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1

Introduction

Tony Addison and Alan Roe

Introduction

Fiscal management is one of the most important tasks facing policy-makers in developing countries, and also one of the most difficult. Its three main dimensions of expenditure budgeting/control, revenue mobilization and deficit containment/financing all pose their own technical and political problems. Fiscal crisis is common in developing countries – and seems ever-present in many African countries. The reasons are well known. Budgetary and revenue institutions are often weak, resulting in poor expenditure control, and poor quality public investment. Debt service typically accounts for a large share of revenue, thereby limiting expenditures on development and poverty reduction. Revenues and aid flows can be highly unstable, leading in turn to expenditure instability. Weak fiscal management reduces aid effectiveness and hinders the transfer of resources, including debt relief to the poverty targets that both donors and governments are trying to favour. Especially difficult challenges confront countries in conflict or post-conflict reconstruction.

This book reports the results of a major UNU-WIDER research project that re-examines these complex and difficult issues. We concentrate mainly (but not exclusively) on the experiences of the low-income (aid-dependent) countries, where the quality of fiscal management is an increasingly prominent issue in the policy debate (see IMF–IEO, 2003 and World Bank, 2003a), particularly with regard to the achievement of the millennium development goals (UNDP, 2003). The book is organized according to five major themes. Three of these themes relate to the three high-level issues mentioned in the book's subtitle – economic growth, poverty reduction and post-conflict reconstruction. The other two with which the book begins are cross-cutting issues, namely the overall (macroeconomic) framework for fiscal policy and the management of public expenditures and revenues.

This chapter introduces the issues, and summarizes the main findings of the project. The next section considers the particular challenges of fiscal

management in low-income countries. The following two sections concentrate on new approaches to expenditure management and to tax policy, respectively. Then we examine the impact of fiscal policy on growth. The next section concentrates on poverty and inequality and how fiscal programmes impact these. The penultimate section assesses issues surrounding the reconstruction of economies from conflict. The conclusions in the final section emphasize the need for both national and international research and other actions to further improve fiscal management in the interests of more effective poverty alleviation.

Fiscal management in poor economies

Various factors contribute to the inherent difficulties of fiscal management in low-income countries. First, and notwithstanding the reforms of recent years, low-income countries demonstrably still face huge problems in achieving *sustainable* fiscal positions. Second, even where they have gone through painful stabilizing reforms, they are still confronted with a long legacy of problems that render stability extremely fragile. Third, although they get much help from aid donors, the directing of that aid to poverty-relieving and other priority expenditures is still difficult to get right. Finally, the persistence of war and civil conflict adds a painful additional dimension to already difficult technical problems. These issues raise familiar questions but the recent literature, including the chapters in this present volume, add significantly to our understanding of them.

How sustainable are internal and external deficits and debt?

Jha (Chapter 2) analyses the familiar general question of the circumstances under which the fiscal and external deficits of low-income countries can be considered sustainable. His work highlights the likelihood of low-income countries facing ongoing fiscal difficulties. The government's intertemporal budget constraint can be used to identify two familiar cases, namely

$$r_t - \pi_t < \eta_t \quad (\text{Case 1}) \quad (1.1)$$

$$r_t - \pi_t > \eta_t \quad (\text{Case 2}) \quad (1.2)$$

where the first term is the real interest rate on government debt and the second is the rate of growth of real GDP.

In the second case the debt is unsustainable and the debt stock will become infinite no matter what sequence of primary deficits is chosen unless the (growing) debt stock can be offset by matching it with a sequence of increasing but discounted primary surpluses in the future. The general question of sustainability of the public debt is clearly an intertemporal

question: every temporary deficit can be sustainable so long as it is matched by an adequate future surplus.

Jha's empirical work for a sample of 29 mainly low-income countries, however, finds an alarmingly high incidence of long-run *non-sustainability* of fiscal deficits. The data reveal only three country cases (Paraguay, South Africa and Sri Lanka) of long-run sustainability.

Similar analytics for the *external* deficit help define cases where the *fiscal* deficit is sustainable but the *external* deficit is not and then also for the reverse case. Empirical analysis of the twin deficits indicates that a majority of his sample countries have faced real difficulties in achieving long-term sustainability of *both* their external and their internal fiscal deficits. Jha links the two by making the important point that the *external deficit* problem must result in a sustained wedge between domestic and international interest rates to attract the necessary capital inflow to finance ongoing deficits. But this acts as a drag on growth and also complicates the task of achieving a sustainable *fiscal position*. Monetary policy is also compromised in this case by the monetary financing of an enlarged fiscal deficit. In brief, the general situation seems to be one characterized by considerable fragility in both fiscal and external deficit outcomes.

Can fiscal balance be assured after stabilization?

A more specific aspect of this problem concerns the robustness of a 'stabilized' economic and fiscal situation once achieved. Economic stabilization is too often presented as a once-for-all challenge. Once you have stabilized you can run the economy in a less constrained manner than before. Adam and Bevan (Chapter 3) suggest to the contrary that real policy choice remains heavily circumscribed by the legacy of past fiscal laxity.

The authors explore this idea by studying a group of 32 successful stabilizers, and find some common outcomes from stabilization and some common residual problems. 'Successful' stabilization often results in a reduced dependence of governments on domestic credit financing, and the rebuilding of official international reserves, but a problematic decline in private credit as a percentage of GDP. The exit conditions from stabilization also show other common patterns across most successful stabilizers. Most low-income economies emerged with lower levels of domestic debt, but with external liabilities net of reserves that were high, and with levels of monetization that were low. In short, their success in tackling high inflation left a legacy of low domestic resource mobilization and an unsatisfactory situation of asset stocks (both government and private) that could threaten the countries' ability to enjoy sustained stabilization.

