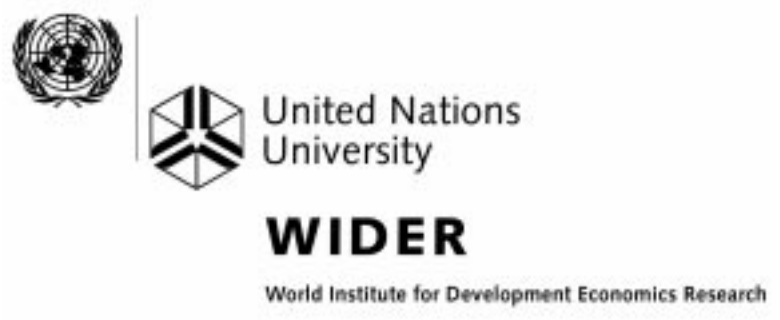

Discussion Paper No. 2002/43

Assessing the Impact of Fiscal Policy on Poverty

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April 2002

Abstract

Fiscal policy measures are a key means by which governments can influence distribution and poverty, but in fact the relationships between fiscal policy and poverty are not well understood. The most commonly used technique for assessing the distributional impact, benefit incidence analysis, is straightforward, but applied by itself it suffers from a number of serious limitations. Assessment of the impact of fiscal policy needs to be developed in various directions, including allowing for behavioural responses and incorporating a broader range of information. In parallel with this careful attention needs to be paid to more effective monitoring of the poverty impsact of fiscal policy.

Keywords: poverty, fiscal policy, benefit incidence analysis, behavioural responses, poverty monitoring

JEL classification: H22, H30, I30, O23

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This study has been prepared within the UNU/WIDER project on 'New Fiscal Policies for Growth and Poverty Reduction'. Project Director: Tony Addison.

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

Acknowledgements

I gratefully acknowledge helpful comments from participants in the project conference at WIDER in November 2000, and from the project director Tony Addison. The usual disclaimer applies.

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Camera-ready typescript prepared by Jaana Kallioinen at UNU/WIDER
Printed at UNU/WIDER, Helsinki

ISSN 1609-5774
ISBN 92-9190-208-X (printed publication)
ISBN 92-9190-209-8 (internet publication)

1 Introduction

Fiscal policy represents one of the key instruments by which public actions can impact on deprivation and poverty. This can happen both through its impacts on growth and on distribution. Fiscal policy is one of a number of important influences on growth rates (Gemmell 2001), and other things being equal a sustained higher growth rate will translate into faster poverty reduction. But fiscal policy is also one of the main mechanisms by which policy impacts on distribution. It can achieve this by means of static redistribution, depending on the patterns of public spending and revenue raising, or through dynamic redistribution, through its influence on the distributional pattern of growth (Killick 2002). Indeed fiscal policy is likely to play a central role in generating a pro-poor pattern of growth, which other things being equal will be much more effective at reducing poverty. Unfortunately all too little is known about its precise role in this.

This paper discusses issues that arise in trying to assess the impact of fiscal policy on poverty, considering this question within a country, rather than on cross-country evidence. Apart from their standard difficulties, the options for meaningful cross-country comparisons are limited in this case, given variations across countries in measures of fiscal policy and measures of poverty. Much more can be learnt from more detailed assessments within countries, and these are in any case more closely linked to policy issues. In discussing approaches to assessing the impact of fiscal policy on poverty at the country level, this paper covers both appropriate methodologies and the data requirements for their implementation.

It is structured as follows. The next section considers some of the channels through which fiscal policy can impact on poverty, and discuss some of the issues that arise in trying to assess this. Section 3 then presents a critical review of the most commonly used method at present, benefit incidence analysis. This technique is relatively straightforward to understand and to implement in practice, and is informative; however, it suffers from a number of important limitations as a guide to policy. Section 4 then discusses the potential for incorporating behavioural responses in modelling the impact of fiscal policy, the non-consideration of which represented one of the important limitations of the benefit incidence method. However, as this still leaves several important questions unanswered, Section 5 briefly discusses some other approaches to assessing the poverty impact of fiscal policy. Section 6 discusses the related, though distinct, issue of monitoring the impact of fiscal policy on poverty in reality, again considering the data requirements for this. Section 7 offers conclusions.

