Addison, Tony; Murshed, S. Mansoob

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The fiscal dimensions of conflict and reconstruction

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Discussion Paper No. 2001/49

The Fiscal Dimensions of Conflict and Reconstruction

Tony Addison and
S. Mansoob Murshed*

August 2001

Abstract

Political violence, coup d'état, civil wars and inter-state wars, all have fiscal dimensions (and sometimes fiscal causes). Who gets what—public employment and public spending—and who has to pay for it, are questions that raise fundamental issues about the distribution of society's resources. These can only be resolved peacefully by some form of social contract, resting on the foundation of effective fiscal institutions (systems of public spending and taxation). Accordingly, the paper contrasts the evolution of fiscal institutions in stable and unstable societies. The paper discusses the likelihood of a fiscal peace dividend, but notes that 'incomplete' peace—and therefore the continuation of high levels of military spending—limits the scale of the dividend in many cases.

Keywords: conflict, fiscal policy, sub-Saharan Africa

JEL classification: H56, O15, D30
Broad reconstruction from war—which spreads its benefits widely so that poverty is reduced—is contrasted with narrow reconstruction, in which society's elite may consolidate their war-time gains, but in which the majority are left behind. Effective fiscal institutions are critical to determining whether broad or narrow reconstruction takes place. The paper concludes by emphasising the need to better understand the incentives of governments to improve fiscal institutions, and the role that conflict has in affecting their motivation.

Acknowledgements

Paper presented at a UNU/WIDER project meeting on ‘New Fiscal Policies for Growth and Poverty Reduction’. Helsinki, 17-18 November 2000. This project focuses on public expenditure management, taxation, and the macro-economic effects of fiscal policy in mainly (but not exclusively) low-income countries. Further details of the project can be obtained from WIDER's Web site (www.wider.unu.edu) or from the project director, Tony Addison (addison@wider.unu.edu).

This paper represents work in progress. Comments are welcome.
Union means so many millions a year lost to the South; secession means the loss of the same millions to the North. The love of money is the root of this, as of many other evils. The quarrel between the North and South is, as it stands, solely a fiscal quarrel.

Charles Dickens in 1861 on the American Civil War

1 Introduction

A significant number of developing countries have experienced violent conflict. Examples include Angola, Congo-Brazzaville, DRC, Eritrea, Ethiopia, Guatemala, Sri Lanka, and Zimbabwe—to name only a few. Political violence, coup d’état, civil wars, and inter-state wars, all have fiscal dimensions (and sometimes fiscal causes). Therefore any assessment of the conduct of fiscal policy in low-income countries—in which a large number of contemporary wars take place—cannot ignore conflict as an issue.

Who gets what—public employment and public spending—and who has to pay for it, are questions that raise fundamental issues about the distribution of society's resources. These can only be resolved peacefully by some form of social contract. Therefore in section 2 we discuss conflict and the creation of fiscal institutions, contrasting stable and unstable societies. Section 3 moves on to consider the fiscal peace dividend, but notes that ‘incomplete’ peace—and therefore the continuation of high levels of military spending—limit the scale of the dividend in many cases. Section 4, contrasts broad reconstruction from war—which spreads its benefits widely so that poverty is reduced—with narrow reconstruction, in which society's elite may consolidate their war-time gains, but in which the majority are left behind. Section 5 concludes by emphasising our need to better understand the incentives of governments to improve fiscal institutions, and the role that conflict has in affecting their motivation.

2 Conflict and the creation of fiscal institutions

All societies are characterised by conflict over resource allocation. Societies that are at peace have created, over time, institutions to reconcile competing claims over resources, so that most people accept the ‘rules of the game’ (in particular the rule of law and legislative accountability) whatever their present grievances. The violent prosecution of one's demands is thereby seen as an exception to the norm (Addison and Murshed 2000a).

The creation of fiscal institutions—the systems of public expenditure management and taxation—is part and parcel of the institutional investment that characterises successful development. Disagreement over the allocation of public spending is channelled into, and mostly resolved by, political processes that have wide acceptance—as is the case with the right of the state to impose taxes, and the obligation of the citizen to pay. Hence, the creation of a legitimate state is intimately bound up with the creation of fiscal institutions.
fiscal institutions that are acceptable to the majority—or at least do not provoke mass revolt.

But such progress is not linear. Developed countries have histories marked by violent disagreement over the rules of the game, including taxation and spending. The English civil war (1642-48), with its conflict between the crown and parliament over the monarch's powers of taxation, is a case in point, as is the French revolution of 1789. Controversially, Adams (2000) argues that the American Civil War (1861-65) was primarily caused by disputes over taxation and tariffs, and their differential impact between the northern and southern states.

A fiscal dimension is certainly evident in the causation of contemporary conflicts, although this is not to say that it is the most important factor. In so far as declining living standards contribute to violent conflict (see Nafziger and Auvinen 2000 on the evidence), so fiscal mismanagement plays a role in conflict generation, and may therefore be a leading indicator. Somalia is a case in point: budgetary ‘chaos’ facilitated the diversion of public money and aid, both of which became prizes in a process that ultimately destroyed the state; ‘... the structure of the budget of Somalia renders it essentially useless as a tool for analyzing government expenditures’ commented a World Bank public expenditure review shortly before the civil war (World Bank 1991 cited in Coolidge and Rose-Ackerman 1997).

Moreover, discrimination in public spending and in the allocation of the tax burden can raise the relative deprivation of ethnic and regional groups, thereby inflaming grievances (Ndikumana 2000, Stewart 2000). Lack of budget transparency facilitates this, and is especially prevalent in resource-rich countries—which are particularly conflict-prone—and fiscal institutions degrade as more rents are siphoned off (Bayart et al. 1999, Leite and Weidmann 1999). Considerable revenues are traditionally kept outside the state budgets in Angola, Congo-Brazzaville, and DRC (Addison et al. 2000b). Table 1 shows that recorded expenditure has fallen to 61.1 per cent of total expenditure in Angola (IMF 1999a): the true figure is almost certainly less than half.\(^2\)

Moreover, the local populations of the regions that provide the resource revenues typically receive little of the bounty, leading to resentment and insurrection. Examples include Cabinda in Angola, Nigeria's Delta region, and Aceh in Indonesia (Ibelema 2000).

