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### Executive Summary

Potential losses in government revenues resulting from preferential tariff reductions have been a major source of concern to many participants in the SADC Trade Protocol negotiations. Such concerns have often overshadowed the broader implications of the Protocol for the integration and increased competitiveness of Member States in the world economy.

From the very narrow perspective of a customs collector, implementation of the SADC Trade Protocol might appear to pose serious problems in some countries. In Zambia and Malawi, import duty collections after full implementation of SADC free trade are predicted to fall by 66 and 50 percent respectively relative to what they would be in the absence of the Protocol and of any other reductions in import tariffs. Zimbabwe and Mozambique are predicted to face reductions of 42 and 34 percent respectively. The decreases in Mauritius, Tanzania and SACU will be much lower, only 24, 12 and 4 percent respectively of customs revenues.

From a broader economic policy perspective, however, the problems are much less serious than they might appear to a customs collector.

First, these revenue losses do not represent an economic cost to the Member States. The direct revenue impacts estimated here are simply a transfer from the countries' treasuries to the industrial users and final consumers of taxed imports.

Second, SADC Member States generally rely to a relatively small and shrinking extent on import duties as a source of government revenue. Relative to overall government revenues, the reductions in import duty collections are not nearly as serious as they initially appear. The import duty losses in Zambia, Malawi and Zimbabwe due to full implementation of SADC free trade represent reductions of only 9, 8 and 7 percent respectively in total government revenues. In Mauritius and Mozambique, the reductions are only 8 and 5 percent of government revenues, and in Tanzania and SACU only 1.6 and 0.1 percent.

Third, although import duties are relatively easy to administer in many developing countries, they are also one of the most economically costly forms of taxation in any country. Trade liberalization and tax reform to reduce reliance on trade taxes are key elements of the process of economic reform for creating a development-friendly economic environment. A number of SADC Member States are already well along the path of such policy reforms. As a result, the import duty losses attributable to SADC will be smaller than those estimated here. If the pressure of import duty losses from SADC tariff reductions creates an additional incentive to pursue such complementary programs of tax and trade policy reform, that will be another significant benefit of the Trade Protocol.

Fourth revenue reductions due to the Trade Protocol will be phased in very slowly, and in many cases will be more than balanced by the positive revenue impacts of normal economic growth, especially in the early stages of implementation. In the first four years, only two countries are predicted to face actual revenue losses, and even after eight years, three countries will still collect more import duties than in the base year prior to the Trade Protocol.

It would appear that revenue concerns have played far too great a role in the SADC trade negotiations.

# 1. Introduction

Potential losses in government revenues resulting from preferential tariff reductions have been a major source of concern to many participants in the SADC Trade Protocol negotiations. Such concerns have often overshadowed the broader implications of the Protocol for the integration and increased competitiveness of Member States in the world economy.

This is a report on estimates of the revenue implications of the Trade Protocol. It is the first set of estimates to take account of the actual tariff reduction offers of the Member States and to estimate the time profile of likely revenue changes over the rather lengthy phase-in period of the Protocol.<sup>1</sup>

The presentation begins with a discussion of some basic economic issues related to the revenue implications of preferential trade liberalization (Part 2). It reviews the simple economic determinants of revenue losses (2.1), and presents a framework for evaluating the implications of any revenue losses in the broader context of the needs and interests of the citizens of the Member States (2.2).

Parts 3 and 4 present and review the basic data required for estimating revenue losses – the characteristics of the members' tariff reduction offers (Part 3) and existing patterns of trade among the Member States, including the coverage of pre-existing preferential trading arrangements that will interact with the SADC Protocol (Part 4).

Part 5 presents estimates of the likely revenue implications of the actual tariff reduction programs agreed to by the Member States, including their time path over the implementation period. Part 6 reviews the main findings of the report.

# 2. The Economics of Revenue Losses Due to Trade Liberalization

There are two types of economic issues related to revenue losses from trade liberalization under the Trade Protocol. The first is an issue of estimation and prediction: how large will be the revenue changes due to the implementation of the Protocol? And the second relates to the

<sup>&</sup>lt;sup>1</sup> For other estimates see World Bank 2000, Table 3.2 and Lewis 2001, Table 9.

economic implications of any revenue losses: what do revenue losses mean for the economic welfare of the citizens of the Member States?

