SOUTHERN AFRICAN REGIONAL POVERTY NETWORK

MACROECONOMIC POLICY AND POVERTY IN SOUTHERN AFRICA:

SOME ELEMENTS OF AN ANALYTICAL FRAMEWORK¹

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¹ These notes are based on collaborative work in progress by Rob Davies of the University of Zimbabwe and the Trade and Industrial Policy Secretariat, as well as concept material from the International Development Research Centre's (IDRC) effort to investigate the Micro Impacts of Macroeconomic Adjustment Policies (MIMAP).

Introduction

It has long been recognised that there is a range of regional problems in Southern Africa that requires regional co-operation and co-ordination. Food security, environmental and related tourism issues, and infrastructure development in transport, communications and energy have been approached on a regional basis since the founding of the Southern African Development Community (SADC). Similarly trade and trade negotiations amongst regional countries also clearly require a regional perspective. However, the primary structural issue facing all countries in the region is poverty and income inequality, while they all have to cope with the same policy problem of how to manage globalisation.

Of particular interest is the relationship between macroeconomic shocks and policy and income distribution and poverty. These notes attempt to sift through what have been the experiences elsewhere and some of the policy recommendations. While far from complete and therefore probably lacking coherence, this note then leads to the identification of elements for a research agenda to tackle the relationship between macroeconomic policy and poverty in Southern Africa

Background

The relationship between macroeconomic policy and macroeconomic shocks and poverty has had a long history of research. Before we start our overview we need to be somewhat precise about the term macroeconomic. Traditionally, macroeconomic policy has referred to fiscal and monetary policy. From a very simplistic point of view, with fiscal policy we have in mind changes to tax rates and aggregate expenditure of the public sectors, while monetary policy relates to forced changes in the interest rate, exchange rate and money supply. However, in many developing economies, structural adjustment packages administered by multilateral institutions have often included, amongst others, trade liberalisation efforts and labour market regulation. Both policy domains have traditionally been regarded as microeconomic policy measures. With this in mind we then continue with a broad view on macroeconomic adjustment (shocks or policy, terms which are used indiscriminately for reasons of convenience).

We start by giving a historical perspective of research in this area by following the views of the International Development Research Centre's (IDRC) effort to investigate the Micro Impacts of Macroeconomic Adjustment Policies (MIMAP), a research programme that has been ongoing since the late 1980s. We close this section with a brief and highly selective impression of the body of analysis that has accumulated in South and Southern Africa.

Global

According to Medhora (1996), investigations into the relationship between macroeconomic policy and macroeconomic shocks basically started in the early 1980s with the United Nations International Children's Emergency Fund's (Unicef) "Adjustment With a Human Face" set of studies, in which the matter of the adverse effects of structural adjustment policies was first raised:

Although nominally about the negative impacts of such policies on children, the studies are remarkably wide ranging in their analysis... Geographically, the breadth of evidence – from Botswana, Brazil, Chile, Ghana, Jamaica, Peru, the Philippines, South Korea, Sri Lanka and Zimbabwe – is impressive... Elements of the thinking in this chapter have clearly gone into the UNDP's (UN Development Programme) Human Development Index exercise (Medhora, 1996).

The Unicef effort mainly focussed on how to monitor and collect statistics on poverty to examine the impact of structural adjustment on poverty. This body of work was followed in the late 1980s by research undertaken at the World Bank under the Living Standards

Measurement Survey (LSMS) and Social Dimensions of Adjustment (SDA) banner. These two programmes focussed on the collection and dissemination of disaggregated statistics on poverty, micro-macro linkages and long-term institutional development, amongst others, but are according to Medhora (1996) limited to the typical income and consumption-based measures used in traditional economic analysis.

The analysis of poverty at the World Bank, as indicated by Kanbur (1987), has been the domain of microeconomics, with topics such as consumer choice, labour market behaviour, agricultural production decisions and demographic patterns. However, with structural adjustment during the late 1980s it appeared to World Bank policy makers that macroeconomic policy could have a critical short-run impact on poverty in less developed countries where social security is inadequate. If, for example, an economy is in need of structural adjustment, it typically suffers from balance of payments difficulties. The World Bank / International Monetary Fund (IMF) medicine, according to Kanbur (1987), then takes the form of devaluation, credit restraint, demand contraction, reduction in government deficits and price reform, which usually means increasing the price of imports and decreasing the price of exports in an attempt to switch the composition of production from the nontraded to the traded goods sectors. In such a framework, devaluation may reduce poverty if it shifts income to the traded sector away from the non-traded sector and if, as was thought at the time, most small farmers produce for the traded sector, poverty may be reduced indeed. The question is whether it is the case that most small farmers produce cash crops for the traded sector.