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\(^2\) Under its 2000 shadow IMF programme, the Government of Angola agreed to an independent audit to check whether oil revenues reach the central bank's accounts. But this depends entirely on information supplied by the government, and the use of the revenue once it reaches the central bank is not monitored.
Table 1

Angola government expenditure by function, 1993-97 (in per cent of total)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total expenditure &amp; net lending</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>General public services</td>
<td>18.4</td>
<td>21.4</td>
<td>19.2</td>
<td>13.9</td>
<td>17.7</td>
</tr>
<tr>
<td>Defence &amp; public order</td>
<td>24.6</td>
<td>33.7</td>
<td>31.4</td>
<td>35.0</td>
<td>36.3</td>
</tr>
<tr>
<td>Of which: recorded</td>
<td>21.1</td>
<td>19.5</td>
<td>18.2</td>
<td>27.6</td>
<td>18.1</td>
</tr>
<tr>
<td>Peace process</td>
<td>0.0</td>
<td>0.1</td>
<td>0.5</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Education</td>
<td>7.2</td>
<td>2.8</td>
<td>5.1</td>
<td>4.6</td>
<td>4.9</td>
</tr>
<tr>
<td>Health</td>
<td>5.8</td>
<td>3.8</td>
<td>5.7</td>
<td>3.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Social security, welfare &amp; housing</td>
<td>7.9</td>
<td>2.2</td>
<td>3.1</td>
<td>2.1</td>
<td>5.3</td>
</tr>
<tr>
<td>Economic affairs &amp; services</td>
<td>4.9</td>
<td>2.5</td>
<td>6.6</td>
<td>8.5</td>
<td>8.7</td>
</tr>
<tr>
<td>Interest (commitment basis)</td>
<td>19.0</td>
<td>19.7</td>
<td>18.9</td>
<td>21.0</td>
<td>9.9</td>
</tr>
<tr>
<td>Other (residual)</td>
<td>12.1</td>
<td>13.7</td>
<td>9.4</td>
<td>11.0</td>
<td>13.5</td>
</tr>
<tr>
<td>Memorandum item</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total recorded expenditure</td>
<td>78.9</td>
<td>80.5</td>
<td>81.8</td>
<td>72.4</td>
<td>61.1</td>
</tr>
</tbody>
</table>

Accounting data and budget estimates are adjusted by IMF staff estimates of unrecorded transactions.

Source: IMF (1999a, Table 17).

In contrast, social stability is correlated with redistribution through fiscal mechanisms. Azam et al. (1996) show that redistributive public spending (on primary education, health etc.) has a negative impact on the probability of conflict in Africa. Côte d’Ivoire is a case in point. The late President Houphouët-Boigny used visible public investment across Côte d’Ivoire's regions to successfully buy the loyalty of the leaders of the country’s ethnic groups. Azam (2000) concludes that this redistribution provided the cement of the emerging Ivoirian nation, and considerable stability—until Houphouët-Boigny's successor abandoned the strategy (see Appendix 1). Adverse trends in SSA’s main commodity prices, and mismanagement of booms and slumps in earnings, have also weakened the social contract in SSA by reducing the revenues available for redistribution. 3

In extreme cases, belligerents may need to reach an explicit fiscal agreement in order to achieve peace. In Guatemala, for example, discrimination against indigenous groups

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3 For cross-country evidence on the relationship between ethnic fragmentation and public spending see Kuijs (2000), who concludes that the quality of public spending is worse in countries characterised by high levels of ethnic fragmentation.
contributed to the 36 year civil war—the longest in Latin America. The 1996 peace accords—signed by the government and the insurgency movements—includes a provision for a more equitable budgetary policy to redress indigenous grievances, together with a target to raise the tax/GDP ratio by 50 per cent over a five year period to finance the necessary spending (US Department of State 1998). However, the wealthy landed elite is reneging on the contract by obstructing the necessary tax reform, thereby endangering peace itself (see Appendix 1 and Reding 1998).

**Fiscal innovation in war time**

In principal, belligerents have strong incentives to maximise resource-mobilization for their cause. Historically, inter-state wars in today's developed countries led to investments in state capacities to tax, manage budgets, and issue debt—thereby converting informal ad hoc procedures into formal ones. For example, many of Portugal's fiscal institutions originated in the fifteenth century, in the context of wars with Spain (Braga de Macedo et al. 1998). In exchange for providing revenues, societies extracted institutional reforms from rulers, a process that strengthened the legitimacy of early modern states: ‘.... state-building was a process by which institutions of law and representation arose out of exchanges for revenue that war-fighting rulers undertook under the lash of fiscal and strategic necessity’ (Mahon 2000: 4).

Has similar fiscal innovation occurred in contemporary wars? Sri Lanka's progress in tax reform after 1994 has been encouraged by the state's need to strengthen itself against the Tamil Tigers (although revenue mobilization is now declining again: see IMF 1999b). In their 1998-2000 war, both Eritrea and Ethiopia mobilized more revenue (see section 3). Eritrea stepped up the quasi-voluntary tax on its diaspora and raised up to US$ 500 million in 1999, facilitated by the strong social capital forged in the earlier war against the monarchy and the Derg.

But with these exceptions, contemporary war states have generally failed to invest in fiscal institutions, despite the advantages that this confers. Indeed, in failing to address macro-economic instability incumbents often weaken their hold on power. Mobutu's Zaire experienced hyperinflation which reduced tax revenues through the 'Tanzi effect' (Beaugrand 1997). This inevitably weakened the regime's ability to defend itself, especially as rebels took control of the gem mines, the regime's main revenue source. Similarly, the Government of Angola's fiscal mismanagement during the 1990s contributed to hyperinflation (Aguilar 2000): this further undermined tax revenues, and without the secure revenues provided by offshore oil it would probably not still be in power.