The evidence from their research suggests *seven* particular stabilization 'hangovers' that successful stabilizing governments still need to address. These include the overhang of external debt; higher domestic debt burdens associated with the ending of financial repression; an inadequate supply of

credit to the private sector; a legacy of increased foreign reserves; and long delays in the recovery of demand for real money balances in response to lower inflation. A still low tax-to-GDP ratio is an eighth problem for many countries.

The authors also explore how these various challenges relate to the specific administrative mechanisms for the budget that countries frequently adopt in the post-stabilization phase. *Rules-based mechanisms* and especially tight *cash-budget rules* have helped to reduce very high inflation in several countries (Uganda and Zambia are prime examples). These mechanisms have obvious appeal but are not free of problems. In particular, strict cash budgeting requires governments and central banks to forgo other forms of intervention and this can and does lead to higher than desired volatility in domestic prices and the nominal exchange rate. Cash budgeting has also failed to deliver the precision of budget outcomes that might have been expected including the expenditure outcomes for poverty programmes (see for instance Zambia's Poverty Reduction Strategy Paper, PRSP). In brief the management of the stabilization legacies still requires a great deal of new thinking to come up with better budget management arrangements in the post-stabilization era.

Assessing the impact of aid on fiscal performance

Foreign aid adds a further complicating factor by impacting government fiscal behaviour in a number of complex ways: a topic examined by McGillivray and Morrissey (Chapter 4). Aid inflows constituted approximately half of all public expenditures in low-income countries during the mid- to late 1990s and aid dependency is clearly a widespread problem.¹ In spite of this, there are few strong theoretical results about the impacts of aid; empirical findings are highly sensitive to differing theoretical and econometric specifications; and there are relatively few attempts to study specifically the links between aid and fiscal behaviour in developing countries. This is an area of the literature calling out for more research.

There are two established analytical strands in the literature relating aid flows and fiscal policy. The first involves *studies of fungibility*: identifying whether or not aid finds its way to the particular expenditure target, such as health or education, intended by the donors. The second strand is the *fiscal response literature*: explicit models showing how aid is mediated by public sector behaviour. This second class of models is broader in scope and cover, for example, tax effort and public borrowing.

Clearly, aid is sometimes used in a fungible manner and so fails to reach its intended targets. But it seems difficult to make any general comment regarding the extent of fungibility: the results in the empirical literature vary from zero fungibility (Indonesia) to complete fungibility (Pakistan) and are invariably hard to interpret. Practical policy conclusions drawn from these studies are also unlikely to be valid. A notable example is the conclusion from the

World Bank that fungibility ‘helps explain why large amounts of aid have had no lasting effect in highly distorted environments’ (World Bank, 1998). The authors argue that aid ineffectiveness is just as likely to be due to the low productivity of aid-financed investments as to aid being diverted to unintended uses.

The alternative *fiscal response approach* has its own technical problems. One is the common assumption that donors grant aid only for investment purposes: hence any aid allocated to current purposes is an *ex post* measure of fungibility. More recent papers have sought to solve these problems both through slightly different theoretical specifications and through various econometric devices. One major variation on the simple model is to make aid endogenous rather than exogenous.

As regards empirical results, the evidence that aid is primarily spent on consumption rather than investment (an implication of fungibility studies) is not compelling. At the same time there is little encouraging evidence that aid induces significant increases in investment spending. General conclusions are difficult to draw from the limited number of these recent studies of fiscal response. However, these approaches are encouraging in the sense that they allow a more systematic study of the influence of aid on the fiscal problem writ large, for example, the effects on tax effort and government borrowing. They are discouraging in that they pose very substantial technical problems in specification and estimation and the results so far contain several ambiguities. Their principal selling point is that the ultimate effects of aid receipts in terms of total spending, and its allocation, are quite different when one solves the system of fiscal interactions compared to when one looks narrowly at the partial, contemporaneous relationship. In brief we have the technical apparatus to unravel the impacts of aid on fiscal behaviour but not yet a strong consensus of results about how those impacts work in practice. This is a serious gap given the high levels of aid dependence.

New approaches to managing expenditures

During the 1980s, economists, management theorists and politicians in many OECD countries, notably New Zealand, Australia, the United Kingdom and the United States, set about revitalizing policy approaches to the public sector. Fozzard and Foster (Chapter 5) identify six main elements in their new public management model (NPM):

- The role of the state has been redefined and its scope for intervention curtailed through the privatization of public enterprises
- Policy and implementation functions have been separated by creating executive agencies and decentralizing responsibility for service delivery

- Public sector managers have been liberated from bureaucratic controls, giving them greater autonomy in the use of resources and in staffing
- Incentives for agencies and personnel have been aligned with policy goals, by setting and monitoring performance targets, personnel performance contracts and performance related pay
- Agencies have been subjected to competitive pressures through compulsory tendering, internal markets and benchmarking of performance between service delivery units
- Mechanisms have been put in place to ensure feedback from and accountability to the public, by creating opportunities for 'exit' (access to alternative private and public providers) and 'voice' (through, for instance, client surveys and the participation of representatives on management boards).

How far have these tendencies gone in the developing world? The 1980s and early 1990s saw public expenditure management issues focused narrowly around the priority of *economic stabilization*. So issues such as the reduction in the size of the public sector, through civil service reform and the privatization of public enterprises were prominent. In many cases, however, this resulted in poorly prepared cuts in public spending and in situations where badly paid staff lacked the means to adequately fulfil their functions – teachers without materials and health centres without medicines – so that short-term stabilization was achieved at the expense of efficiency and effectiveness (Addison, 2002; Kayizzi-Mugerwa, 2002).

In the second part of the 1990s, the World Bank and other donor agencies started to pay more attention to the NPM agenda as defined above. But in general it has been pursued with considerable caution. For example, recent World Bank programmes for Ghana, Tanzania and Zambia allude to the key elements of the NPM model, but place greater emphasis on the reform process than on specific measures. Priority has been given to the development of high-level structures to oversee the reform process and the identification of quick-win interventions that can mobilize and sustain the momentum of reform. In this context, much progress has been made in getting governments out of costly interventions with a weak rationale, especially in Africa, through the privatization of state enterprises and the reduction of price subsidies. But for poor countries, even after cuts in redundant functions, the resources available are often insufficient to fund adequately even those remaining services that have a strong justification, particularly in terms of human development.