## 2.1 Determinants of Revenue Losses

The most immediate and *direct revenue impact* of preferential tariff reductions under the Protocol will be on existing trade. Goods currently imported into one Member State from another Member State under MFN (or other applicable pre-Protocol) tariff rates will be subject to the lower preferential rate. The direct loss in revenue on imports of any particular good at any point in time is simply the current level of imports of that good times the difference between the MFN (or other pre-Protocol) rate and the new preferential rate. The total direct revenue loss is the sum of these amounts over all imports.

There might also be some *indirect revenue changes* arising from shifts in trading patterns due to the Protocol. To the extent that the preferential rate on intra-SADC trade causes importers to switch to intra-SADC sources for goods previously imported from non-SADC members, there will be an additional revenue loss equal to the difference between non-preferential and preferential rates times the amount of trade diverted in this manner. On the other hand, any net increases in total imports due to reduced tariff rates under the Protocol will increase import duty revenues, at least as long as preferential rates remain above zero.

Estimating the direct revenue impacts of preferential trade liberalization requires data on existing imports from intra- and extra-SADC sources, and on differences between preferential and non-preferential rates. To estimate the additional indirect revenue effects also requires data on the elasticities of import demand.

Obtaining reliable basic data on trade patterns and tariff rates was a major challenge in conducting this study, and it therefore was decided to confine the analysis to the direct revenue effects of the Trade Protocol. Most studies of revenue effects of trade liberalization that have attempted to measure indirect as well as direct effects find the indirect impacts to be of a much lower order of magnitude than the direct effects. Assuming the same to be true in this case, any estimates of indirect revenue effects in all likelihood would be smaller than the estimating error of direct effects arising from data weaknesses. It was decided to concentrate as much effort as possible on improving the quality of basic data on trade flows and tariff structures.

An important feature of the Trade Protocol is that tariff reductions will be phased in over a relatively long time period, and the phase-in schedules will be differentiated by source of imports within SADC. In many cases, the schedules have been deliberately chosen to ensure that there will be minimal economic or revenue impact until a quite late stage of the liberalization process. In estimating revenue impacts, therefore, it is important to try to take account of this important timing element. Previous estimates of revenue implications of the Trade Protocol have not taken this into account.

Estimating the amounts and timing of direct revenue costs of tariff reductions under the Trade Protocol requires knowledge of trade patterns of the Member States and of the planned phase-in

of preferential tariff reductions. An appreciation of the orders of magnitude of the resulting revenue reductions requires as well information of the relative importance of import tariff revenues in the members' overall revenue structures. Information on trade patterns, tariff reduction schedules and overall revenue structures is provided in Parts 3 and 4 below. Actual estimates of revenue impacts are presented in Part 5.

Before proceeding to the revenue estimates, however, we place the discussion in policy context by reviewing the economic implications of customs revenue losses from trade liberalization.

# 2.2 Economic Implications of Revenue Losses<sup>2</sup>

There is often considerable confusion in discussions about the economic implications of revenue losses from trade liberalization.

Some policy makers, especially in Ministries of Finance and Customs Departments, treat customs revenue losses as a cost of trade liberalization. While any revenue losses on existing imports represent a loss to the members' government treasuries, they are not an economic cost to the countries' citizens. They represent simply a transfer from the treasury to the users of imported goods. There is no net change in total economic welfare as a result of this transfer.

To the extent that the tariff reductions encourage trade creation and/or a reduction in the price of domestically produced import substitutes, there is a net economic gain to the country's citizens. The increases in productive efficiency and consumer welfare arising from trade creation exceed the customs revenue losses arising from liberalization. The net benefit measured by this difference is the familiar, but too often forgotten gains from trade that are the principal motivation for trade liberalization.

In the case of preferential trade liberalization, there may be additional revenue losses due to trade diversion. Tariff reductions on intra-SADC trade may encourage importers to switch from low-cost international suppliers to higher cost SADC sellers. This might be a more serious danger in some of the smaller, less developed Member States. But it would occur only if they failed to continue with ongoing MFN-based tariff reduction programs.<sup>3</sup>

To the extent that revenue losses are due to trade diversion, there is a net economic cost. However, the economic cost is not the total amount of the revenue loss. Rather, it is only the difference between this revenue loss and the higher cost of SADC-sourced imports compared with what they would have cost if bought from the lowest cost source. The revenue loss is an upward-biased estimate of the loss from trade diversion. The size of this bias is larger the smaller is the difference between MFN tariff rates and preferential SADC rates on the diverted goods.