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4 High inflation leads to a decline in the tax base since there is inevitably a gap between tax assessment and tax payment, and as inflation increases so the incentive to delay tax payment increases (Tanzi 1977). The ‘Tanzi’ effect is magnified in countries with high levels of corruption, such as Zaire under Mobutu, since tax payers offer some of the gains to tax collectors to secure delayed payment, or no payment (thus raising corruption further).
Typically, we think of fiscal policy as in the domain of governments, but rebels also need to tax and spend in the territories they control. Indeed, rebels may be better at gathering taxes, and controlling and allocating their expenditures, than governments. For example, in a popular war for secession individual preferences may favour paying, rather than evading, rebel taxes and strong group cohesion may limit misappropriation of the funds: Eritrea and Kosovo are both examples.\(^5\)

Indeed, the local population may prefer rebel taxes to government taxes even if they feel no ideological or ethnic affinity to the rebel side. This may be the case if the rebels are less predatory than the government and provide more protection (and other public goods) in return. Such resources-for-institutions exchange may provide nascent rebel states with some initial legitimacy. Such support—or at least acquiescence—may be invaluable in eventually capturing the central state itself. In the part of Equator province (DRC) controlled by the Ugandan-backed Mouvement pour la liberation du Congo (MLC), businessmen prefer the MLC's taxes to those of the Kabila government, or indeed those of Rwandan-backed rebels (who contest MLC's control of Equator).\(^6\)

### 3 Military spending and the peace dividend\(^7\)

Post-war governments (whether victorious incumbents or their successors) hope for a large fiscal peace-dividend. But this is often limited in the early years of peace (Mohammed and Thisen 1996). Badly paid armies typically live off the land during wars, and civilians bear much of the cost, a ‘tax’ that is also highly regressive. The post-war state must take over these costs, otherwise they hinder community reconstruction. But demobilization and the creation of a smaller and professional military (often by merging the forces of former belligerents) are expensive and they limit the size of the fiscal peace dividend in the immediate post-war years—unless external aid is forthcoming.

For example, after the independence war that ended in 1991, the Eritrean government incurred large one-off extraordinary expenditures (peaking at 7.3 per cent of GDP in 1995) on demobilization, reintegration, and payments to bereaved families. Together with the costs of the new defence force and the settlement of the army's wartime pay arrears, Eritrea’s military spending averaged 15-23 per cent of GDP over 1993-94 (IMF 1997: 7). It fell back to 3.4 per cent of GDP in 1997, but then surged again to reach 17.2 per cent of GDP (and 62.4 per cent of total government spending) when war broke out in 1998 (Figure 1. and Appendix 1).

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\(^5\) The Kosovo insurrection was in part funded by a well-organised informal payroll tax on Kosovar workers in Germany.

\(^6\) The MLC derives half its revenues (US$ 1.5 million) from an export tax on coffee: a 10 per cent export tax on gems provides much of the rest. MLC is stepping up its tax collection effort, following a reduction in Ugandan funding (from 40 per cent of MLC’s war effort to 10 per cent)—an indication that aid flows affect the tax effort of rebels, not only governments. Source: *Africa Research Bulletin*, Vol.37 No.8 (August 16-September 15, 2000), p.14463.

\(^7\) This section draws heavily on joint work with Leonce Ndikumana (Addison and Ndikumana 2000).
Positive fiscal effects are eventually forthcoming if peace holds. In Mozambique, the share of the social sectors in total current expenditures rose from 27.2 per cent to 30.5 per cent between 1996 and 1999, helped by a reduction in military spending after the earlier expenditure on creating a national army out of Frelimo and Renamo forces (IMF-IDA 2000, Sköns et al. 2000: 270). The government's commitment to reducing the military burden is important. But Mozambique has also been fortunate in its geographical position. Since the democratic transition in South Africa in the early 1990s, and until the Zimbabwe crisis of 2000, Mozambique has not bordered countries in major conflict (unlike Uganda where military spending has recently increased).

The fiscal effects of failing to sustain peace

Closer examination of Ethiopia highlights the consequences of failing to sustain peace. The Derg regime (in power until 1991) spent 9.5 dollars on the military for every dollar of military spending elsewhere in low-income Africa, and military spending and social spending are inversely related for the Derg period (Haile Kebret Taye 1997, and Mohammed and Suleiman 1994). Haile Kebret Taye (1997) estimates that education and health budgets could have doubled over 1974-87 if military spending had remained at its 1973 level. Ethiopia benefited from a substantial peace dividend over 1991-98, once demobilization was over (Bevan 2000). In 1989-91, defence spending averaged 46.6 per cent of total current expenditures, whereas social spending accounted for 17 per cent. But in the first three years of peace (1992-1995) the defence share fell to 16.4 per cent, and the social expenditure share rose to 23.5 per cent (Colletta et al. 1996: 20) and the latter's share continued to grow reaching 28.8 per cent in 1998. Military
spending as a percentage of GDP therefore fell from 9.1 per cent of GDP in 1990 to a low of 1.9 per cent in 1996 (Sköns et al. 2000: 270).

The 1998-2000 Eritrea-Ethiopia war has reversed progress. The World Bank (1999: ii) estimates that Ethiopia's military spending has risen to 7 per cent of GDP, defence taking at least 23 per cent of total spending—some Birr 3.4 billion (US$ 433 million at an exchange rate of Birr 7.85 = US$1) for fiscal year 1998/99 (World Bank 1999: 73). If the figures are to be believed (and off-budget military spending is unobtainable) then Ethiopia's military budget is over three times as high as its low point in the mid 1990s (1.9 per cent of GDP), but not yet at the level in the last year of the Derg (9.1 per cent), and the share of military spending in total expenditure is still only half the peak Derg level. But macro-economic stability has been maintained at the cost of progress in liberalization; Ethiopia imposed an additional 10 per cent tariff on most imports to raise revenue, thereby partially reversing the tariff reduction conducted under the economic liberalization of the 1990s.