Alongside these developments, two further tendencies have become evident. First, considerable progress has been made in the reform of agency management structures along the lines suggested by the NPM: Ghana in particular. The autonomous agency model has been particularly favoured for tax administration agencies, with examples in Malawi, Zambia and Uganda.

Among other things, this has allowed the payment of more attractive salaries, with the objective of reducing corruption, and protecting day-to-day management from political interference: an improvement on the past but without being a panacea. Second, more countries are allowing parallel private provision of key services such as education and health in an explicit manner. It is now common, for example, to find *private* household spending on education and health exceeding state expenditures, even where governments claim to offer free services (Bangladesh is an example). For the poor, who are most in need of public subsidy for the services they consume, this has not been a positive development.

The same authors also review problems and experiences with selected aspects of the public expenditure management task as follows: improving agency performance; improving resource and expenditure planning; strengthening governance; integrating development assistance; and improving the poverty focus of public expenditures. In most of these areas of reform, Fozzard and Foster argue that low-income countries are unlikely to achieve radical changes in their public expenditure management systems in the short term, partly because of their commitment to traditional administrative structures that preclude effective agency/managerial autonomy, and partly because weak managerial capacity makes it hard to actually manage radical change.

As regards *performance indicators and targets* of agencies, many countries have adapted existing information systems that may often fail to meet the criteria of sound design. Performance information can also easily become tainted, particularly where it is linked to resource allocations or personal remuneration. Nonetheless, there is a growing acceptance that measuring institutional performance is essential if the efficiency and effectiveness of public spending is to be improved. One key issue is to determine how often performance reviews should take place: annual reviews seem to be neither feasible nor necessary.

As regards the *medium-term expenditure framework* (MTEF) process, the authors conclude that this approach does have the potential to improve budgetary outcomes, particularly with regard to expenditure prioritization. However, there has been considerable variation in the methods of applying this approach and considerable variation in the degree of success that has been realized so far. Experience suggests a number of critical success factors. For example, the relative success of Uganda's MTEF derives from its acceptance as a tool of political decision-making at cabinet level, forcing line agencies to take the Ministry of Finance initiative seriously.

A generic problem seems to be that reform initiatives have first addressed the budgeting and resource planning processes, which are primarily intended to improve allocational efficiency. But the authors argue that changes in budgeting and expenditure planning are unlikely to generate significantly improved performance where core functions continue to

operate inadequately: this is largely the experience of Mozambique and Malawi in introducing the MTEF. Improvements in core expenditure management functions such as treasury management, budget execution/control, accounting and auditing, which are primarily concerned with improved operational efficiency and accountability, have often lagged far behind the changes in budgeting. In reality, too, the sequencing of reforms is likely to reflect political expediency, taking into account likely sources of resistance to reform.

Fozzard and Foster conclude that successful public expenditure management reform cannot be dissociated from more fundamental institutional reforms within government. This requires a higher level of commitment than is normally experienced, in order to push through reforms against the opposition of vested interests both within and outside of government. It also requires some measure of policy stability, since a long implementation period is likely to be required. There is contradictory evidence about the power of democratic forces to drive the process forward. However, the authors note that the prospects for transparent and effective public expenditure management seem, on balance, much brighter for countries that have passed through a democratic transition and where the institutional frameworks for adequate parliamentary and public oversight of the public sector have been put in place.

Re-designing tax systems for low-income economies

Chapter 6 by Christopher Heady moves the focus from the expenditure side to the revenue side of the budget. Specifically, he discusses the design of tax systems in developing countries in the light of the tax reform advice that is frequently given by the IMF and others. The main question posed is whether low-income countries should be advised to deviate from the standard prescription of 'neutral' taxes.

The main background issue is that developing countries have not been particularly successful in designing progressive tax structures, which would place a smaller burden on their poorest inhabitants. Table 6.1 in his chapter for 21 developing and transition economies shows that in comparison with the OECD countries, developing country tax structures reveal a low usage of social security taxes, a high revenue from trade taxes and high levels of non-tax revenues. Developing countries also tend to collect a substantially higher share of their income tax revenue from companies than from individuals. There are both administrative forces (convenience and low collection costs) as well as non-administrative forces at work in explaining these differences. Examples of non-administrative factors include the high non-tax revenues in some countries (Angola, for example) resulting from mineral deposits.

Heady stresses that the pressures on reforming tax and other aspects of developing country policies have been intense in recent years. He notes that the tax element of these policies has generally involved a movement towards 'neutrality': introducing a tax system that has a smaller effect on the allocation of resources in the economy. In particular, because taxes on international trade are seen as distortionary, countries are frequently advised to reduce the rates of import duties and to make them more uniform. There is also advice to reduce and often eliminate export taxes because they discourage exports. Table 6.2 in his chapter shows that many low-income countries have, indeed, succeeded in reducing their dependence on trade taxes. A third common recommendation has been to replace any lost revenues from trade taxes by increasing the revenue from domestic commodity taxes, which are less distortionary. Table 6.2 for 16 of the same countries mentioned earlier shows that several, but not all, low-income countries have increased the revenue share of sales taxes, including both general sales taxes and domestic excise duties. It is also common for VAT to be recommended as a replacement for existing commodity taxes.

Relating these actual reforms to the theory that may underpin them, Heady notes that the theoretical results are typically dependent on two strong assumptions. The first is that the economy would produce an efficient (Pareto optimal) allocation of resources in the absence of distortionary taxes. The second is that the government has available a large menu of tax and spending instruments. Some of the standard policy reform recommendations noted above follow easily from these assumptions. For example, the idea that the pre-tax economy is efficient leads naturally to the goal of tax neutrality.