Final to the historical overview presented by Medhora (1996) is the analysis undertaken by the Organisation for Economic Co-operation and Development (OECD). While Kanbur (1987) made use of some short cuts to link the macroeconomy with poverty, he mainly relied on household survey and some very aggregate policy levers, the OECD Development Centre's "Adjustment and Equity" series of studies in seven developing countries mostly used the economy-wide general equilibrium modelling approach for macro-micro linkages. The main issue at stake in the OECD series of studies was whether "managed" structural adjustment is more or less favourable to the poor than a "no adjustment followed by a crisis" scenario. At the same time a number of typical structural adjustment remedies, such as raising the prices of basic goods and laying off public sector employees, were shown to be more damaging to the poor and for income distribution than a devaluation combined with less drastic reductions in credit and public sector employment. In addition, the study series recommended that reductions in capital expenditures should almost never be across-the-board or borne primarily by rural investment and primary health care budgets. Privatisation measures should be part of adjustment and not stabilisation (except in those instances where they will quickly and efficiently yield revenues for the exchequer), and should be accompanied by effective compensation or retraining programmes (Medhora, 1996).

Taking into account the above-mentioned research efforts, the IDRC launched a programme of activities under the banner of MIMAP that attempted to be more holistic, in that top-down quantitative economy-wide analytical frameworks were chosen, such as general equilibrium models, as well as bottom-up household models. Starting from a small base with a single project in the Philippines in the late 1980s, the programme has gradually expanded into a collaborative effort across a range of less developed countries. The MIMAP programme distinguishes itself from the other efforts discussed above in that it places more emphasis on the buy-in of local policy analysts and policy makers, a more eclectic approach using a range of different quantitative and qualitative methods, poverty measurement that goes beyond the usual income and consumption criteria, as well as links with related issues such as the environment (for more detail see: www.idrc.ca/mimap).

Southern Africa

In terms of Southern Africa it is worth noting the efforts of the International Food Policy Research Institute (IFPRI). Until recently very little had been available, except for isolated attempts such as Rutayisire and Vos (1991), Sarris (1994) for Tanzania, Davies et al (1994) for Zimbabwe based on benchmark data for the mid 1970s and 1980s respectively and Tarp (for sub-Saharan Africa, 1993) at a more macro level. However, efforts improved during the second half of the 1990s when IFPRI co-ordinated a programme of research activities which focussed on Macro-Economic Reform and Regional Integration in Southern Africa (MERRISA). According to Robinson (2000) the aim of MERRISA is to undertake analysis of economy-wide income and equity effects of macro-economic policy reforms and closer economic relations among SADC members. The first stage of the work programme was to conduct country studies for Zimbabwe, Zambia, Tanzania and Mozambique while South Africa and Malawi were added at a later stage. Individual country data were collected and organised in the Social Accounting Matrix (SAM) framework of similar format across the participating countries with some household detail. A number of single country applications of first and second-generation economy-wide modelling efforts investigated several relationships between macroeconomic shocks and policy levers and poverty.

For example, stylised models of Mozambique and Tanzania showed according to Robinson (2000) that policy reform led to devaluation or lower tariffs. However at the one end of the supply chain, where there are large marketing margins, the threshold for any action is quite high. If households largely engage in home consumption and these marketing margins are indeed high, some price change at the centre or at the border has a small chance of being transmitted into the region. In other words, until the policy reform is big enough to jump some wedge, nothing changes in terms of production decisions. This could lead to some counter-intuitive behaviour, or a policy reform that actually has perverse effects, until one hit some threshold effect. Consequently, it was found in a number of these studies that one could get an enormous kick from reducing the marketing margin. Investment in transportation and marketing infrastructure could be very important and worth a lot if this translates into lower trade and transport margins (for more detail see http://www.cgiar.org/ifpri/divs/tmd/dp.htm). Special attention was paid to compatibility across SADC country SAMs. This opened the door to the integration of country SAMs into a multicountry SAM framework at a reasonable level of sectoral (but not household) disaggregation. The missing link between individual country SAMs and a multicountry SAM is a fully directional trade matrix and data on crossborder flows of production factor rewards. Whilst trade matrices are not likely to be generated as part of the Merrisa project, this will soon be available from other sources, such as the efforts by Evans (1998) mentioned above or the Global Trade Analysis Project (GTAP) located at the University of Purdue (see Hertel, 1997). Recent applications with GTAP in Southern Africa have been made by Davies (1998) and Lewis et al (1999), but the GTAP framework lacks a household disaggregation and can therefore not report directly on poverty issues. However, Evans (2001) has extended the GTAP analysis to incorporate income distribution issues in a recursive way. This was achieved by feeding the GTAP results through the income distribution component of the Zambian SAM (Hausner, 1999).