The Bank report concludes that increased revenue mobilization and one-time financing measures such as the utilisation of privatization receipts preserved Ethiopia's pre-war gains in real spending on core priorities (education, health and roads programmes) despite the rise in military spending—although the Bank also concludes, rightly, that the war represents a lost opportunity for faster growth in social-sector spending (World Bank 1999: ii). But the Bank's simulations also show that whereas the fiscal damage has been contained over 1998-2000, the continuation of military spending at 1998-2000 levels will soon erode development spending and cause the unfunded fiscal-deficit to surge. This is mainly because donors continued to disburse much of the aid committed before the war but are now reluctant to make new commitments until Eritrea and Ethiopia convert the present cease-fire into a peace agreement—without true peace military spending will remain high even in the absence of renewed fighting (and aid fungibility will result in aid-financed military spending). The growth in real consumption per capita under this scenario will be less than half that of the baseline peace scenario in which military spending is cut back to pre-war levels (World Bank 1999: 75). The effects are therefore dire if Eritrea and Ethiopia cannot achieve peace, especially for the poor. The data does not permit a similar analysis for Eritrea, but the fiscal impact is probably even worse given the scale of the country's mobilization (Hansson 2000). Certainly, Eritrea cannot raise its desperately low human development indicators while defence takes 60.5 per cent of total government spending (in 1999) and the social sectors take only 10.6 per cent (Figure 1).

The fiscal impact of inter-state wars is drastic as Ethiopia and Eritrea illustrate, but it pales in comparison to civil wars that disrupt and destroy state fiscal institutions themselves. Such cases include Congo-Brazzaville, East Timor and Guinea-Bissau (Appendix 1). In Guinea-Bissau tax collection ceased during the 1998 conflict and domestic revenue in 1998 fell to one-quarter of its pre-conflict level (EIU 2000 quoting the Banque de France). By depressing output—Guinea-Bissau's real GDP contracted by 28 per cent during 1998—conflict also reduces a country's tax base (particularly for

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8 The fiscal estimates in World Bank (1999) were prepared in May 1999. Estimates of military spending were subsequently increased in late 1999, as new data became available (see Annex 2 in World Bank 1999). We use the revised (higher) estimates.
sales taxes). This severely impedes the post-war recovery in public spending, and leaves the budget even more aid dependent than before the conflict (Kovsted and Tarp 2000).

More broadly, high levels of military spending undermine the integrity of state institutions—at least in Africa (Gupta et al. 2000 find that corruption is positively associated with high military spending), blocks the improvement of budgeting and planning institutions (since much military spending is kept off-budget), and creates large external debt-burdens. High military spending takes resources away from developmental spending, especially social spending (see Gyimah-Brempong 1989 on the SSA evidence). And it damages donor-government relations since partnership through the adoption of the sector-wide approach (and a concomitant reduction in detailed policy conditionality) cannot develop when military spending is high, and aid is fungible.

Insecurity and war keeps military budgets at high levels—not only in countries at war, but also among their peaceful neighbours who have legitimate defence concerns. Such negative externalities thereby reduce development and aid effectiveness across Africa (Addison 2000). Peace is a public good, and better regional-peacekeeping together with more international commitment to UN peacekeeping would have substantial rates of return to development—by facilitating deep (and sustained) cuts in military budgets—in addition to the direct humanitarian benefits (Addison and Ndikumana 2000).

### 4 Broad versus narrow reconstruction

War increases uncertainty. This is often magnified by policy reversal (or simply policy chaos), which becomes more common in wartime. Therefore the investment decisions of economic agents—communities, the private sector, and government itself—become skewed towards activities with short-term returns (Addison 1998). Communities focus on subsistence activities to meet their immediate needs, switching away from investments with longer term returns such as tree crops and education. The private sector concentrates on commerce, both internal and external, and in safe areas (which needs less fixed capital than production) to take advantage of the economic rents generated by war. Public investment stalls, as public spending is redeployed to war. Government employees focus on their own survival, reducing their incentive to maintain institutional capital for the long term (and their resistance to corruption declines).

Figure 2 divides the economy into two sectors: $S$ (activities with mostly short-term returns, including predation) and $L$ (activities, mainly production, with long-term returns which are more vulnerable to conflict and policy reversal by virtue of their higher fixed capital requirements and often their location e.g. agriculture if the war is a rural insurrection).  

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9 The next draft of this paper will develop the model in more detail
Three production frontiers are shown: $PP$ (peace), $WW$ (war) and $RR$ (recovery). These have the usual properties. In a peaceful economy the $L$ sector will be larger than the $S$ sector provided that the policy framework supports long-term investment (e.g. avoidance of currency overvaluation). If this is the case, then the peace equilibrium will be at point such as $Ep$ (the $L$ sector has the largest share of output) where the relative price line $p$ (i.e. the relative returns in the two sectors) is tangent to the production frontier $PP$. Growth will be along a ray such as $Gp$, as aggregate investment pushes the production frontier outwards over time. However, in many cases the pre-war economy is nowhere near its Pareto optimum, and indeed policy distortions may be a major cause of the eventual outbreak of war, when they reduce the incomes of one ethnic/regional group relative to another (as noted in section 3 above). For our immediate purposes we can start from $Ep$ as shown.

Contemporary wars generally reduce aggregate output—for instance in Sri Lanka the cost of the war so far amounts to two years of annual GDP according to estimates by Arunatilake et al. (2000). The wartime production frontier must therefore lie within the peace time frontier. $L$ activities are hit harder than $S$ activities as argued above, and the
production frontier changes shape (to form WW reflecting the greater difficulties of $L$ production). The rate of return to $S$ activities rises relative to $L$ activities (shown by the shallower price line tangent to WW which gives the economy's new equilibrium at $E_w$).