However, neither assumption is fully appropriate in the case of low-income countries. Heady points out that some countries are unable to administer direct payments to households: that instrument is not available. Many countries have even greater restrictions on their tax powers: the nature of small-holder agriculture makes it impossible, for example, to tax many agricultural transactions. He concludes that it is, therefore, necessary to use a theory of *restricted taxation* in evaluating tax policy for developing countries. An additional deviation from the standard theory derives from the reality of widespread market failures in low-income economies. These market failures mean that the pre-tax economy is not efficient, that resources consequently need to be re-allocated and that tax neutrality is not necessarily a desirable aim.

Another important tax restriction arises from the difficulties involved in taxing trades *within* agriculture. This inability to tax agricultural transactions directly leads to the desirability of taxing agriculture through its trade with the rest of the world: but not at the high rates often found in practice.

As regards *market failures*, Heady notes that the labour market has often been cited as a significantly distorted market in developing countries. A first distortion can arise because migrants from rural areas are unable to sell the

land they occupy. This restricts the movement of labour from agriculture to industry. In this case, the obvious target for taxation is agriculture because that will encourage the movement into manufacturing. However, because of the difficulties of direct taxation, agriculture has to be taxed indirectly, through taxes on its trades with other sectors. This is not consistent with uniform taxation and may once again justify the taxation of international trade. A second distortion arises when the urban wage in 'modern' manufacturing is set above market clearing levels. This produces an incentive for people to leave agriculture to seek urban jobs despite the existence of urban unemployment. In this case, the tax remedy would be to tax the people in the 'informal' urban sector in order to discourage further migration and avoid subsidizing formal employment. However, the very nature of informal employment means that income taxes cannot be used.

As a final example of how the principle of tax neutrality might need to be qualified, Heady considers the taxation of land. Given the difficulty of taxing trades in agriculture, taxation of land could be seen as a natural alternative. However, there are significant technical and political difficulties in this approach. Technical difficulties arise from variations in land quality and from making sure that the right person pays the tax. For a land tax to be horizontally equitable, the tax should be paid by the landowner and depend not only on the land area but also on its value. Even in countries that have good data on yields for agricultural land that can be used in tax assessments, there are problems. For example, the agricultural tax in China makes use of the records of grain yields from each plot of land. But some land near cities has been switched from grain production to market gardening and this has increased the profitability of the land. In theory, this should lead to an increase in the tax on the land used for market gardening, but the use of grain yields as a measure of quality prevents this from happening and generates considerable horizontal inequality. Political oppositions that cite such technical problems and the apparent inequities that they produce compound the practical difficulties of using land taxes.

Overall, Heady concludes that there are sound reasons for much of the tax reform advice that is given to low-income countries. However, theory provides rather little support for the policy of full tax neutrality that is frequently recommended. Countries might be able to do better than the tax neutrality policy with a carefully designed policy that includes non-uniform sales taxes and modest trade taxes. However, the data requirements of such an approach are non-trivial. More serious, perhaps, are the political economy arguments against non-uniformity of taxation. If governments really have the interests of their citizens at heart then differentiated tax rates could result in improved growth and poverty alleviation. However, where governments are under the control of special interest groups, it might be better to have a constitutional provision restricting the government's power to set differentiated taxes.

Fiscal policy and growth

The core of this section of the book is the chapter by Gemmell (Chapter 7) that assesses recent theoretical and empirical evidence on the impact of fiscal policy – taxes, public expenditures and budget deficits – on long-run growth. This is supported by Hermes and Lensink's chapter (Chapter 8) on the links between fiscal policy and private investment, a crucial issue given the importance of such investment to growth.

Can fiscal policy have long-term effects on growth?

Gemmell begins by noting that the traditional (Solow) growth model provides a simple but limited answer to the question: can fiscal policy affect the long-term growth performance of low-income countries? The answer is that, at most, it can affect the short-run growth rate of *per capita* income during the transition from one steady state to another. However, new endogenous growth models have proposed a richer set of channels through which fiscal policy can have 'permanent' growth effects. These results rely on specifications in which (i) factor accumulation or technical progress is endogenously determined; and (ii) physical and human capital are not subject to diminishing returns in aggregate. The new models have mostly been developed for richer economies in the OECD and so their relevance to LDCs remains to be assessed but they could clearly be important.

The several channels of influence through which fiscal policy might influence long-term growth in the new growth theories include:

- *Production externalities*: public capital/investment or education may enhance private sector production
- *Productivity growth*: fiscal policy may influence innovation, R&D and the acquisition of foreign technologies through FDI
- *Public/private sector efficiency differences*: these provide growth-affecting opportunities via intersectoral flows; such models involve *assumed* average and/or marginal productivity differences between government and private sectors
- *Fiscal effects on factor accumulation*: either indirectly via incentive effects on private accumulation or directly via public investment in physical or human capital
- *Crowding-out*: to the extent that 'unproductive' public expenditures crowd-out 'productive' private or public investment (including education) long-run growth can be impaired
- *Redistribution*: policies aimed at redistribution can affect long-run growth by a number of mechanisms: altering savings rates, providing social insurance and overcoming capital market imperfections.

Many endogenous models of fiscal policy and growth have focused on the *tax side* of the government budget. Gemmell analyses these by using a Barro-type intertemporal model in which revenues are raised through a combination of a proportional output tax and a non-distortionary lump sum tax. The former affects the private sector's incentive to invest whereas the latter does not. The growth equations derived from this model show that the growth rate is decreasing in the rate of distortionary taxes (τ) and increasing in government productive expenditure (g), but is unaffected by non-distortionary taxes (l) or unproductive expenditure (see (7.3) and (7.4) in Chapter 7).