Some of the key findings on the impact of trade shocks on post-tax household income distribution in Zambia are summarised by Evans (2001: 17-18), and suggest that Post Uruguay unilateral tariff reforms in Southern Africa can be strongly income-improving but are expected to have unfavourable income distribution effects, while a EU-SA Free Trade Agreement appears to have no impact on income distribution. Evans (2001: 18) explains that the first finding, that the Post Uruguay Round unilateral tariff reforms had a regressive impact on income distribution in Zambia, is counterintuitive. It arises because of trade

diversion, as unilateral tariff reforms in Southern Africa open these economies to an increased demand for imports from outside the region, in spite of low intra-trade in Southern Africa. Explicit analysis of appropriate poverty measures could not be undertaken by Evans (2001) but is on his research agenda. For that purpose, he proposes to explore the 1993/94 household survey of Zambia

South Africa

Following international trends, the relationship between macroeconomic shocks and policies and poverty has been explored in South Africa by two distinctly different camps, with little interaction between the two. On the one hand, top-down economy-wide general equilibrium analysis has been undertaken, with limited focus on the poverty dimension, as the analytical frameworks often only identified a small number of household income classes, while explicit analysis of appropriate poverty measures was not pursued. On the other hand, the more bottom-up approach to poverty analysis using household surveys and population censuses, although more rich in household and poverty detail, paid less attention to the impact of macroeconomic shocks and policies and feedback between the two levels.

A considerable number of economy-wide applications have been undertaken during the 1990s in South Africa. Gelb et al (1992) developed a dynamic one-sector computable general equilibrium (CGE) model of the South African economy, based on an aggregate SAM for the year 1990, extended with financial variables. The model was used to evaluate the impact of a negative external shock and of a programme of government stimuli. Using a rigid, albeit multisectoral modelling template, previously developed at the World Bank, Naude and Brixen (1993) examine the impact of an increase in government expenditure, export demand, world price and a lowering of import tariffs under various sets of closure rules. Tarp and Brixen (1996) have taken the IMF's financial programming model and the World Bank's revised minimum standard model and applied it to the South African economy, basing the modelling framework on a single-sector accounting framework, with which they investigate exchange rate devaluations, external borrowing by the government and higher international reserves.

Subsequently, several larger scaled multisectoral CGE models of the South African economy were developed by the Industrial Development Corporation (Coetzee et al, 1997), the World Bank/OECD (Van der Mensbrugghe, 1995) and the Development Bank of Southern Africa (DBSA, Gibson and van Seventer, 1996a), which resulted in a number of applications such as investigations into trade liberalisation, green trade restrictions, devaluation and government expenditure and restructuring. (See for example Cameron, 1994; Gibson and van Seventer, 1996b, 1997a, 1997b; Gibson, 2000). At the household survey level, basic poverty measurement and analysis have been undertaken by, amongst others, Leibrand et al (2001), Herz (1995), May et al (1995), Whiteford et al (1995) and Whiteford and van Seventer (2000), but this has lacked macro-micro linkage analysis.

A regional perspective in SADC policy formulation

Returning to the Southern African region, it was mentioned above that a range of regional problems in Southern Africa requires regional co-operation and co-ordination. Food security, environmental and related tourism issues, and infrastructure development in transport, communications and energy, to mention only a few, have been approached on a regional basis since the founding of SADC. Similarly, trade and trade negotiations amongst regional countries also clearly require a regional perspective. With the development of trading blocs and the establishment of the World Trade Organisation (WTO), the need for a co-ordinated approach *vis a vis* the rest of the world is increasingly recognised (if more in rhetoric than in

action). These trade issues spill over into the need for co-ordinating industrial development and other areas.