2 Issues in assessing the impact of fiscal policy on poverty

That this is a complex question is clear from the outset. Poverty is multi-dimensional in nature, and its different aspects may be influenced by different factors. Fiscal policy covers many different types of public expenditure and different ways of financing this. And even when attention is focused on one component of fiscal policy (say expenditure on primary education) and one aspect of poverty (say primary school enrolment), the channels through which one affects the other are generally not straightforward.

The experiences of poor communities themselves, as well as theoretical representations of living standards in terms of capabilities (Sen 1985, 1999), confirm the multidimensional nature of poverty and deprivation. These important dimensions include human development (health, education), nutrition, consumption, income levels, vulnerability and powerlessness. In general these different dimensions need to be considered and measured separately (that is, no satisfactory single measure of capabilities is currently available). This is desirable anyway given that different dimensions are not always closely correlated within countries (Appleton and Song 1999), and may be influenced by different factors. In the present context, a given fiscal policy measure may affect different aspects of poverty in different ways.

In assessing the poverty impacts of fiscal policy, it is equally important to consider both public spending measures and the way they are financed, whether based on tax revenue or deficit financing. The financing method will have poverty impacts just as will the spending it finances. Hence it is incorrect and therefore meaningless to consider for instance the impact of an increase in the overall level of public spending without considering how this is to be financed; the poverty impact is the combination of the two effects which may (probably will) operate in opposite directions. Of course this issue does not arise in considering the impact of changing the composition of public spending for a given overall level, for example increasing spending on primary education while making a matching reduction on spending on higher education. Again though different components of such a re-allocation may operate in opposite directions.

Changes in fiscal policy can take many different forms, each of which can have impacts on some or all dimensions of poverty. Consider for instance an increase in public spending. If this is financed through increased taxation this raises the issue of who bears the burden of this; with deficit financing the issue of who bears its consequences (increased inflation or interest rates, an increased debt burden) arises. The poverty impact also depends on the nature of the spending. Increases in spending on basic health and education are widely viewed as having beneficial impacts on human development of the poor – though this needs to be considered in each specific case; if so this may be complemented by other long-term or externality benefits. Increased spending on public transfers or in-kind transfers (such as food subsidies) can have beneficial impacts on income, nutrition etc. among the poor if these transfers effectively reach them. Other types of increased public spending can also have strong poverty impacts, but the effects are more indirect. This could apply for example to infrastructure development in poor areas, to spending to uphold the legal process where this fails to benefit the poor, or from measures to ensure security in former conflict zones. Such effects may be indirect, but this does not necessarily mean that their poverty impact is small, or necessarily less than that of the more direct effects.

Quantifying the various impacts of fiscal policy will be difficult in practice. This is especially true of indirect effects, but is still true for more direct effects. One key methodological issue is the question of the counterfactual. Available data may provide information on different aspects of living standards for different groups at one or more points in time (e.g. primary school enrolment), as well as information on fiscal policy (e.g. spending on primary education) at the same time. But it is generally difficult to establish the links between one and the other. Retaining the primary school example, how much difference does the level of public spending make to the enrolment rate? What would happen to enrolment rates if the level of spending was reduced? And what would be the distributional pattern of the impact?

Much existing analysis of the distributional impact of fiscal policy focuses on identifying who receives the benefits of existing public spending in an area and/or pays different taxes. Such studies do not really identify why some groups do or do not benefit. Further (though related), this type of analysis usually does not consider behavioural responses, in other words, how does behaviour change as a result of the public spending, taxes, higher interest rates and so on? Some studies though have addressed these questions; in general they require an approach based on modelling. The next two sections discuss these issues in more detail.

3 Benefit-incidence analysis and its limitations

Inevitably it is easier to assess the poverty impact of some types of fiscal policy measures than others. Assessment is easier for instance in the cases of direct transfers paid to households (such as state pensions), taxes paid directly by households (some commodity or income taxes), subsidies on items consumed by households (such as food subsidies), public spending on education and health, or public employment creation. In such cases the immediate impacts on households are fairly direct, and it is often possible to quantify the first order effects. It is much harder to identify and measure the impacts of fiscal policy measures that affect households through indirect channels (such as taxes paid by producers, or spending on infrastructure). The vast majority of the analysis of the poverty impact of fiscal policy has considered the more direct effects. Many valuable and wide-ranging studies on the impact of public spending on poverty are included in the volume edited by van de Walle and Nead (1995), and reference will be made to several of these below.