These basic models can be elaborated in the manner proposed by Devarajan, Swaroop and Zou (1996) by considering the possibility of government expenditures that are productive to varying degrees. They define productive expenditure as 'that component of public expenditure an increase in whose share will raise the steady-state growth rate of the economy'. Not surprisingly the growth rate is now also a function of the relative shares of these components in total expenditure. But counter-intuitively, it is possible to 'over-allocate' resources to a 'more productive' public expenditure category (higher α). This will reduce growth.

When *budget deficits* are allowed for, a first obvious question is whether agents respond to these in a manner that reflects the Ricardian Equivalence (RE) principle: i.e. will they raise present savings in order to pay expected future taxes? If they do, deficits are analogous to lump sum taxes and have no long-run growth effects. Where this is not the case, fiscal deficits are normally shown to be growth-retarding. However, the specific results can vary depending on the methods of financing the deficit and other factors.

On the question of the relevance of these models to low-income countries, Gemmell proceeds mainly by commenting on the appropriateness of certain key assumptions of the familiar models. In brief, this confirms that considerable care needs to be exercised in drawing out fiscal policy prescriptions for LDCs from this literature.

In relation to the empirical literature, Gemmell notes that this has generally yielded non-robust results. Several main problems for empirical investigation are identified, including:

- The availability and quality of relevant data
- The inadequate regression specifications used in many studies
- The failure of some model specifications to deal adequately with the government budget constraint
- The expected relationship between fiscal policy and growth: this may depend on whether governments set tax rates (and other fiscal variables) optimally (i.e. they operate at the top of the inverted-U relationship between government size and the economy's growth rate); if they do not, then cross-country evidence will yield observations at many different points on that relationship.

Gemmell is generally sceptical about the correctness and the usefulness of the first- and second-generation models that investigate the growth effects of taxes and expenditure, for the reasons just listed. ‘Third’-generation models that (i) recognize the role of the government budget constraint when testing for fiscal effects, by examining at least two of the tax/expenditure/deficit effects simultaneously and (ii) adopt recent advances in panel or time-series econometrics, including testing for the endogeneity of fiscal policy, are likely to be more reliable.

Finally, Gemmell reviews the applicability of the empirical results to the LDCs. In general he advises caution in claiming that they are indeed of relevance. Only with respect to the relationship between growth and budget deficits is some consistency found. Nevertheless, current evidence suggests that aid donors’ insistence on *capital* spending without adequate provision for the accompanying recurrent expenditure, leads to a misallocation in the capital/recurrent mix of public spending which is harmful for growth. In addition, there are no good reasons for believing that aid inflows can necessarily overcome the harmful growth effects associated with deficits.

Does fiscal policy impact investment?

Chapter 8 by Niels Hermes and Robert Lensink provides complementary evidence on the links between fiscal policy and private investment. They set out to extend the literature by analysing the possible existence of a non-linear relationship between fiscal policy variables and private investment for a sample of 33 LDCs.

The linear results suggest that an increase in capital expenditures leads to an increase in private investment. If it is assumed that capital expenditure mainly consists of public investments, then this result supports the view that an increase in public investment crowds-in private investment.

The non-linear results in Chapter 8 suggest that low levels of government revenues do *not* hurt private investment, whereas government revenues reduce private investment at high levels. When expenditures are disaggregated, significant non-linear effects are found. Notably, wages and subsidy expenditures conform to an inverted-U curve: increasing the levels of expenditures on these categories reduces private investment but only after a certain threshold value is surpassed. By contrast they find a U curve for capital expenditures, other expenditures and interest payments. These results are clearly important for policy formulation: they indicate that considerable care must be exercised in making any fiscal adjustment to avoid undesirable effects on private investment (and hence growth).

Poverty reduction

In so far as fiscal policy is designed to support growth, Gemmell’s as well as Hermes and Lensink’s discussion of this issue is relevant to the poverty

reduction objective (notwithstanding the extensive debate on the exact mechanisms by which growth affects poverty, and the size of these effects: on this see Shorrocks and van der Hoeven 2004). In addition three chapters of the book directly address the poverty implications of fiscal policies. The first (Chapter 9) provides an overview of the manner in which the poverty effects can be quantified and assessed. The second (Chapter 10) is a discussion of the measurement of service delivery, which is highly relevant to poverty reduction given the widespread concern that too little public spending reaches the services of most benefit to the poor. The third (Chapter 11) is a specific example of some of those impacts in India. A fourth study, prepared for the UNU-WIDER project, namely Heltberg, Simler and Tarp (2004) – which undertakes a benefit-incidence analysis of public spending in Mozambique – is published in Addison, Hansen and Tarp (2004).

Chapter 9 by Andrew McKay reviews the various different mechanisms through which fiscal policy can impact poverty. Both poverty and fiscal policy have many different components and this inevitably means that the channels of influence from one to another are large and often difficult to pin down theoretically. Increases in public spending, for example, will distribute their effects differently, depending on whether they are financed from higher taxation or from deficit financing and inflation. The poverty impacts also depend on the nature of the spending. Increases in spending on basic health and education are widely viewed as having the more significant beneficial impacts on the human development of the poor. They are also more likely to generate longer-term or externality benefits. But expenditures of an indirect nature such as infrastructure development in poor areas, spending to uphold legal processes of relevance to poor people and measures to ensure security in former conflict zones, can also confer significant benefits on the poor (as participatory poverty assessments often show: see World Bank, 2001).

Quantifying the various impacts of fiscal policy is also difficult in practice. This is especially true of indirect effects, but is also true of direct effects. One key methodological issue is the question of the counterfactual. What might have happened to school enrolment rates or the health status of the population, for example, if spending to increase this had been a bit higher or a bit lower?

In relation to this question, McKay notes that with direct fiscal activities such as transfers, the immediate impacts on particular households are fairly clear. It is normally possible to quantify at least the first-order effects. It is much harder to identify and measure the impacts of fiscal policy measures that affect households through indirect channels.