There may be periods of growth during wartime—from a point below the peacetime production frontier—but it will be $S$-biased (along the ray $G_w$) and is therefore unlikely to be broad-based; especially given the destruction that typically occurs in smallholder agriculture and the knock-on effects to non-farm livelihoods (Angola's agricultural output is less than 5 per cent of its pre-war level for example). Rents from wartime rationing will typically be captured by higher income groups, although some may percolate down to micro-enterprises. The extraction of natural resources may well increase (oil and diamonds in Angola, for example) but the backward and forward linkages to the rest of the economy are often limited, and thus the income and employment multipliers are low. Some of the inevitable rise in poverty and income-inequality may be offset by public action, but this requires governments—if they continue to function—to prioritise poverty in their wartime public-expenditure allocations (not the case in Angola and DRC).

If a cease-fire is achieved, but no peace deal is signed (the Eritrea-Ethiopia situation), then uncertainty will remain high and long-term investment ($L$) will remain sub-optimal. This is also the case if a peace deal is signed, but the credibility of either party is in doubt—the case in many civil wars e.g. Angola through the 1990s, Guinea-Bissau in 1999 etc. (Addison and Murshed 2000). In either eventuality, military spending will remain high (limiting development expenditures as discussed in section 3). Moreover, the $S$ activities that develop in wartime, and which continue under uncertain peace, often fall outside the tax net, thereby limiting the recovery of public revenues, a further constraint on development spending. For all these reasons, any recovery in GDP growth (if it happens at all) is unlikely to be broad-based or to achieve much poverty reduction.

If a credible peace is established, and uncertainty falls, then the return on $L$ investments should rise, so that $L$ increases more than proportionately to $S$, the economy thereby moving through a series of reconstruction production frontiers such as $RR$. But the benefits of such recovery may still be distributed too narrowly. Distressed asset sales and the loss of human capital during war time tend to be disproportionately concentrated among the already poor, and many new poor are created—especially if the military and political elite use the war to accumulate personal wealth through predation (the case in Sudan for example). If so, then post-war growth may be even less broad-based than pre-war growth (i.e. a path such as $G_w$ rather than $G_p$); Liberia is one example. Indeed, post-war inequality (e.g. between regions) may be so high as to destabilize an initially credible peace-deal, or new sources of violent conflict may arise (e.g. within communities between those who achieved some recovery, and the majority who are left behind—a real danger in Mozambique).

We noted earlier that the economy's pre-war structure might in any case have been far from optimal for growth, poverty reduction, or peace, due to the existence of major policy distortions. Consequently, significant economic reform must take place alongside reconstruction if broad, rather than narrow, recovery is to be achieved—thereby raising
the return on $L$ relative to $S$ activities further (i.e. to the relative price line $b$) so that the economy recovers along $Gb$).\textsuperscript{10}

The allocation of public expenditures is clearly a crucial area in which substantial reform may be necessary to shift spending into basic services and infrastructure of value to the urban and rural poor, thereby broadening post-war recovery. Since credit markets are highly imperfect in conflict countries, and since many households lose all their collateral during war, well-designed public subsidies to household investment are necessary (for instance subsidies, rather than user fees, for households with children of primary school-age might be considered).

These priorities inevitably add to demands on limited public revenues, and further stretch weak institutional capacities. Therefore improving domestic revenue mobilization is important—to both raising pro-poor spending but also strengthening state capacity itself—but must avoid excessively taxing recovery (a trade-off that is reduced by budget support through increased programme aid). Again, weaknesses in tax and customs institutions (or their destruction in conflict) are a limiting factor, and considerable institutional innovation may be necessary. To take one example, strengthening the customs service is a priority; trade taxes account for large revenue shares in SSA, especially in conflict countries where internal trade (and sales taxes) usually contract by more than external trade (and tariff revenues) during war.

Mozambique has undertaken major institutional reform, putting out to tender a contract to supply customs services (Addison and Ndikumana 2000). The UK’s Crown Agents won the first three-year contract (starting in 1997 and subsequently extended) to reorganize the customs service, cut delays in customs clearance, and meet higher revenue targets. Customs revenue rose to US $198 million in 1999 (from a low of US$ 86 million in 1996), based on imports with a value of US $730 million, despite a reduction in the average tariff rate under the trade-liberalization programme (Crown Agents 2000).

However, it also follows that the design of the overall reform programme, including its fiscal component, is especially critical to achieving broad-based recovery, as is the mobilization of aid (including debt relief) to reduce the severity of trade-offs. Particular care must be applied to design of the macro-economic framework, to ensure that the target set for the fiscal deficit (as well as its financing) is compatible with the necessary growth in public investment and, critically, sufficient recurrent expenditures to make capital investment effective (Addison and Ndikumana 2000). Moreover, improved fiscal policy and broad-based recovery are unlikely to occur without improved governance, including democratization, so that institutions are created to oversee a transparent allocation of expenditures in the public interest (for example independent auditor-generals, and legislative committees with oversight over the public accounts). But democratization, in particular the adoption of competitive elections, leads to further

\footnote{Note that strictly the full model must define a utility function such that point $Eb$ is superior (higher welfare) to $Ep$ and other such points along $PP$. If the utility function gives a higher weight to utility gains to those with lower initial incomes then this will be the case. Our point here is relevant to the old debate on whether changes in GDP provide a good indicator of changes in welfare. Certainly in a post-war economy, two growth paths associated with equivalent changes in GDP can have very different welfare outcomes depending upon the patterns of structural change (and thus the distribution of the benefits) associated with each.}
fiscal pressures (including the creation of electoral-fiscal cycles) that donors will need to be sensitive to.

5 Conclusions

In summary, fiscal policy plays a role in the generation of violent conflict—perhaps a decisive role on occasion. But the relationship is far from being a mechanical one in which fiscal management and economic decline, or a skewed distribution of public spending and taxation, inevitably results in conflict (Pei and Adesnik 2000). Social institutions may be able to check the descent into violent conflict, and channel disagreement into mechanisms for peacefully resolving differences (hopefully the outcome in Zimbabwe as Addison and Laakso 2000, argue). If conflict does occur, then post-conflict reconstruction must be managed to ensure that a broad, rather than narrow, recovery is achieved. This may require considerable fiscal reform.