The approach that has been most widely used in practice in assessing the distributional impact of fiscal policy is the so-called 'benefit incidence' method.[1] Here the impacts of fiscal policy are generally measured in terms of the increments or reductions to income or consumption they imply. Thus changes in welfare are measured in money-metric terms; see Heltberg et al. 2001, for a good example of its application to public spending in Mozambique. One reason for the popularity of this technique is that such calculations are relatively easily done and its data requirements are relatively modest, in particular requiring only a single cross-section of household or individual level data. This method does however rely on a number of strong assumptions, one of the most important of which is that those affected by the fiscal policy measures do not alter their behaviour as a result. Both theoretical analysis and empirical evidence suggest that this is generally not true, in which case the appropriate counterfactual is not being considered. Nonetheless, benefit incidence analysis may still provide a reasonable estimate of the first round, static, distributional incidence of an existing fiscal policy measure – though note that it is focusing on its *average* rather than its *marginal* incidence (see below).

If fiscal policy measures can be translated into their monetary values for different households, then a number of criteria can be applied in assessing the poverty impact. A simple criterion is whether poor households are better off as a result of a given measure.

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1 As Heltberg et al. (2001) note, this should more accurately be referred to as 'beneficiary incidence assessment'. The term benefit incidence assessment is retained here because of its widespread use in the literature.

But better measures are to consider the *progressivity* of the measure (do poor groups benefit more than proportionately to their share of overall income or consumption, so that the measure tends to reduce inequality?) or how *well targeted* the measures are (do the poor benefit more in absolute terms relative to non-poor groups?). Benefit incidence analysis typically focuses most on the last of these criteria, especially so for measures that are intended to benefit the poor disproportionately, or at least in proportion.

The application of the method is best explained by considering specific fiscal policy measures. Starting with one of the most straightforward, in the case of cash transfers, a first order incidence analysis of the impact on income poverty simply requires knowing the pre-transfer (or post-transfer) income distribution and the amount of transfers received by each household. This information is available from most household surveys that collect the information need to estimate household consumption or income. With this it is possible to compare pre-transfer and post-transfer income distributions to identify the distributional impact of the transfer; see for example, Jarvis and Micklewright (1995) on family allowances in Hungary. Techniques of this type can be used to identify the numbers of those who were income poor according to their pre-transfer income that benefited from the transfer. In addition this is sufficient to identify the numbers raised out of poverty by the transfer. Where transfers are targeted to particular groups, such analysis can also be used in identifying the errors of targeting (Cornia and Stewart 1995): the numbers that ought to benefit from a given transfer but are not in fact receiving it, and of those receiving it that in fact should be ineligible.

The distributional impact of taxes on expenditure (e.g. commodity taxes) or income by households can be assessed given knowledge of the tax structure and respectively of their consumption pattern or earnings of taxable income (Younger 1993, Younger et al. 1999). A similar principle applies to assessing food subsidies, which of course are like negative taxes, or food stamps. As with the cash transfers above, in both cases the pre- and post- tax/subsidy distributions can be compared to see the overall effect on the distribution of income, or specifically on the incomes of the poor (Grosh 1995a, 1995b).

Again, where food subsidies are intended to be targeted towards the poor (they often are to a greater or lesser extent) such techniques can also be used to determine the extent of targeting errors (Cornia and Stewart 1995). Indeed similar analysis is also possible using alternative measures of poverty – how many of the poor (non-poor) according to a given measure benefit (do not benefit) from a given food subsidy? However, using non-monetary standard of living measures it will not be possible to quantity the magnitude of the effect of the food subsidy.

In the case of commodity taxes or subsidies this can be used to examine the different distributional impacts for different commodities; and this can be important information in considering which subsidies to retain or which taxes to increase/reduce. To do this requires information on consumption patterns, sources of taxable income etc. (as appropriate), combined with estimates of overall income or consumption; again this information is typically available in many household surveys.

Benefit incidence methods are also commonly used in assessing the distributional impacts of public spending on health or education services (Meerman 1979, Selowsky 1979, Castro-Leal et al. 1999). Such spending is a subsidy in that those households using the service are generally paying significantly below cost price, or sometimes receiving it free. The extent of the subsidy depends on their extent of usage (e.g. the

number of children being sent to primary school). Benefit incidence analysis translates this into a monetary value (based on the estimated unit cost of provision) for all using the service, viewing this as an increment to their income. In this way again it is possible to look at the pattern of receipt of the subsidy according to the pre-subsidy income distribution, so enabling an assessment of its distributional impact, including its impact on the poor. This calculation requires data on the use of differently publicly subsidised health and education facilities by households in different groups (these groups may be defined based on consumption levels or according to other criteria); but it also requires the information needed to calculate unit costs, which is not always easily done.