If revenue losses do not represent significant economic costs, why are they the source of so much attention in trade negotiations? One reason, of course, is that Ministry of Finance and

<sup>&</sup>lt;sup>2</sup> The discussion in this section derives from Flatters 2001, part 5.2.

<sup>&</sup>lt;sup>3</sup> See section 4.3 of Flatters 2001.

Customs officials, who have a vested interest in revenue issues, often play a large role in the negotiations. Their vested interest is more acute in countries with weak revenue systems, and especially in those that operate on the basis of collection targets. Like any other vested interest, their concerns should be balanced against the broader national interest when developing and implementing strategies for trade policy reform.

There is also, however, a potentially legitimate concern about revenue losses in countries with weak revenue systems. In such systems, tax collection has high direct costs, and also creates serious distortions in economic incentives. As a result, the economic cost of public sector revenues can be very high. In the face of these constraints, poorer countries tend to rely relatively heavily on taxes on international trade. To forgo revenues from this source might make it necessary to rely on revenue sources with higher economic costs of tax collection. The resulting additional economic costs are another cost of revenue losses from tariff reductions. Once again, the cost is not measured by the size of the revenue losses, but rather by the difference in the economic costs of collecting revenues from alternative sources.

Taxes on trade are a *relatively* low cost revenue source in poor countries. However, in absolute terms trade taxes are still very costly. This is why countries switch to other taxes, levied primarily on income and consumption, as quickly as possible in the process of economic development. Most SADC Member States are already well along in programs for the modernization of their tax systems. A key element in these programs is the introduction of value-added taxes, which are much more productive at revenue-raising and distort economic incentives far less than trade taxes. Value-added taxes have an additional advantage for countries like the SADC Member States is that a large share of collections takes place at international borders, but without the adverse production incentives created by import duties.

In this context, the revenue losses that will occur as a result of SADC (and even more so as a result of MFN-based tariff reduction programs) should be seen as part of the general process of tax reform being undertaken in m the Member States. Any acceleration of the tax reform process arising from SADC should be seen as an additional benefit rather than a cost. In any case the gradual phase-in of the SADC-related revenue losses provides more than adequate time to make necessary policy adjustments.

# 3 Characterization of Offers: The Tariff Reduction Schedules

As of late February 2001, only five members, Mauritius and four members of SACU (Botswana, Lesotho, South Africa and Swaziland) have submitted their Instruments of Implementation of the Trade Protocol. Three other members of SADC (Angola, DRC and Seychelles) have not joined the Protocol and one of the other members (Zambia) has not yet ratified it. A number of countries have not yet submitted final tariff offers. Many of those that have been submitted, in preliminary or final form, are inconsistent with the terms agreed under the Protocol, in both form and substance.

Despite these differences and the lack of complete clarity regarding the terms of all the offers, it is possible to characterize some of the key features of the tariff liberalization commitments that will underlie implementation of the Protocol.

Members' tariff reduction schedules are to be differentiated in two ways – sectorally and by country of import.

The sectoral differentiation is achieved in each Member State by grouping its imports into three lists – A, B and C. The A list is goods which already have very low MFN tariff rates and which will be liberalized very quickly. The C list comprises "sensitive sectors whose liberalization will proceed very slowly. The sensitive lists are not permitted to account for more than 15 percent of a member's imports (3 percent in the case of SACU). The B list contains all goods that are not on the A or C lists (and are not deliberately excluded from the tariff reduction program).

Regional differentiation is accomplished on the part of all non-SACU members by offering speedier tariff reduction schedules to other non-SACU members than to SACU.

Almost all the offers are significantly back-loaded; that is, a large part of most countries' trade liberalization is postponed until the late stages of implementation of the Protocol. Most of the products being liberalized in the early years are those that already have very low MFN rates and/or have very little intra-SADC trade. (See following section for further discussion of trade patterns in relation to tariff reduction schedules.)

