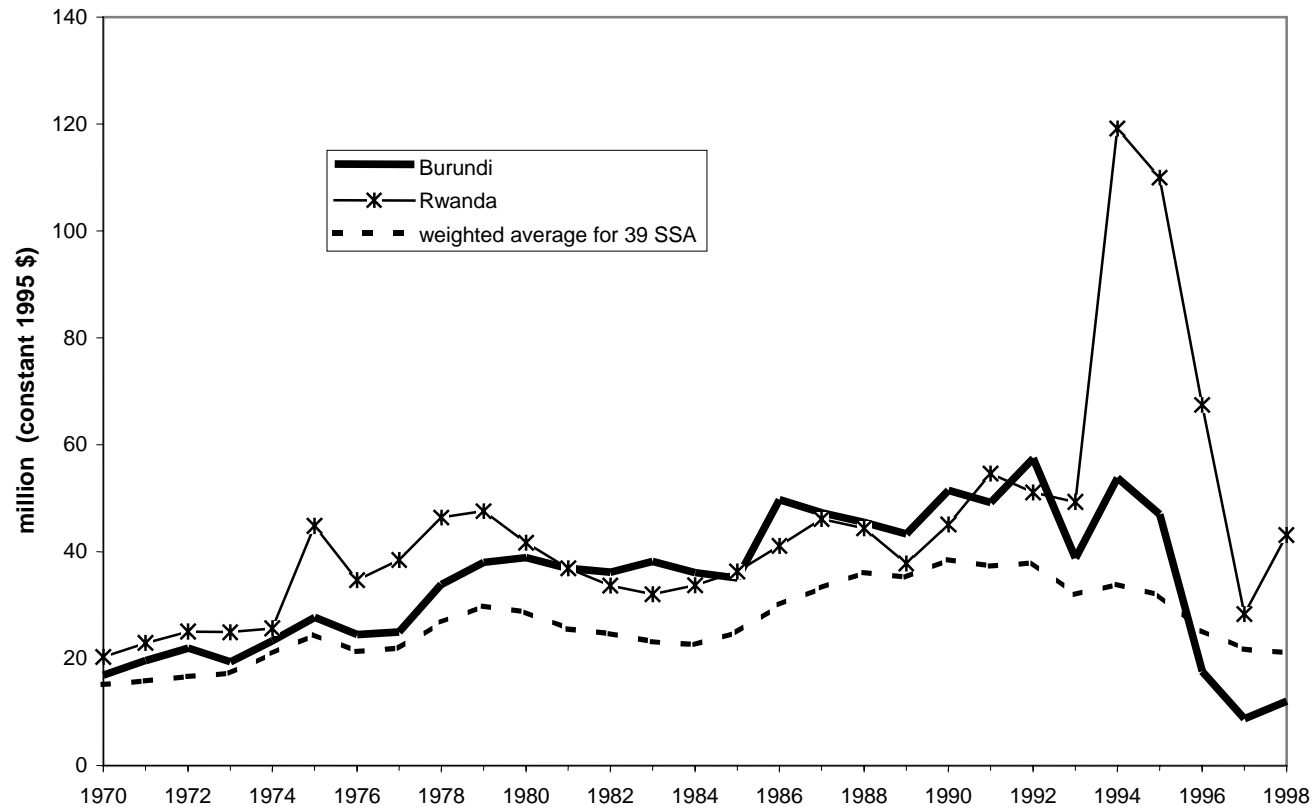


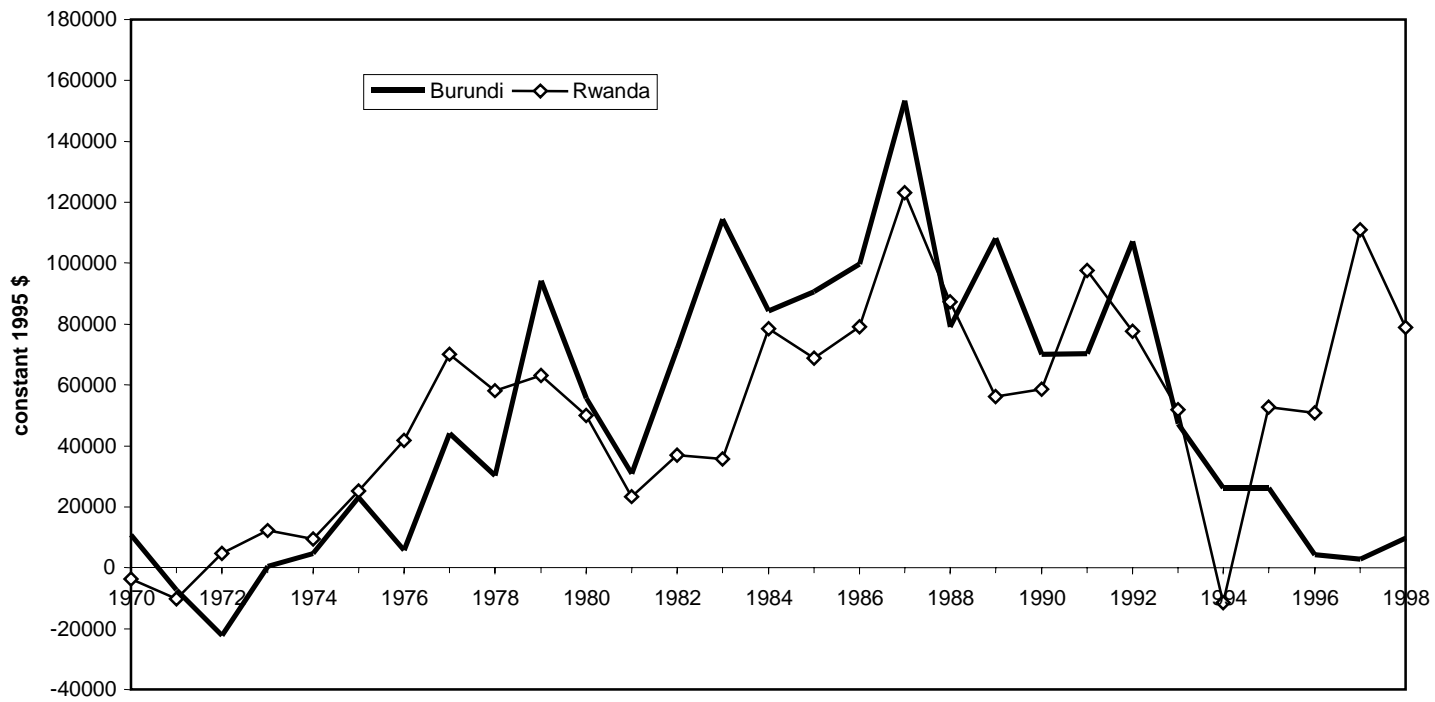
Figure 7

Burundi and Rwanda: Real official development aid (at 1995 US\$)



Source: Nominal debt figures (from World development Indicators 2000) are deflated to real values using the US producer price index (from International Financial Statistics, December 1999 CDROM edition).

Figure 8
Net flows on debt 1970-1998 (constant 1995 \$)



Source: *Global Development Finance 2000*.

UNU World Institute for Development Economics Research (UNU/WIDER) was established by the United Nations University as its first research and training centre and started work in Helsinki, Finland in 1985. The purpose of the Institute is to undertake applied research and policy analysis on structural changes affecting the developing and transitional economies, to provide a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and to promote capacity strengthening and training in the field of economic and social policy making. Its work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world.

UNU World Institute for Development Economics Research (UNU/WIDER)
Katajanokanlaituri 6 B, 00160 Helsinki, Finland

Camera-ready typescript prepared by Anna Kervinen at UNU/WIDER
Printed at UNU/WIDER, Helsinki

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute or the United Nations University, nor by the programme/project sponsors, of any of the views expressed.

ISSN 1609-5774
ISBN 952-455-248-5 (printed publication)
ISBN 952-455-249-3 (internet publication)