3.1 Evidence from benefit incidence studies

A recent review of evidence from benefit incidence of public spending in developing countries (Chu et al. 2000, covering 55 such studies; see also the summary by Killick 2002) 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 it was often poorly targeted, most often in sub-Saharan Africa. Health spending was found to be progressive in all cases, but well targeted in only over a half. Targeting was poorest in transition countries and sub-Saharan Africa, the latter fact consistent with the findings reported by Castro-Leal et al. (1999), who survey several African countries. This does not distinguish levels of health care, because many of the studies reviewed do not. It may be that targeting is reasonably good for basic health care, but poorer for higher level health care facilities, however, a study in Ghana in 1991–92 somewhat surprisingly found that spending on health centres and clinics is not any better targeted on the poor than spending on hospitals (Demery et al. 1995).

How progressive and well-targeted education spending is also depends on the level under consideration. Thus primary education is everywhere progressive and well-targeted in many instances, although again the record of targeting is less good in Africa, even at primary level (as also reported Castro-Leal et al. 1999). This poor targeting becomes more apparent once allowance is made for the fact that poorer groups often have more school-aged children, something many benefit incidence studies do not do. Of course this reflects differences in enrolment rates according to the income group. As a consequence of this, spending on secondary education in Africa is still less well targeted to the poor. However, in Asia and Latin America spending on secondary education is quite well targeted (Killick 2002); this is partly a consequence of the higher overall level of secondary enrolment in these regions. It is clear that measures to raise enrolment rates among the poor are essential in Africa. However, quality is also a key factor here, with recent evidence suggesting that this is better for richer groups (World Bank 2000) – this is likely to be part of the explanation for differential enrolment rates, and so poorly targeted education spending. Finally, in the vast majority of countries the direct benefits of spending in higher education accrue predominantly to those in the richest groups; again patterns of enrolment lie behind this.

As might be expected, public spending on transfers is more likely to benefit poorer groups disproportionately where measures are designed to build targeting into their delivery (such as food stamps in Jamaica; Grosh 1995a and 1995b). Otherwise they are often not well targeted, even if progressive (Chu et al. 2000).

Much more limited evidence is available on the distributional impact of taxation, though it is commonly argued that at the present time in low income countries the ability of taxation to be progressive is limited (Killick 2002). This is partly a consequence of the limited tax base, but is also a consequence of administrative difficulties. The common practice of establishing independent revenue authorities in many countries is intended to strengthen administrative procedures, and some anecdotal evidence suggests that this may have had a favourable distributional impact in some cases.

Very few studies have considered the overall incidence of fiscal policy, considering both spending and taxation. One exception though 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. As the authors themselves admit, they were required to make a number of strong assumptions in doing this; however they argue that their results are nonetheless likely to be robust to changes in some of these assumptions.

3.2 Assessment of the benefit incidence approach

The benefit incidence method has the advantage of being direct and easily understood. It does not require modelling and its data requirements are relatively modest. When the standard of living is measured in money-metric terms, it can be used to quantify the benefits or costs of the fiscal policy measure in the same terms. It is therefore possible to assess how substantial its effects are in this sense.

But the approach also suffers from a number of substantial limitations (van de Walle 1998). Some of these are general problems that any method of evaluating the poverty impact of fiscal policy will face:

i) It cannot be easily applied to fiscal measures the poverty impacts of which may be quite indirect (e.g. increased spending on infrastructure in a region) or general equilibrium in nature, and it is difficult to take account of longer term or dynamic impacts.

Other limitations though are specific to this technique:

ii) As usually applied it is a static method, using data from and looking at impacts at a point in time. However, it can be applied to looking at changes over time (Hammer et al. 1995, do this in a study of social sector expenditures in Malaysia).

iii) The method focuses on the *average* incidence, whereas it is the *marginal* incidence that is relevant for assessing the distributional consequences of changes in fiscal policy. This point is very important for policy purposes; even where the average benefits for the poor from an existing programme may be relatively low compared to richer groups, the poor may benefit disproportionately from an expansion of that programme (if richer groups are already sending all their children to school for example) and may suffer disproportionately from any contractions. This is especially so where the political economy is such that richer groups are able to capture the benefits of existing public programmes more quickly than poorer groups. In this case richer groups are more likely to have reached their desired level of

consumption of these public goods than poorer groups, and so may respond less than poorer groups to changes in the scale of the programme (Lanjouw and Ravallion 1999). In other words, in such a case richer groups may have a relatively low marginal incidence to this spending, while poorer groups have a higher one. Estimates of marginal incidence of public works and other programmes across states in India (Lanjouw and Ravallion 1999) indicate that these effects can be important in practice, and there are similar patterns in other countries (Ravallion 2002). This means that extreme care is need in drawing conclusions from estimates of the average incidence of fiscal policy measures.