The ‘benefit-incidence’ method generally proceeds by measuring the impacts of fiscal policy in terms of the increments/reductions to income or consumption that these policies imply (van de Walle and Nead, 1995). The popularity of this technique is attributable to the ease of the calculations and

the relative modesty of the data requirements. Unfortunately, it also relies on a number of strong assumptions, the most important of which is that those affected by the fiscal policy measures do not alter their behaviour as a result. For this reason, this approach provides a reasonable estimate of only the first-round, static, distributional and average incidence of fiscal policy measures.

McKay also reviews the evidence generated by cross-country studies based on the benefit incidence method. A recent review of evidence from benefit incidence of *public spending* in developing countries (Chu, Davoodi and Gupta, 2004, covering 55 such studies) highlights some important findings. In the majority of cases, overall public spending in each of the areas of education, health and transfer payments was found to be progressive, but was often poorly targeted, most commonly in Sub-Saharan Africa (SSA). In the case of education, targeting was poorest in transition countries and in SSA. Primary education expenditures were everywhere progressive and were also well targeted in many instances. But again the record of targeting was less good in Africa, even at primary level. Spending on secondary education in Africa was even less well targeted to the poor. By contrast, in Asia and Latin America spending on secondary education was reasonably well targeted. In the vast majority of countries, the direct benefits of spending in *higher education* accrue predominantly to those in the richest groups; patterns of enrolment lie behind this. As might be expected, public spending on transfers was more likely to benefit poorer groups disproportionately in those cases where specific measures were designed to integrate targeting into their delivery (for example, food stamps in Jamaica).

Much less evidence is available about the distributional impact of *taxation*, though it is commonly argued that in low-income countries, the ability of taxation to be progressive is limited (Killick, 2002). Few studies have considered the *overall incidence* of fiscal policy. One exception is the study for the Philippines by Devarajan and Hossain (1995). They find that the overall pattern of incidence was progressive; the tax system was broadly neutral but the pattern of public spending was progressive. More work is clearly needed on the incidence of *individual* tax instruments.

Notwithstanding the popularity and ease of use of the benefit-incidence method, its defects needed to be noted. McKay identifies eight specific problems that are detailed in his chapter.

An understanding of how beneficiaries change their behaviour in response to a fiscal policy impulse is fundamental to considering the counterfactual: in other words, how behaviour would have differed had fiscal policy been different. But incorporating behaviour requires a modelling approach that is also likely to have different and more demanding data requirements than the benefit-incidence approach. Examples of the behavioural responses that are relevant are potential responses of labour supply or private inter-household transfers to the receipt of state transfers.

The general principle of modelling these behavioural responses is to make use of differences in fiscal policy over time or space to examine their impact on welfare outcomes for households or individuals, controlling for all other likely influences. This calls for an econometric model or at least an approach based on appropriate control groups. The welfare measures used in this approach can be monetary or non-monetary – a contrast to the benefit-incidence approach where a money metric is normally used. Behaviour needs to be modelled explicitly although this may be difficult in practice, due to both the complexity of the behaviour to be modelled and limitations of data availability. A number of country specific and cross-country examples are presented in the chapter to illustrate the general approach.

Overall, McKay concludes that approaches based on modelling the behaviour of individuals and households can overcome several of the problems associated with the more straightforward benefit-incidence approach. But these approaches are more complex to implement in practice because of the variety of different behavioural responses to be modelled and also because the data requirements are likely to be somewhat greater. Again, there is a large research agenda still to be addressed.

Finally, McKay notes that household surveys provide the data necessary to measure poverty incidence but not the information required to understand the motivations of the groups targeted by fiscal interventions. Yet we need to understand why certain outcomes arise if we are to achieve proper design of fiscal policies and also understand when and why they might address the poverty objectives. For example, household survey data may identify that primary school attendance is lower for poorer households, but may not offer a sufficient explanation as to why. A qualitative or less structured approach can be a better source for such information than traditional household surveys. Participatory poverty assessments in particular can identify important explanations for behaviour, which would not be picked up through other means.

Recent experience in Ghana, Honduras, Tanzania and Uganda offers important examples of alternative methods and how they can be used as inputs into public expenditure decisions. Reinikka and Svensson (Chapter 10) discuss the use of microeconomic tools: the public expenditure tracking survey (PETS) and the quantitative service delivery survey (QSDS). Both are means to compile information on a sample survey basis on: the quantity and quality of service outputs, inputs, resource allocations within facilities and lower tiers of government, financing (including alternative means of financing), management (including the incentives of managers to conform to the goals of the overall public spending strategy), staff attendance and motivation (e.g. capturing the phenomenon of 'ghost workers') and community participation and involvement in service delivery and monitoring.

These microeconomic techniques are an important cross-check (some may say 'reality check') on the evidence from cross-country econometric studies

of public spending and its impact, as well as studies on the fiscal effects of aid. Crucially, they show that just using budget allocation data may reveal very little about whether service delivery is actually improving, particularly for the poorest people. Evidence from PETS shows that leakage of funds in education and health impedes social service delivery: the three African PETS (Ghana, Uganda, Tanzania) reveal that leakage is a substantial problem. In the case of Uganda a PETS found that in the mid-1990s schools received on average only 22 cents of every dollar spent by the central government on non-wage expenditures at the primary level. And schools serving the children of the poor did worse than schools where the parents were better off.

The authors conclude that these types of tools mobilize 'voice': they provide compelling evidence on service delivery which is difficult to ignore. In the case of Uganda, the government has acted on the findings of the PETS and launched an information campaign to empower its citizens. The flow of funds to where they are most needed appears to have improved substantially as a result.

We can understand the poverty effects of public spending only through detailed empirical investigation of *specific* public spending programmes. This is especially so if we are to give fiscal policy a gender dimension. Chapter 11 by Sonia Bhalotra is a good example of this. The chapter investigates the effects of a major food subsidy programme in India on child malnutrition, and in doing so it illuminates one of the most controversial areas of public spending in developing countries.