To end, we return to the point made in section 2 that historically fiscal innovation has often occurred during periods of war, but less so during contemporary wars. This presents a puzzle. The issue goes back to the distinction made by McGuire and Olson (1996) between ‘roving’ and ‘stationary’ bandits. When competition over a territory prevails between bandits, there is little incentive to protect production, and everything to gain by theft. But if a bandit can secure the territory, to become an autocrat, then his monopoly over taxation induces him to limit his tax rate, since there comes a point at which higher taxes induce dead-weight losses that are large enough to lower his income (McGuire and Olson 1996: 76). A rational autocrat will provide public goods because they increase taxable production. The roving bandit is thereby converted into the stationary bandit or autocrat, and peace prevails. But many contemporary wars, especially in SSA, seem to approximate the following exception described by McGuire and Olson (1996: 76):

When there is more than one tax-collector in a domain, each has a less encompassing interest than a monopoly tax collector would have had and the aggregate rate of redistributive taxation is higher and public good provision lower. Warfare among tax collectors also generates uncertainty, and this by shortening time horizons, can give autocrats an incentive to confiscate capital goods.

This captures some of the dimensions of the chaos in Angola, DRC, Sierra Leone, and Somalia. But it does not explain why some of Africa’s autocrats, having captured the territory, then fail to develop it—despite having an encompassing interest. Thus Mobutu controlled Zaire for 30 years, but left state institutions, including fiscal institutions, to whither. There are many other examples from the region. Finding an answer to this puzzle can help us in understanding how better fiscal institutions and more effective states might emerge in the African context.
Appendix 1.
The fiscal dimensions of conflict and reconstruction in selected countries

Congo (Brazzaville)

The Conflict. The Republic of Congo (Brazzaville) has been affected by violent conflict since 1993. President Pascal Lissouba (who won the multi-party elections in the early 1990s) was overthrown by his predecessor Denis Sassou-Nguesso after intense fighting over June-October 1997. This displaced a third of the population and destroyed property and state institutions, especially in the capital, Brazzaville. The oil sector is offshore and was therefore largely unaffected by the fighting. Sassou-Nguesso formed a new government in November 1997. A guerrilla campaign by his opponents continued, and a ceasefire agreement was reached in November 1999. The November 2000 peace accord reflects a recognition by both sides that a stalemate has been reached, but it does not include all the rebel leaders, and may therefore collapse.

Fiscal Dimensions. Military spending, and the decline in non-oil revenues, led to a widening of the budget deficit to 7.5 per cent of GDP in 1997 (despite a substantial rise in oil revenues) which was financed by a large accumulation of domestic and external arrears. In July 1998 the IMF approved emergency post-conflict assistance to the new government (IMF 1998). Reconstruction entailed a widening of the primary fiscal balance from 6.4 per cent of GDP in 1997 to 11.9 percent in 1998. Revenue mobilization includes: efforts to collect revenues from oil companies under existing oil production-sharing arrangements (oil revenues provided 60 per cent of total revenues in 2000), extension of the VAT (1998 budget), together with early strengthening of tax and customs administration and collection. Donor support to the Sassou-Nguesso government has been limited, but is now being stepped up after the signing of the peace accord, and further post-conflict loans are expected from the IMF and the World Bank.

Côte d'Ivoire

The Conflict. The late President Houphouët-Boigny used public spending to buy the loyalty of the country's disparate ethnic groups, as well as immigrants from neighbouring countries who make up 30-50 per cent of Côte d'Ivoire's population (Azam 2000). His successor, President Henri Konan Bedie, pursued a more exclusionary policy. In particular, he introduced a policy of 'Ivorian-ness' to disqualify his main political rival, Alassane Ouattara, a former prime minister, from standing for president on the grounds of nationality. General Robert Guei, overthrew President Bedie, in December 1999, but pursued the same policy against Mr Ouattara. General Guei rigged the 2000 presidential election to claim victory but was later forced to flee in widespread post-election violence that claimed 171 lives. Laurent Gbagbo was declared the new president. Parliamentary elections are due in December 2000. Laurent Gbagbo's Ivorian Popular Front (FPI) will fight the election against the PDCI party which ruled Côte d'Ivoire for 40 years after independence, and Alassane Ouattara's RDR party.

Fiscal Dimensions. A deterioration in budgetary management and tax fraud are longstanding problems. Wage increases and bonuses to the military have increased pressure on the budget. The economy and revenues have been hard hit by the sharp deterioration in the terms of trade: cocoa prices are now 40 per cent below their level at the end of 1998. External aid disbursements also began to slow prior to the coup d'état. The contraction of revenues (particularly VAT receipts and customs revenues) has led to the accumulation of domestic payments arrears, and arrears on donor loans, Brady bond dividends, and payments to the Caisse francaise de developpement. Arrears amounted to more than 7 per cent of GDP at the end of 1999 (IMF 2000b). The government is certain to prioritise payment of arrears to the military, followed by civil servants. Accordingly, social and development spending will continue to decline until the political situation is resolved. Fiscal control is expected to loosen as the government seeks to maximise its votes in the December 2000 legislative elections.
### Democratic Republic of Congo (DRC)

**The Conflict.** Laurent Kabila overthrew Zaire’s longstanding dictator, Mobutu Sese Seko, in 1997 following an 11 month military campaign, with assistance from Rwanda and Uganda, and the country was renamed DRC. Insecurity persisted in eastern DRC, leading Rwanda and Uganda to break with Kabila and back a Tutsi-led revolt in August 1998. Half of DRC is now controlled by the Rassemblement congolais pour la democratie (RCD), backed by Rwanda, and the Mouvement pour la liberation du Congo (MLC), backed by Uganda. The MLC split away from the RCD after mounting tensions including fighting between Rwandan and Ugandan forces in the DRC. The governments of Angola, Namibia and Zimbabwe have provided military assistance to the Kabila government. The six nations involved in the conflict signed the Lusaka ceasefire and peace agreement in July 1999, but the fighting continues.