iv) One of the most serious limitations of the method is its complete failure to consider the counterfactual – what would have happened in the absence of the fiscal policy measure. This is closely related to the previous point, and can be quite important in practice. If taxes or subsidies are changed this is likely to affect the quantity consumed of that and other commodities; this is not allowed for in the benefit incidence approach, but can have important consequences for welfare or nutritional consequences. If public education was not subsidised individuals might or might not send their children to school – this ought to affect the assessment of the benefit of the subsidy. If unemployed household heads did not receive cash transfers from the government then they may instead have received transfers from another household; if so the state transfers may crowd out private transfers. If this happens, and the household that had been making the transfer was relatively well off, then the distributional benefit of the introduction of the government transfers is different from what it appears at first sight. In other words, consideration of the counterfactual can significantly affect the assessment of who the true beneficiaries of the state transfers are (and so their impact on poverty).

v) The methodology is based on monetary measures of living standards, so only capturing one dimension. In addition, the monetary impacts will often not be the object of greatest interest; for instance nutritional outcomes may be of greatest interest in evaluating food subsidies (also the nutritional effects may be somewhat bigger and more important). This problem partly arises from the static nature of the method, using data from a single point in time. Thus for example examining correlations between health status outcomes and use of public health facilities provides no information on the impact of the former on the latter; what is required rather is to know how health outcomes changed as a result of a change in the level of health expenditure. Poverty monitoring systems to some extent seek to do this.

Some additional limitations of the approach apply specifically to its use in assessing provision of public goods and subsidised social education and health.

vi) It cannot be applied as described above if the beneficiaries cannot be identified or if unit costs cannot be estimated (van de Walle 1998). For some purposes partial information can still be useful. For example knowing how levels and patterns of primary school enrolment in public schools vary across different groups still enables an assessment of whether the poor (who could be defined according to different criteria) benefit in proportion to other groups. But of course this does not require a full benefit incidence analysis. Further, the magnitude of the benefits is not quantified given that unit cost information is

not available. For some purposes this may not matter, but for others it will, for example if one wants to consider the poverty impact of a reallocation of a given level of education expenditure between different levels (primary, secondary, higher).

vii) Its measure of 'benefit' of a service is simply a measure of the cost of providing it; its true benefit to the recipient may be significantly greater or less, and may be better observed based by looking at other dimensions of living standards. In addition, the unit cost concept takes no direct account of quality. Where quality is poor the true benefits (e.g. in terms of improved health status, or in terms of acquiring basic literacy) may be much less; and quality is not just related to the unit cost of provision.

viii) Most importantly in this context, it does not offer any analysis or explanation as to *why* some households do not use a facility. There may be many reasons for this: quality of the service provided, ease of access, costs involved in using the service, perception of lack of need, and so on. Yet this is exactly the type of information that is likely to be particularly useful for policy purposes (Castro-Leal et al. 1999). In this and other respects benefit incidence analysis is only a starting point, and by itself does not provide sufficient information for policy decisions.

In summary benefit incidence analysis is relatively straightforward to conduct, and its data requirements are relative modest assuming that the unit cost data can be obtained. Public spending decisions in particular are frequently not considered sufficiently in terms of their distributional impacts (the same is less true of taxation, although attempts to actually identify the distributional impacts are still quite rare). Benefit incidence analysis offers a relatively easily understood tool that can be used to identify key areas where the benefits of public expenditure are failing to reach poorer groups, or where poor groups bear too much of the incidence of taxation. For these purposes it can represent a very useful tool, including in holding governments to account. But the simplicity of the method is deceptive. It suffers from a number of fundamental limitations, need extreme care in its interpretation and does not provide enough of a basis by itself to inform policy change.