The chapter addresses three inter-related questions: (i) Does the food subsidy induce higher expenditures on food? (ii) Are there gender inequalities in the distribution of food within the household, and in the gains from the food subsidy? (iii) Does food spending impact on child health? The motivation for the chapter is the very high incidence of child malnutrition in India, estimated at 66 per cent in 1998 for children under five. At the same time the all-India figures on malnutrition conceal enormous variation across the regions of India, including remarkable variations in the usage rates of the public distribution system through which food subsidies are made available.

Bhalotra notes that India's programme of economic reform initiated in 1991 incorporated actions to reduce government expenditures and remove subsidies. In this context, the country's public distribution system (PDS) was a prime candidate for reform, being argued to be obsolescent and fiscally unsustainable. Critics have typically also argued that the PDS has had a poor record of reaching the poor. The counter-view is that PDS is an important safety net for the poor and particularly likely to be useful in the current context of deregulation and inflation. And the benefits of the programme to people who are malnourished, but not income-poor, must also be taken into account.

Using econometric analysis of household data, Bhalotra concludes that if the average subsidy for the average household on the PDS is 23 per cent

(which is what the data suggest), then the PDS-using household buys 23 per cent more food. The additional expenditure on food translates, on average, into increased height and weight for boys and girls (but larger increases for boys than girls). Bhalotra argues that gender differences appear not in the allocation of food expenditure but in the conversion of this into health and also in the effects of other covariates on health. The chapter therefore finds that the PDS has a significantly positive effect on childhood nutritional status, although the size is small. This represents an important contribution to the debate on the PDS and its reform.

In summary, focusing the fiscal system on poverty reduction and human development must be a priority, and greater effort in this area is essential if the ambitious millennium development goals (MDGs) are to be met. Unfortunately many countries are characterized by political systems in which the benefits of public spending are disproportionately concentrated on wealthier groups by virtue of the latter's influence in the political process (Addison and Rahman, 2003). However, more data collection – using both using qualitative and quantitative methods – can at least clarify the basic facts of public spending and its impact, thereby hopefully facilitating more effective political action in orientating public spending towards development and poverty reduction.

Fiscal issues during conflict and reconstruction

Chapters in the penultimate section of this volume throw light on how war and civil conflict further complicate fiscal management. These aspects of fiscal policy are more important than often recognized and certainly under-researched. But these are far from being peripheral issues since the last 10 years or so have seen 56 major armed conflicts in 44 different locations, most of them civil wars in poor countries (Sollenberg and Wallensteen, 2001) and conflict has undermined development in Sub-Saharan Africa in particular (World Bank, 2003b).

Conflict as an additional challenge

The overview chapter by Addison, Chowdhury and Murshed (Chapter 12) notes that contemporary civil wars in low-income countries have done great damage to state institutions and especially fiscal arrangements (recent examples include Afghanistan, Angola, Guinea-Bissau and Liberia). This is in contrast to the historical experience of the now developed countries where fiscal and other state institutions were often strengthened during wars *between* states. The key to this difference is that most contemporary wars are civil rather than inter-state wars.

During periods of conflict, rebel forces may actually be better at gathering taxes, and allocating expenditures, than governments. This could happen, for example, in a popular war for secession where individuals may favour

paying, rather than evading, rebel taxes and where strong group cohesion may limit the misappropriation of the funds. This is particularly likely if the rebels are less predatory than the government and provide more protection and other public goods.

When conflicts end, post-war governments typically hope for a large fiscal peace dividend. But this is often limited in the early years of peace. Demobilization and the creation of a smaller and more professional military are both expensive processes. However, positive fiscal effects may eventually be forthcoming if peace holds. In post-war Mozambique, for example, the share of the social sectors in total public expenditure rose as military spending fell.

Rebuilding the rules of the game, and people's respect for them (the social contract) are necessary for peace. Whatever form the new rules take, they will invariably have a fiscal dimension; people will expect some new (often radically different) distribution of public services and infrastructure. This must be financed and therefore revenue mobilization, including some measure of political agreement on its incidence, is essential. Aid can reduce the trade-offs and buy time, but if political actors delay action then they store up trouble for the future when aid to reconstruction tails off. Above all, fiscal management must be used to achieve a recovery that is *broad-based* in its benefits and not one simply confined to a narrow (and wealthy) segment of society. However, revenue and budgetary reforms that threaten elite interests may stumble: therefore building a functioning democracy that represents the interests of the majority is crucial to the effectiveness of any reform that aims to achieve a broad-based recovery from war. Democratization does not guarantee success, but it does enable the populace and civil society organizations to hold governments to account for their expenditure and taxation decisions (Addison, 2003).

It is evident that the *sustaining* of peace is critical to the fiscal outcome. In the case of Ethiopia, for example, defence spending in the war period 1989–91 averaged 46.6 per cent of total current expenditures, whereas social spending accounted for only 17 per cent. But in the first three years of peace (1992–95) the defence share fell to 16 per cent, and the social expenditure share rose to 24 per cent. Military spending as a percentage of GDP fell from 9 per cent of GDP in 1990 to a low of 1.9 per cent in 1996. But the 1998–2000 Eritrea–Ethiopia war reversed this progress, and the continuing tensions between the two countries will result in heavy military spending in the foreseeable future (see Addison, 2003).

In general, war and civil conflict are realities confronting fiscal management in many low-income countries. High levels of military spending undermine the integrity of state institutions – this is certainly the experience of Africa. This increases the incidence of corruption, creates large external debt burdens, drains resources away from developmental spending – especially social spending – and damages donor–government relations since effective partnership cannot develop when military spending is high, and

aid is fungible. So peace is undoubtedly an important public good. By eliminating conflict – or at least reducing its intensity – better regional peacekeeping would have substantial rates of return to development in addition to the direct humanitarian benefits. Unfortunately, these and other implications for both expenditure management and revenue generation are not readily assimilated into the mainstream approaches to fiscal reform. They are aspects of fiscal policy that remain seriously under-researched.