Supra-regional policy as clearly requires research with a regional perspective. But there are many areas, currently approached as single-country issues, which would also greatly benefit from a regional perspective. Although there are significant differences between the countries in the region, there are also important commonalities. Looking beyond short-term macroeconomic stabilisation problems to deeper-seated structural and developmental issues, we see that all of the countries in the SADC region face the problems of poverty, inequality and unemployment. Many of the issues which are currently the central focus of policy debates – trade, the WTO, industrial development, energy policy, even macroeconomic stabilisation – are of interest mainly because they are means for addressing these primary developmental concerns.

These common problems suggest regional perspectives are imperative. However, more important than these shared problems is the fact that the Southern African region is economically integrated. This has two important dimensions. First, policies in one country affect others, and there may be important feedbacks that affect the effectiveness of the policy in the policy-making country. Secondly, single-country policies may be affected by the regional context. Not only do regional agreements constrain policy options, but regional linkages may also impact on the effectiveness of national policies. For example, national industrial policy has important competitiveness effects that have a multilateral dimension. National investment policies may be ineffective if they ignore regional capital mobility. Similarly, national employment creation and poverty alleviation are affected by the possibilities of regional migration. Thus, national policy formulation will benefit from the addition of a regional perspective.

According to the OECD (1995: 34), ...it would also be worth investigating the potential impact of the spread of growth in the region from a more macroeconomic standpoint. Recent work has indeed suggested that spread effects could be a significant factor accounting for Africa's poor growth record. According to this view, the economic failures of individual countries may have been mutually reinforcing, having a multiplier, rather than merely cumulative effects... much remains to be done to explain the mechanisms through which these propagation effects operate. This nevertheless offers a promising approach for investigating to what extent South Africa could progressively act as an engine of growth for its neighbours and thus contribute to the development of the continent. However, there is still a question as to the risk of reverse effects, entailing economic impoverishment of South Africa's neighbours, due to too wide differences in initial levels of development. Experience gained in other parts of the world, such as the European Union, suggest that it might be appropriate to pursue specific regional policies. This could help to avoid economic polarisation, which would impede the desired process whereby South Africa stimulates the entire region.

Policy issues

The primary structural issue facing all countries in the region is poverty and income inequality, while they all have to cope with the same policy problem of how to manage globalisation. An obvious starting point for examining the relationship between the macroeconomy and poverty is therefore the area of trade and poverty. However, a number of related areas are of interest and it is important to have an inclusive rather than an exclusive agenda. The poverty dimension brings in issues of inequality (in both incomes and assets), unemployment, the informal sector and small and medium-sized enterprises (SMEs), gender, HIV/AIDS and environmental management. The trade dimension brings in both first and second-generation WTO issues and regional integration.

Mapping macro-micro relationships

If it is feasible to quantify trade liberalisation and poverty it may be possible to establish some correlation between the two phenomenons. Even if one were to get a quantitative handle on poverty using appropriate measures that are expressed not only in terms of money value but also basic needs, entitlements and capabilities and redistribution aspects of poverty, according to Winters (1999) there are typically a range of other issues that may impact it, of which trade liberalisation is just one. From a simplistic point of view there are two ways of investigating the impact of macroeconomic policy levers such as trade liberalisation on poverty. From the top down it may be possible to create a laboratory of the economy at hand that has some, albeit fairly aggregate, poverty features. In such a laboratory it is then possible to simulate features of the macroeconomy while, to the extent that this is realistic from a policy perspective, keeping other potential policy levers and shocks constant.

On the other hand, one can take a bottom-up approach, which starts by looking at poor households using household surveys, how these households link into the labour market and obtain other forms of income, and how trade liberalisation may be one source of impetus that could have an impact on households moving in and out of poverty, that is, below or above the poverty line.

More recently, a middle ground between the two approaches has been explored. Although still in initial stages of development, the approach suggests using the full details of a household survey with respect to certain variables in combination with a scaled-down macroeconomic model in an attempt to explore the impact of macroeconomic policies directly on the household or individual level. The advantage is that not only is the richness of household survey information preserved in a partial equilibrium way, some general equilibrium feedback mechanisms are also added to the analysis at the same level of detail. In the case of Madagascar, Cogneau and Robilliard (2000: 52-54) noted that apart from the affordability of social safety net programmes in a macroeconomic context, some of the initial positive effects of introducing a social safety net might actually be eroded by negative general equilibrium price effects on non-traded "traditional" goods.