4 Incorporating behavioural responses

As discussed above, one fundamental weakness of the benefit incidence approach is its failure to consider behavioural responses to fiscal policy measures, in other words how individuals change their behaviour as a result, which they will almost inevitably do. An understanding of this is fundamental to considering the counterfactual, in other words how behaviour would have differed had fiscal policy been different, an important part of assessing the welfare impact. This knowledge also implies consideration of the *marginal* incidence of fiscal policy changes. Taking account of behavioural responses helps in identifying the true impacts of fiscal policy. To do this will require a modelling approach; it may also have different – generally more demanding – data requirements than the benefit incidence approach. Examples of the types of behavioural responses that are relevant are potential responses of labour supply or private inter-household transfers to the receipt of state transfers, or increasing private expenditure on health care facilities in response to the introduction of user charges.

The general principle of modelling these behavioural responses is to make use of differences in fiscal policy over time and/or space to examine their impact on welfare outcomes for households or individuals, controlling for all other likely influences. This calls for an econometric or at least an approach based on appropriate control groups. The welfare measures here can be monetary or non-monetary; this modelling approach tries to estimate the extent of variation in these welfare outcomes which results from the fiscal policy measures. By modelling behaviour explicitly (household behaviour as well as how fiscal policy influences the welfare outcomes) this gives a better measure of the impact of the fiscal policy measures, assuming that behaviour is adequately modelled. The latter though may be difficult in practice, due to both the complexity of the behaviour to be modelled and possible limitations of data availability.

This issue is best illustrated by examples. Cox and Jimenez in a series of studies (1992, 1995, 1998) consider the determinants of private inter-household transfers, a key informal social safety net in many countries, including examining the influence of public transfers. For example in Peru (Cox and Jimenez 1992) they consider the determinants of private inter-household transfers from young to old, finding that receipt of state pensions has a negative influence on such transfers. Based on the coefficients of their econometric model, they argue that these transfers would be around 20 per cent higher in the absence of state pensions. As discussed above, this information on the private responses of households obviously affects the assessment of the distributional incidence of state pensions. It is likely that the responses of private inter-household transfers would make the true incidence of public transfers less progressive (in that the effect of the public transfers has been to reduce private transfers that might otherwise have been made by mainly non-poor households).

Similarly, the issue of the impact of public transfers on labour supply has been widely studied. For example, modelling the determinants of labour supply in Sri Lanka, Sahn and Alderman (1995) find that when households receive a targeted food subsidy (a rice ration in this case) this has a significant negative impact on labour supply. Again they simulate the quantitative magnitude of this based on the estimated coefficient values, and suggest that the rice ration programme may reduce labour supply by two or three days per month. Of course, this does not necessarily imply that its impact is welfare reducing.

Studying the impact of government spending on health in Indonesia, Deolalikar (1995) conducts a regression analysis of the determinants of demands for health inputs and of health outcomes; among the determinants is included provincial recurrent government expenditure per capita on health. Such analysis can be used to model the impact of government pspending on different groups of households distinguished according to their characteristics, impacts that may differ according to a household's income group for example. A broadly similar approach has been used to study the impact of user charges on health-seeking behaviour (e.g. Gertler et al. 1987), where the impact of this may again differ according to income group (there is quite a lot of evidence in this and other contexts that poorer households' demand are often more price elastic).

Many such studies have been based on cross-section household surveys that collect the necessary information. Such approaches can applied to non-monetary as well as monetary measures of welfare, and can quantify the effects of fiscal policy interventions in either case. But the strengths of the approach depend on the accuracy with which behavioural responses are indeed estimated. Issues of simultaneity or omitted variable bias can be very important in this type of analysis and can affect the results

substantially. An example of where this might be important is where fiscal policy measures take the form of programmes in particular areas (e.g. school feeding programmes) placed in areas of particular need (high child malnutrition). In this instance a cross-sectional comparison between child malnutrition and presence of a school feeding programme is meaningless and fundamentally misleading without controlling for the programme placement effect (van de Walle 1998). This simultaneity issue will arise any time where the presence or extent of the fiscal policy measure is related to the welfare measure being modelled. Such effects can cause substantial biases to the results and can lead to non-trivial changes in the estimated magnitudes of the effects. This is not just a technical econometric point; such issues can then be very important in practice in drawing conclusions to inform policy.

Critically important then is the accuracy with which behavioural responses are estimated, in particular the extent to which it is possible to control for other factors to enable a meaningful comparison with the control groups identified. In addition, the data requirements for implementing this method in a way that the results command confidence are likely to be somewhat greater than for the benefit incidence method. For example, panel data or repeated cross sections of data generally enable better control for extraneous factors so enabling the actual effects of the fiscal policy to be discerned more accurately.