Table 1 provides an overview of the speed of preferential tariff reductions by presenting estimates of each member's weighted average tariff rate on intra-SADC trade for each year over the phase-in of tariff liberalization. In the case of non-SACU members, the estimates are provided for trade with SACU and with non-SACU members, to capture the effects of the differentiated offers to SACU to the rest of SADC. Trade weights are derived from 1998 trade patterns, the most recent year for which a consistent set of estimates of trade flows was able to be calculated.

The Table shows that the preferential tariff reductions agreed under the Trade Protocol will be implemented very slowly. For most members, full liberalization will not be achieved until the end of 12 or 13 years. In the case of SACU, which has offered the speediest tariff reduction schedule, full tariff liberalization will be achieved after eight years. But even in this case, the pace of liberalization over the first three or four years is quite slow. Among the non-SACU members, Zimbabwe and Zambia have offered relatively faster preferential tariff reductions over the first four years than have Malawi, Mauritius and Mozambique, whose tariff reduction schedules are especially heavily back-loaded, even with respect to imports from non-SACU members.

Even after eight years, when all but the members' sensitive and excluded products are meant to be liberalized, most members still plan to be quite far from the final tariff reduction goals. Malawi, Mauritius and Zimbabwe plan to be the furthest from zero preferential tariff rates at

that time (measured by the proportional reductions in trade weighted tariff rates over the phasein period.)

The other thing to note from the table is that, as intended under the differentiated offers scheme, preferential tariff reductions on imports from SACU will proceed more slowly than for imports from the rest of SADC. Mauritius and Mozambique are exceptions to this observation, especially over the early part of the phase-in period.

Offer	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
SACU	5.2	5.1	4.0	3.0	2.2	1.5	0.9	0.1	0.0	0.0					
Malawi															
to SACU		9.3	9.3	9.3	9.2	7.9	6.4	5.4	3.2	2.2	1.6	1.1	0.0		
to rest of SADC		8.9	8.9	7.0	5.5	4.0	3.3	2.3	2.3	1.6	1.2	0.7	0.0		
Mauritius															
to SACU	15.7	15.7	15.7	13.4	11.5	9.6	7.7	5.8	4.6	3.5	2.3	1.2	0.0		
to rest of SADC	22.0	21.1	20.2	19.4	18.5	17.6	17.6	17.6	14.1	10.6	7.0	3.5	0.0		
Mozambique															
to SACU	9.3	9.3	8.5	8.5	8.5	7.6	5.7	3.5	3.0	3.0	2.5	2.0	1.6	1.6	0.0
to rest of SADC	9.9	9.9	9.0	9.0	9.0	8.0	5.2	2.1	1.8	1.5	1.0	0.0			
Tanzania															
to SACU		19.0	19.0	19.0	17.6	15.3	13.0	8.6	3.4	2.6	1.7	0.9	0.0		
to rest of SADC		19.4	19.4	15.8	13.1	10.1	7.3	5.4	2.0	1.5	1.0	0.5	0.0		
Zambia															
to SACU	12.1	12.1	11.3	11.3	10.5	9.1	7.5	6.1	5.1	2.1	1.3	0.7	0.0		
to rest of SADC	9.8	9.8	8.8	7.0	6.1	4.3	2.4	2.4	2.4	1.9	1.3	0.7	0.0		
Zimbabwe															
to SACU	19.9	19.1	19.1	18.3	16.2	13.3	11.6	10.2	8.4	7.7	7.0	6.4			
to rest of SADC	20.0	18.3	17.8	16.1	14.1	11.9	10.0	8.5	7.2	6.8	6.3	6.0			

Table 1
SADC Tariff Offers: Trade Weighted Tariff Rates (%) Over the Phase-In Period

# 4. Trade Patterns of SADC Member States

There is a long history of trade among the SADC Member States. There is also an existing network of often overlapping plurilateral and bilateral trade agreements relating to this trade, each with its own unique preferential arrangements, rules of origin, etc.

While the SADC Trade Protocol will for the first time cover the trade among all of the Member States, its impact can only be understood in the contect of other existing arrangements. In this sense, the Protocol will affect only the "residual" trade that is not already covered by these existing plurilateral and bilateral trade agreements. Due to the complexities of the SADC preferential arrangements and those under other existing agreements, the marginal impacts of the Trade Protocol will often be country- and product- specific.