However, whichever way, our thinking on the paths of impact need to be spelled out and formalised. In the case of trade and poverty, Winters (1999) suggests ways to measure the impact on poverty by making use of poverty profiles, including information on consumption, production and employment activities of the poor. Policy according to Winters can then be judged by the number of households that are in poverty, measured in terms of a metric income level. Moreover, Winters identifies four potential routes: prices, enterprises, government revenue and economic growth and technology.

Trade liberalisation as one of the macroeconomic policies can be transmitted down to the poor by way of price changes in a direct way, that is through the distribution sector, or indirectly through the "domain" of trade. The state of the distribution sector refers to whether the market is competitive to a more or lesser degree. The degree to which price changes are transmitted to the rest of the economy is dependent on the domain of trade, that is whether the good is traded internationally, nationally or locally.

Through the enterprises, trade liberalisation effects poverty because, according to Winters (1999), outputs are sold and inputs are acquired through market transactions involving firms, hence the link to border, wholesale and retail prices. Given demand and intermediate supply for goods and services, demand for primary inputs will directly affect households, since they are the ultimate owners of the factors of production. If the Stolper-Samuelson Theorem were to hold, and trade liberalisation were to increase the demand for labour-intensive goods while poor households depend largely on unskilled wage income, poverty will be alleviated. However, liberalisation may well only increase the demand for medium-skilled labour, and as a result low-skilled labour could be left behind. Obviously a number of different

configurations to this argument are possible, depending on a range of conditions, such as the supply of the factors of production, the degree to which markets are differentiated and the degree to which trade liberalisation increases volatility.

Trade liberalisation has an impact on government revenue. For those countries that rely heavily on tariff revenue, trade liberalisation could impact on spending and the tax burden. The former may limit poverty alleviation programmes, while the latter could result in new taxes on staple goods. This aspect of the relationship between trade and poverty obviously also applies to fiscal policy itself. Finally, the impact of trade liberalisation on the household level is transmitted by means of the economic growth variable. Growth will cut across all other paths mentioned above and, according to Winters (1999), will affect relative prices as well as the incomes generated by the enterprise sector, both in terms of their average level and the number of people working in that sector. If the impact of trade liberalisation on growth is indeed positive, and the discussion about that is not yet concluded, it will also increase demand and generate higher government revenue. This aspect of the relationship between trade and poverty obviously also applies to fiscal policy.

The length of the planning horizon is, however, an important factor. Although trade liberalisation may improve the plight of the poor in the long run, short-term adjustment costs may still push households into poverty for shorter or longer periods, depending on the intensity of the reforms, whether they are concentrated or diffused.

Trade policy reform is but one aspect of globalisation that may produce winners and losers. A range of other policies can probably be considered. Another link between macroeconomic policy and poverty has been noted by Spence (1993), as quoted by Medhora (1996), who examines the impact of monetary policy that aims at lowering inflation and raising domestic savings. In terms of its impact on vulnerable groups such as rural smallholders:

An immediate impact would be the higher cost of the short-term credit that such farmers typically rely on to bridge the period between input purchase and output sale. However, higher domestic interest rates also tend to attract foreign capital. If unsterilised, this alone may depress the initial rise in interest rates but more probably will cause the real exchange rate to appreciate. Exports become more expensive and imports become cheaper. Under the "right" elasticity conditions crop exporters may lose sales but gain revenue while farmers competing with imported crops will lose market share and almost certainly revenue. Imported intermediate goods such as pesticides and small farm equipment... will become cheaper. Non-tradables will become more expensive, thus raising some production costs. The higher rate of interest will lead to a faster rate of natural resource extraction/use. Depending on who benefits from the original policy, opportunities for higher or at least more diversified income (such as market gardening or day labour) may arise.

The fact is, in the absence of coherent and structured micro-macro analysis we know neither the size or direction of the net impact of the rise in domestic interest rates on... rural smallholders, nor the size of the individual impacts that comprise the net impact. Multiply this story by the number of "micro" groups identified as "mattering" in an economy and the picture becomes even more complex. And yet, for the initial policy to be agreed upon and accompanying measures (palliative or otherwise) to be sensibly determined, such information is crucial for responsible policy decisions to be made.