In summary, approaches based on modelling the behaviour of individuals and households overcome several of the problems associated with the more straightforward benefit incidence approach. But it is somewhat more complex to implement in practice. There may be several different behavioural responses to be modelled (e.g. responses of labour supply, inter-household transfers etc.) to many changes in fiscal policy, and modelling each may be a significant undertaking. Besides this the data requirements are likely to be somewhat greater.

5 Additional perspectives in assessing and enhancing the poverty impact of fiscal policy

While household surveys are an important source of information in identifying the distributional impact of fiscal policy they often cannot provide a sufficient understanding of the underlying explanations for this. Yet this understanding is essential in order to increase the effectiveness of fiscal policy in reducing poverty, especially where this is the case in apparently pro-poor components such as spending on primary education or basic health care. In general this will require additional information.

Thus household survey data may identify that primary school attendance is lower for poorer households than for richer groups, but may not offer a sufficient explanation as to why. This understanding is important because it is these differential enrolment rates that underlie the unequal distribution of the benefits of spending in what might be perceived to be a pro-poor area of public spending. In particular it is important to know if it reflects supply factors (such as where schooling is available, its quality or its accessibility), demand factors (parents not wanting to send their children to school, which in turn may reflect various factors) or both? The answer to this has important implications for the policy measures necessary for the poor to be included more in the benefits of this spending.

Retaining the primary school example, explanations for the observed patterns of enrolment can often be obtained from other sources. Where household surveys are complemented, as they often are, by community surveys collecting information on local infrastructure and amenities, this may provide a partial explanation if for instance this showed that the nearest school is more than 5 km away. Administrative data from the Ministry of Education may also help in regard to the location of schools and the number of teachers, if the information is sufficiently up to date. Budget information could also help if it were available at a sufficiently geographically disaggregated level.

Ultimately though local communities themselves are best placed to provide insights as to why they do or do not benefit from fiscal policy measures, especially those delivered at a local level such as primary education, basic health care or agricultural extension. A qualitative or less structured approach is generally a better source for such information. Participatory Poverty Assessments can identify important explanations for behavior which often would not be picked up through other means (Norton et al. 2001), for example regarding the absence of teachers, the lack of school books or equipment, or, in the case of health centres, the practice of illegal charging. This offers an important reality check on information suggested by administrative data or large scale surveys.

A major advantage of such techniques is their local level focus. Ultimately a lot of the most potentially pro-poor items of government spending (such as primary education, basic health care and agricultural extension) are delivered at the local level. And this will be the case increasingly in a context of decentralization in many countries. Consequently measures to ensure effective delivery to the facilities supplying the service, and then their effective use, play a key role in increasing the effectiveness of public spending in reducing poverty.

Recent experience in Uganda offers important examples of this, notably through its service delivery surveys and public expenditure tracking surveys (Mackinnon and Reinikka 2000), which have been important inputs into public spending decisions. The expenditure tracking survey is of particular interest because (in the absence of local government accounts) it assessed the extent to which budgetary allocations for public primary education and basic health care facilities reached the intended beneficiaries. In the case of education this showed that over the period 1991–95 less than 20 per cent of the budget for non-salary expenditures ever reached the schools, with district authorities retaining much of the budget intended for schools. In the case of health, the survey was less successful in being able to track expenditures. However, interviews at the clinics showed that medicines generally reached the centres, but there was extensive evidence from focus group discussions that staff often expropriated medicines and supplies and sold them on. In both cases the key issue was poor governance and lack of accountability. But results from such initiatives can be a very powerful tool in improving financial flows to intended beneficiaries as was achieved in Uganda (Mackinnon and Reinikka 2000); the availability of information about resource flows played a key role.

Local level participatory and other surveys have the disadvantage of not being nationally representative, but for some purposes this is not very important (as in the example of the public expenditure tracking above). Also experience with the Uganda Participatory Poverty Assessment Project (UPPAP) and other participatory poverty assessments such as recently in Rwanda, indicates the ability of local level information to influence policy priorities, including in the area of public spending. However, it is

still possible to collect information on service quality or delivery for instance on a national basis; one means of doing this is the Core Welfare Indicators Questionnaire (CWIQ), a light household survey which includes questions on perceptions of public service delivery. Because this is a light survey, it is more feasible to use it to collect information at the district level, something which has generally not been feasible with conventional surveys but which is increasingly important in the context of decentralization.