This discussion of intra-SADC trade is divided into three parts. The first provides an overview of trade patterns of the SADC Member States, focusing in particular on the importance of imports from other members, which is where the primary and most direct revenue impacts of SADC trade liberalization will be felt. The second presents a brief description of the existing trade arrangements, and this is followed by some estimates of the proportion of existing intra-SADC trade in each Member State that will be affected by the implementation of the Trade Protocol.

### 4.1 Current SADC Trade Patterns

Detailed knowledge of existing trade patterns among the Member States is absolutely critical to estimates of customs revenue impacts of SADC trade liberalization. Unforunately trade data for many SADC Member States are of relatively poor quality, as witnessed, for instance by large differences in aggregate and detailed data available from different sources. Compounding this is reluctance on the part of some Member States to make data available.

In the face of such difficulties, estimates were constructed on the basis of the most reliable and consistent data available. The base case data on trade aggregates for each country were constructed from World Bank and IMF estimates for 1998. Wherever possible, disaggregated data were based on proportions derived from trade statistics provided by individual Member States, either in connection with their tariff reduction offers or from special data runs on official Customs entries.

The basic matrix of estimated merchandise trade flows derived in this manner, and which was used as the basis for all revenue estimation exercises reported here, is presented as Appendix Table A.1. Table 2 presents the same data in a simpler and geographically more aggregated manner, highlighting the geographic breakdown of SADC member imports by source. From the perspective of the customs revenue implications of the Trade Protocol, there are a number of observations that are immediately apparent from the data in the table.

- SACU relies on the rest of SADC for only 1.8 percent of its imports, and so the customs revenue imlications of the Protocol for SACU are almost certain to be trivial.
- Zambia and Malawi are the most heavily dependent of the Member States, sourcing about 57 and 54 percent respectively of their imports from other SADC members. They both obtain about 40 percent of their total imports from SACU, almost all of which come from South Africa). Their relatively heavy dependency on imports from SADC suggests the possibility of significant revenue impacts from SADC trade liberalization for these two countries. However, most of their SADC imports come from SACU (75 percent of SADC imports in the case of Malawi and 69 percent in the case of Zambia). The heavy backloading of tariff reductions on imports from SACU means that any adverse customs revenue impacts will also be delayed considerably, allowing considerable time for the implementation of fiscal reforms to make up any shortfalls.

- Mozambique and Zimbabwe have a lower dependence on SADC imports, relying on SADC for 41 and 39 percent of total imports. Once again, the vast majority of their SADC imports come from SACU.
- Mauritius and Tanzania source a very small portion of their imports from SADC, with SADC shares in total imports of only 14 and 11 percent respectively. It is highly unlikely, therefore, that customs revenue implications of SADC integration will be of any importance to these two countries.

		SADC		ROW	Total
	SACU	Non-SACU	Total SADC		
SACU	17.1	1.8	18.9	81.1	100
Malawi	40.4	13.6	54.0	46.0	100
Mauritius	13.5	0.4	13.9	86.1	100
Mozambique	36.4	4.6	41.0	59.0	100
Tanzania	8.9	2.3	11.2	88.8	100
Zambia	39.1	17.7	56.8	43.2	100
Zimbabwe	36.2	2.6	38.8	61.2	100
Total	18.1	2.2	20.2	79.8	100

#### Table 2: SADC Trade Flows, 1998 Percentage of SADC Imports by Source (importers shown in first column; sources in top rows)

## 4.2 Other Existing Trading Arrangements

The potential customs revenue impacts of the SADC preferential tariff regime will depend as well on how it interacts with other existing trade arrangements among the Member States. Current arrangements of this type can be grouped into three categories.

### The Southern African Customs Union (SACU)

SACU consists of the Republic of South Africa (RSA) and the BLNS countries (Botswana, Lesotho, Namibia, and Swaziland). There is no customs duty payable on goods traded within the customs union. There is an external tariff, with centralized duty collection that is allocated to the Member States with an agreed formula on an annual basis.