**Fiscal Effects.** The revenues of the Mobutu regime in Zaire fell from US$ 900 million in 1989 to US$ 138 million in 1994 (Beaugrand 1997), as revenues from the cobalt and copper produced by the state mining company (Gecamines) declined, and as the tax base contracted along with the economy. This seriously weakened Mobutu's defence against Kabila who is reported to have raised US$ 300 million for his forces from foreign mining interests once it became clear that he was likely to capture the state and control the mining concessions (Addison et al. 2000a). Fiscal mismanagement has continued under the Kabila government, and allocations to development and poverty spending remain minimal. The official exchange rate remains grossly overvalued despite the devaluation in 2000. In August 2000, the government granted an Israeli company the export monopoly on diamonds (after a one-off payment of US$ 20 million) which severely disrupted the diamond sector, leading to a collapse in the parallel exchange rate, thereby further stoking inflation. The negative impact of high inflation on tax revenues (the Tanzi effect) has therefore continued, and this has imparted instability to government spending. There is at present no agreement with multilateral lenders, and the government continues to accumulate arrears on its US$ 12.9 billion debt stock.

### East Timor

**The Conflict.** East Timor was annexed by Indonesia in 1975, leading to widespread human rights abuses and 200,000 deaths. A referendum was held in August 1999 to determine East Timor’s future status: 80 per cent voted for independence. Extensive violence occurred, including atrocities by forces backed by the Indonesian military, which displaced two-thirds of the population. A multinational peace-enforcement mission (INTERFET) was sent in September 1999 to restore security and assist humanitarian relief. In October 1999 the Indonesian legislature revoked the decree annexing East Timor. The United Nations Transitional Administration in East Timor (UNTAET) was tasked with overseeing the transition to independence.

**Fiscal Dimensions.** Tax and budgetary mechanisms were dismantled with the withdrawal of senior Indonesian staff. Budgetary transfers from Jakarta ceased in September 1999. East Timor’s archives, including the taxpayers registry, must be re-established. The IMF recommended the establishment of a Central Fiscal Authority (CFA) to create an interim budget, and a simple tax system, to support the provision of basic services (Valdivieso et al. 2000: 13). A preliminary budget was presented to a donor conference in 2000, with the aim of providing sufficient revenue to finance half of recurrent expenditures in the first year, and most of the recurrent budget at the end of a three-year period.
Eritrea and Ethiopia

The Conflict. Eritrea became de facto independent from Ethiopia in 1991, after a thirty year independence war. The country achieved formal independence in 1993. Reconstruction began, and relations with Ethiopia appeared to be good, including substantial cross-border trade, until an unexpected border conflict broke out in 1998. This led to extensive fighting: in 1999, the Eritrea-Ethiopia war was the world's largest in terms of numbers, and combined battle-field deaths are at least 100,000. Following a successful Ethiopian offensive in May 2000, a ceasefire was declared and UN monitors have been deployed. There is as yet no peace agreement.

Eritrea: Fiscal Dimensions. Defence expenditures which had been on a declining trend prior to the outbreak of war in 1998—reaching a low of Nafka 634.2 million or 3.4 per cent of GNP in 1997—more than doubled to Nafka 1,458.8 million in 1998 or 17.2 per cent of GNP (in comparison the social sector budget in 1997 was Nafka 323 million or 4.7 per cent of GNP and 5.4 per cent in 1998) (IMF 2000). Extraordinary revenues to finance the war rose from zero in 1997 to an estimated 13.8 per cent of total revenues in 1999 (IMF 2000a). Large remittances (US$ 500 million) from the Eritrean diaspora have financed much of the war-time fiscal deficit.

Ethiopia: Fiscal Dimensions. Military spending has risen to 7 per cent of GDP (up from a low of 1.9 per cent in the mid 1990s), and 23 per cent of total spending (World Bank 1999: 73). Increased revenue mobilization, including an additional 10 per cent import tariff (thereby reversing progress in trade liberalization) and one-time financing measures such as the utilization of privatization receipts may have preserved real social and development spending according to World Bank estimates (World Bank 1999: 73). Even if this is the case, there still exists a large lost opportunity for faster growth in pro-poor spending, and therefore faster poverty reduction. The fiscal position will deteriorate in the absence of a credible peace agreement, since military spending will remain high, and donor support will decline given fears over aid fungibility.

Guatemala

The Conflict. Guatemala was governed by a succession of right-wing military and civilian governments after the elected government of Jacobo Arbenz was overthrown in the 1954 coup. The Arbenz government had attempted to implement agrarian reform, and reduce the severe inequality characterising Guatemala, including the extensive discrimination against the country’s indigenous population who are disproportionately found among the poor. Guerrilla insurrection continued from the 1950s onwards, meeting severe repression especially over 1978-82, with widespread human rights abuses. Dialogue between the government and guerrillas started in 1990, leading to a ceasefire and peace agreement in 1996.

Fiscal Dimensions. The 1996 Peace Accords included provision for a minimum 50 per cent increase in the tax rate by the year 2000, using the 1995 rate of 7.6 per cent of GDP as a base, to redress discrimination in public spending against indigenous groups. By 1998 the tax rate had risen to 9.7 per cent (all information from Reding 1998). However, in March 1998 opposition from the country's powerful landed elite led Congress to repeal the newly-enacted Single Property Tax (IUSI). In 1999, the commercial and agricultural enterprise tax became deductible from income tax, thereby reducing the rise in the taxation of higher income groups. Creating the socio-economic conditions necessary for peace, in particular fast poverty reduction among indigenous groups, therefore remains in doubt.
Guinea-Bissau

**The Conflict.** Military revolt led by General Ansoumane Mane in June 1998 against the government of President João Bernardo Vieira, led to 11 months of fighting, mainly around the capital, Bissau. In November 1998 General Mane signed a peace agreement with President Vieira, and a government of national unity was formed, and a timetable for elections was set. The agreement quickly broke down and President Vieira was overthrown in May 1999 after two days of fighting and a new interim government was formed. President Kumba Iala took office in February 2000 after winning the elections, but the military could intervene again at any time (Kovsted and Tarp 2000).