The example highlights the need for formal modeling efforts to sort out what the net effect of macroeconomic policies on poverty is. In the South African context Stryker et al (2000) have noted that some macroeconomic policies have an inherent bias against the poor. They note that recent survey work suggests that small and medium sized-enterprises are quite sensitive to rising interest rates. If a plausible assumption is that small and medium-sized enterprises are closer connected to low-income households than large firms, then cautious monetary policy will, at least in the short run, hit the poor harder than the rich.

Regional dimensions

Where the policies applied are through the international community or a regional group, the case for using a regional framework is overwhelming. Yet national policies of a large country, or a dominating country in a region such as Southern Africa, can also have widespread repercussions. Thus there are national and international policy agendas that produce both winners and losers. When the protection or mitigation of losses of the poorest is on the international policy agenda, it is important to develop a research tool that can help to identify the winners and losers.

Given the international dimension, the trade and poverty dimension is a good starting point. Much trade analysis is pitched at a relatively aggregated level, while poverty analysis tends to be more micro-level. Part of the methodological issue is to work out how one can move between these two levels. A multi-country general equilibrium framework such as the one developed by the GTAP (see Davies, 1998) or by Lewis et al (1999) lends itself to trade analysis, but has insufficient household detail to undertake serious poverty analysis. In principle it should be possible to map the results of a GTAP-style analysis onto a separate model based on detailed household survey data, following the direction taken by Evans (2001) and carrying this through towards more appropriate poverty measures.

Poverty constraints to macro policy

A different issue, which has been largely ignored in the literature, concerns the consequences of poverty for trade policy. To what extent do poverty alleviation objectives constrain trade policy? (Gibson, 2000, has some analysis of this). Put differently, how far do initial conditions regarding poverty constrain the options for managing globalisation? This could occur in several ways. If the initial impact of globalisation, in the narrow sense of trade liberalisation, is to widen income disparities, does it need to be undertaken more slowly in poor countries than in rich ones? Is a poor country with low levels of human capital less able to benefit from the opportunities of increased openness than a more richly endowed one?

Elements of a research agenda

It is clear from the above that there is no single and unique relationship between macroeconomic shocks and policies and poverty. While structural adjustment and trade liberalisation may be intended to be pro poor, the outcome very much depends on the structure of the economy at hand and the planning horizon. Poverty itself occurs in many different ways and certain pockets of poor communities may be adversely affected, while others may gain. Since macroeconomic shocks and policies cut right across an economy, no community can be insulated from its effects. The objective of successful macroeconomic policy analysis is to understand the diversity of these impacts so that benefits can be harnessed and costs can be minimised and if necessary, policies are shelved or reversed Although a considerable amount of work has already been undertaken in South and Southern Africa on the relationship between macroeconomic shocks and policy and poverty, further analysis is inevitably needed. This includes amongst others:

- Updating, expanding, adapting and maintaining the stock of economy-wide databases of SAMs that currently exist for SADC economies. This includes, for example, employing household surveys to expand the income distribution and labour market aspects of current databases. Keuning (1995) has indicated ways of organising non-monetary povertyrelated information that goes beyond income and consumption in a SAM-compatible framework.
- Descriptive analysis of intra- and interregional trade in SADC and undertaking homegrown trade policy reviews on an ongoing basis for individual SADC members.

- Descriptive and comparative analysis of industrial structure in SADC economies using single country input-output and social accounting matrix data.
- Descriptive analysis of poverty in Southern Africa, using appropriate measurements that go beyond traditional income and consumption measurements.
- Applying single-country economy-wide policy models to examine the interaction between trade and other macroeconomic policy and poverty for individual SADC economies. These policies should include, amongst others, trade and investment policy, debt, safety nets, management and maintenance of infrastructure, compensation for countries which lose from the elimination of existing distortions in the global trading system, and labour and environmental standards.
- Applying multicountry economy-wide policy models to examine the interaction between trade and other macroeconomic policy and poverty for individual SADC economies.
- Following Cogneau and Robilliard (2000), it makes sense to start exploring a fuller integration of household survey data and economy-wide analytical frameworks to explore the impact of macro-policies on individual households.
- Finally, these analytical frameworks need to be able to go beyond the traditional income and consumption dimensions of poverty.

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