War and fiscal management in Burundi and Rwanda

Léonce Ndikumana (Chapter 13) focuses on the specific situation found in Burundi and Rwanda. These two countries are both extremely poor and have been plagued by chronic ethnic conflicts since the eve of their independence. Ndikumana notes that the relationship between military expenditures and conflict is complex and can run both ways. When the political system is dominated by a particular ethnic group or region, as is the case in Burundi and Rwanda, the expansion of the military apparatus affects the balance of power among social groups. 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.

Ndikumana also explores the link between high military expenditures and the legitimacy of the state: the cases of Burundi and Rwanda being unique illustrations of these links. Post-independence regimes in both countries lacked legitimacy, having gained power by force. These regimes were (and still are) dominated by one ethnic group and are therefore inherently exclusive. Indeed exclusion along ethnic lines has been a perennial feature of governance in Burundi and Rwanda. The cycle of exclusion–oppression–violence is well anticipated by the regimes, which pre-emptively invest in building a strong repressive apparatus. The 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. In Rwanda, the regional monopoly of power went predominantly to those from Habyarimana’s native prefecture.

The threat to state legitimacy induces increases in military expenditures: small initial armies in, for example, Rwanda, growing rapidly much larger. Over time, the dynamic of state legitimacy–military expenditures degenerates into a vicious cycle of high social tension and excessive military spending. High military expenditures ‘crowd-out’ social spending, creating frustration via deprivation among the disenfranchised population. Frustration, in turn, breeds social tension and can serve as a fertile ground for violent opposition. This opposition then induces the incumbent regime to increase the use of force even more.

It may seem that this is a problem without a solution. In principle, the donor community does command 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 behaviour of a regime is constrained by the likely divergence among individual donors' preferences and priorities.

Finally Ndikumana examines the link between fiscal policy and poverty and largely comes up with conclusions that are consonant with those in Addison, Chowdhury and Murshed (Chapter 12). Specifically, in countries evolving from conflict, fiscal policy must move beyond the conventional goals of macroeconomic adjustment and stabilization and pay more attention to the potential role for fiscal policy in reducing poverty. The rigid enforcement of conventional fiscal policy prescriptions may actually *exacerbate poverty in post-conflict countries*. In particular, aggressive public expenditure compression can definitely worsen the poverty situation. The emphasis should not be on reducing government expenditures, but on the reallocation of public money into socially more productive investments. Rwanda has already established a framework consistent with these ideas. A noteworthy feature is the explicit integration of poverty reduction monitoring into its budgetary system. Regrettably, the Burundian economy continues to deteriorate and poverty continues to rise, even as the government continues to build its military apparatus. Issues of economic and social reform do not seem to be regarded with much urgency among the rival leaders in the peace negotiation process.

Conclusions

The chapters in this volume testify to the ongoing problems in fiscal management in low-income economies. Difficulties with the management of public expenditures and the mobilization of revenues have persisted despite many attempts at reform and some apparent successes with stabilization since the 1980s. Individual chapters have confirmed the widespread non-sustainability of fiscal stances in many countries (Chapter 2); the harmful legacies that are left by even successful stabilization (Chapter 3); and the myriad problems arising from conflict and reconstruction (Chapters 12–13). But a more generic reason for persistent fiscal difficulties is that the conduct of fiscal policy depends upon the *effectiveness of the state and its institutions*. Although some countries have achieved significant success in improving state capacity in recent years – most notably Ghana, Mozambique, Uganda and Tanzania – in others the conduct of fiscal policy has been hampered by continuing state weakness and, in the worst cases, a continued decline in state capacity (Kayizzi-Mugerwa, 2002). The increased

support for new approaches to fiscal management (Chapter 5) has been impeded in its effectiveness by these systemic problems of capacity and political economy. In particular, efforts to redirect public money to pro-poor services and infrastructure are very much affected by such weaknesses (Chapter 10).

Adverse international factors also contribute to undermining national efforts. In the developed world, continuing protectionism against developing country exports hinders poor economies in their efforts to diversify away from exports of traditional primary products (thereby impacting both the level and volatility of public revenues associated with primary-product exports). This also contributes to unhealthy levels of aid dependency in some cases. At the same time, the real value of aid flows was in decline over much of the 1990s. Budgetary support through aid is still heavily constrained by project or general conditionality and this injects a further element of instability to budget receipts. And tardiness in granting debt relief (to redirect resources from debt service to development spending) has compounded the problem of low and declining external flows to poor countries (on the fiscal dimensions of debt relief, see Addison, Hansen and Tarp, 2004). Finally, international action to support peacekeeping and conflict reduction has been too hesitant, especially in Africa; in consequence, too much public money continues to go to military rather than development spending. Better international responses in all these areas are crucial to the success of national efforts to improve state capacity, and therefore to the more effective conduct of fiscal policy.

Most of the necessary improvements will be more difficult to achieve if the quality of the debate and understanding on fiscal policy is not first improved. This, in turn, requires more rigorous research and more investment in data collection, both household surveys and participatory poverty assessment (particularly important in understanding and monitoring the poverty effects of public spending, taxation and the overall fiscal stance – see Chapters 9 and 10). Accordingly, this book presents some of the latest research and thinking on fiscal policy in low-income developing countries, with the hope that this will stimulate a more informed discussion of these complex and difficult issues. This summary has endeavoured to highlight the areas where this research need is greatest.

Note

1. In Sub-Saharan Africa (SSA), the aid-general government consumption (GGC) ratio is above 100 per cent for highly aid-dependent economies, and is 30 per cent on average. This ratio is also around 30 per cent in the poorer South Asian countries and 12 per cent in Pakistan. Even in lower middle-income countries the aid-GGC ratio is over 5 per cent.

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