**Fiscal Dimensions.** In the 1990s, compliance with IMF fiscal conditionality reduced the army's budget; military expenditure was cut from 3.6 per cent of GNP in 1993 to 2.8 per cent in 1995 (Kovsted and Tarp 2000). During the conflict, tax and budgetary institutions were completely disrupted. The tax base fell sharply with the economy's contraction. The 2000 budget aims to raise revenues from 0.7 per cent of GDP to 14 per cent of GDP (their level before the conflict began). Raising budgetary allocations to reconstruction and social services is urgent, but is limited by the need to avoid disaffection in the army. Soldiers have protested about unpaid wages, forcing the finance minister to give priority to paying arrears in military wages.

Liberia

**The Conflict.** Economic decline under the increasingly brutal regime of Samuel Doe (who took power in a 1980 coup) contributed to the 1989-96 civil war. This destroyed much of the economy, especially in Monrovia, in a contest between Charles Taylor and other warlords over the country's natural resource wealth (timber in particular). Charles Taylor won the internationally supervised elections in August 1997. Per capita income remains about a third of pre-war levels (IMF 2000c).

**Fiscal Dimensions.** Extra-budgetary expenditures, mainly involving presidential and security-related outlays, rose sharply in 2000 leading to a deterioration in the fiscal position, in turn leading to an accumulation of arrears on wages and other payments (IMF 2000c). Trade tax revenues have increased due to the growth in imports and non-tax revenues have risen from timber concession receipts. A new tax code has been submitted to the legislature to replace emergency tax regulations. In general, the fiscal system remains chaotic and is non-transparent in a number of areas. The support of Liberia's government to rebels in Sierra Leone led to a freeze of US$ 45-50 million post-conflict assistance by a key donor.
Sierra Leone

The Conflict. The 9-year civil war displaced 2 million people, half the country's population. Democratically elected government was restored in March 1998, but rebels of the Revolutionary United Front (RUF) invaded Freetown in January 1999. The Lomé peace agreement signed in July 1999, led to a cessation of fighting, and the return of rebel leaders to Freetown, and their entry into a government of national unity in October 1999. However, the peace deal collapsed in May 2000 when international peacekeepers attempted to enter the rebel controlled diamond producing areas, which finance rebel activities. Rebel leader Foday Sankoh was subsequently arrested. The government and the RUF signed another peace agreement in November 2000, but it has not yet been tested. The RUF and other rebels presently control half the country, including the diamond producing areas.

Fiscal Dimensions. The fiscal base collapsed with the economy's shrinkage (real GDP contracted by 17.6 per cent in 1997, stagnated in 1998, and fell a further 8 per cent in 1999): real government revenues fell by 56 per cent over 1998-99 (GOS 1999). Following the Lomé peace agreement, the IMF approved $21 million in emergency post-conflict assistance in December 1999, pending application to the Fund's Poverty Reduction and Growth Facility (PRGF) and for HIPC debt relief (IMF 1999c). Under this programme, the primary fiscal deficit was targeted to fall to 4.2 per cent of GDP in 2000, from an estimated 7.4 per cent in 1999 (the latter reflecting security-related outlays that amounted to 2 per cent of GDP), through improved tax collection and stricter expenditure control. Meeting the wage bill of the civil service and the army is a major problem: the government wage bill amounts to 5.8 percent of GDP, or 72 percent of domestic revenue (GOS 1999). In the event, none of the targets set out in the 1999 Letter of Intent were met as a consequence of the renewed fighting in 2000. The government has decided to end the previous practice of supplying free rice to the armed forces and the police, and to monetize this allowance. Previous attempts to end this allowance led to major disaffection in the army and to political instability. This will raise the wage bill further. The government is treading a fine line between its need to devote resources to security, and the demands of an impoverished and brutalised population.
Conflict. Growing opposition to the one-party rule of Robert Mugabe (president since independence in 1980) led by the Movement for Democratic Change (MDC) resulted in widespread intimidation and brutality against MDC supporters by the ruling party, ZANU-PF, over 1999-2000. Zimbabwe has substantial land inequality, the consequence of its history as a settler economy. In order to intimidate white farmers and their workers, most of whom are MDC supporters, the government encouraged the veterans of the liberation war to occupy and seize white owned farms in the run up to the 2000 legislative elections (Addison and Laakso 2000).

Fiscal Dimensions. The government attempted to reduce the fiscal deficit to a target of 5 per cent in the first reform programme in the early 1990s, but it remained above 10 per cent for the 1990s. Premature financial liberalization (which should have been sequenced after the deficit was cut) led to an explosion in the government’s debt bill, which in turn constrained its efforts to reduce the fiscal deficit (Addison and Laakso 2000). High inflation resulted, leading to public-sector strikes and rioting in the second half of the 1990s, which in turn facilitated the growth of opposition forces, and the formation of the MDC which is led by trade unionist Morgan Tsvangirai. Zimbabwe’s intervention in the DRC in support of the Kabila government has exacerbated the fiscal problem. In 1999, the government told the IMF that is was spending US$ 3 million per month on its military intervention in the DRC (in which it has 11,000 troops) but in 2000 the government admitted that the cost was running at US$ 26 million per month, or 9 per cent of the national budget (Addison and Laasko 2000). This, together with the disruption caused by the land seizures has led to a sharp economic contraction, loss of tax revenue and a fiscal deficit of 25 per cent of GDP. The government’s interest bill is expected to exceed 50 per cent of total revenue by the end of 2000, and the local capital market continues to lend to the government only because the central bank has ordered it to do so. The government is spending unauthorised money not yet approved by parliament. In September 2000, it was expected that the finance minister would shortly request parliament to vote the funds, thereby giving the opposition the chance to demand details of the DRC war spending as well as the decline in social-sector spending.
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UNU World Institute for Development Economics Research (UNU/WIDER)
Katajanokanlaituri 6 B, 00160 Helsinki, Finland

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