Finally, another important factor in making fiscal policy more pro-poor is to create the incentives at national and local level for governments to deliver more effectively to the poor. This issue of designing appropriate incentives is still very much underdeveloped. One example, again from Uganda, has been via the use of its Poverty Action Fund (PAF). One of the most effective ways for Government Ministries to increase their spending is to argue that it qualifies for the PAF (Mackinnon and Reinikka 2000). As spending under the PAF is tightly monitored, with a significant civil society involvement, this is intended to make this marginal spending more effective in delivering poverty reduction.

6 Monitoring the poverty impact of fiscal policy

As well as identifying the impact of different components of fiscal policy at a point in time, it is equally important to monitor the effects of fiscal policy on poverty over time. This is most frequently considered in terms of different components of public spending, with PRSP monitoring strategies based on input, output or intermediate and outcome targets (World Bank 2002, Booth and Lucas 2001). Taking the example of health care for instance, the standard input indicator would be public spending on health care, available from budget data. Ideally this should be available at the most geographically disaggregated level possible. Examples of output indicators could include utilisation rates for health centres, the extent to which they are fully staffed, the availability of drugs and so on. Typically this type of information would be available from government administrative data, and again it is important to look at this at the most disaggregated level possible. Often though the quality of this administrative data is fairly patchy, poor quality, of sometimes out of date; and also it will not cover the private sector (which may play an important role). Information on service delivery may also be relevant here. Examples of outcome indicators include measures such as infant mortality or life expectancy; these will typically be measured infrequently, based on surveys for example.

Disaggregation by income group (relevant for considering the distributional pattern of spending) can be done most easily at the outcome level, as is also the case for other relevant disaggregations such as gender. However, it is also possible to consider distributional factors in considering the input and output indicators. For instance if it is known initially that the infant mortality rate is highest in a particular region, this can provide a signal to increase spending disproportionately in this region and also to set more demanding targets for the output indicators. This is important because in most cases the input and intermediate indicators can be monitored much more frequently than the outcome indicators – in other words, distributional issues can only be considered explicitly relatively infrequently. Again though the issue of creating incentives is important here.

A monitoring framework does allow an assessment of the effectiveness of public spending in achieving desired outcomes, and in assessing the distribution of these outcomes. How effective and meaningful a monitoring framework is depends on the successful identification of the indicators, that is on the extent to which the input indicators do indeed relate to intermediate indicators and these in turn to the outcome indicators. But given that, many of the issues discussed in Section 5 above are likely to play a key role in ensuring an effective monitoring tool for assessing the impact of fiscal policy on poverty (and more generally). At the input level it is important to assess the extent to which government spending in areas to be delivered at local level actually reaches the local level facilities. Community based monitoring using qualitative methods is likely to be of particular importance for intermediate and outcome objectives, and offers the additional advantage of a potentially independent means of monitoring not dependent on government generated data.

7 Conclusions

Fiscal policy is important both for growth and for distribution, the latter both in a static and dynamic sense. This paper has focused much more on its impact on distribution, an issue which has been insufficiently considered in most countries. This is partly because the administrative data collected by government ministries almost invariably does not contain information on the living conditions of the beneficiaries or those paying the taxes. However, the increasing availability of household survey data in most countries has enabled much more consideration of poverty and distributional issues in general. In addition though, such surveys frequently contain sufficient information to assess the distributional impact of many of the more important components of fiscal policy, both on the spending and taxation side. This has most often been considered through benefit incidence analysis, and has shown that while fiscal policy is often progressive or neutral, it is often not well targeted to the poor, this being especially the case in Africa.

Benefit incidence analysis represents an important and valuable source means of assessing the distributional impact of fiscal policy. At the same time though it does have a number of important conceptual and practical limitations, in particular as a guide to policy. Thus for instance, the fact that the poor may not benefit proportionately from an existing level of public spending in a given area (say health care) does not imply that they would not suffer (benefit) disproportionately from a reduction (increase) in the level of spending. Further, it does not model how beneficiaries and non-beneficiaries respond to changes in fiscal policy, an important factor in considering its distributional incidence; this can though be modelled based on survey data.

Important as household survey data are for assessing the distributional impact of fiscal policy, they alone are insufficient to understand why the pattern is as it is, and what might be done about it. Alternative sources of information, especially those based at the local level, and including participatory poverty assessments, service delivery surveys and expenditure tracking surveys have an important role to play. Non-provision of services or poor quality is likely to play an important role in explaining the observed distributional patterns. This issue is equally important in seeking to monitor the impact of fiscal policy on poverty.

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