#### The Community of Eastern and Southern African States (COMESA)

COMESA comprises nineteen eastern and southern African states. Nine COMESA members also belong to SADC. These are Angola, Democratic Republic of Congo, Malawi, Mauritius, Namibia, Seychelles, Swaziland, Zambia, and Zimbabwe. Another set of nine members of COMESA, including SADC members Malawi, Mauritius, Zambia, and Zimbabwe, agreed to establish a COMESA Free Trade Area that took effect on October 31 2000. This provides for tariff-free trade on all originating imports from participating members. Due to their membership in SACU, Namibia and Swaziland are not able to offer duty-free imports to the

other COMESA Member States, and so they have been granted a special dispensation giving their exports duty-free access to the other COMESA members' markets on a non-reciprocal basis.

COMESA does not have a common external tariff, although it is hoped to have one in place by 2004.

Mozambique and Tanzania both withdrew from COMESA, in November 1998 and September 2000 respectively.

#### Bilateral Trade Agreements

There are a number of bilateral agreements between various pairs of SADC Member States.

Zimbabwe has bilateral agreements with Botswana, Malawi, and Namibia. All three of these are fully reciprocal for all products that qualify under the strictly defined 25 percent local content rule of origin. The agreements cover a very large proportion of the trade between them.

RSA has bilateral agreements with Malawi, Mozambique, and Zimbabwe. Its agreement with Malawi provides for controlled entry of selected RSA products into Malawi, quota-restricted entry of Malawian agricultural products into RSA, and unrestricted access to RSA for other goods with 25 percent Malawian local content. This agreement covers a substantial percentage of Malawi's exports to RSA, but has a negligible impact on RSA's exports to Malawi.

RSA's agreement with Mozambique allows a defined list of Mozambican products to enter RSA duty and quota-free, with no reciprocity. As with the agreement with Malawi, the arrangement covers a substantial percentage of Mozambique's exports to RSA, but has minimal effects on RSA's exports to Mozambique.

The RSA-Zimbabwe agreement allows a stipulated list of products to be imported into each other's markets at concessional rates of duty, or duty-free but with a quota. Most products from RSA are excluded from the list of qualifying products, while larger but still limited range of Zimbabwean products was extended slightly in the late 1990s. This agreement has only limited impact on the range of products traded between these two countries.

Tanzania has no bilateral trade agreements with other SADC members.

## 4.3 Implications of Other Agreements

These other bilateral and plurilateral trade agreements among various SADC members mean that a considerable amount of intra-SADC trade is already accorded preferential status. This will mute the net effect of the SADC Trade Protocol on its Member States and in particular on their customs revenues.

Table 3 presents estimates of the proportions of existing imports of SADC Member States that are already subject to preferential treatment under existing trading arrangements. For SADC as a whole, 71 percent of imports from other SADC members are covered by preferential rrangements that pre-date the Trade Protocol.

However, the extent of such coverage varies considerably across different members and groups. In the case of SACU, over 97 percent of SADC trade is covered by pre-existing arrangements. Almost all of this is accounted for by trade under the customs union to which they belong, reflecting the fact that most of their SADC imports are from other members of SACU. At the other extreme, none of Mozambique's or Tanzania's SADC imports are covered by other preferential arrangements, and only 2.3 percent of Mauritian imports from SADC are covered.

It is notable that in the cases of Malawi and Zambia, the non-SACU countries with the highest levels of dependence on SADC imports (see Table 2), a non-trivial portion of this trade is already covered by other preferential arrangements (28.8 percent for Malawi and 17.9 percent for Zambia). The existence of a considerable amount of duty-free imports from SADC prior to implementation of the Trade Protocol will tend to reduce the net impact of SADC on customs revenue collections in these countries.

Member	% of SADC Imports Covered
SACU	97.4
Malawi	28.0
Mauritius	2.3
Mozambique	0.0
Tanzania	0.0
Zambia	17.9
Zimbabwe	9.6
Total SADC	70.8

#### Table 3: Intra-SADC Imports Covered by Pre-Existing Preferential Arrangements

## 5 Estimated Customs Revenue Losses

The estimates are presented in three steps. The first is to provide a brief review of the overall importance of import duty collections in government revenues of the different Member States. The second is to describe the steps in estimating revenue losses. And the third is to present the actual estimates of revenue losses and some indications of their significance.

### 5.1 Relative Importance of Customs Revenues in SADC

Table 4 shows the relative importance of customs revenues from import duties in the SADC Member States. Except for Mauritius and SACU, all the Member States rely on import duties for between 13 and 17 percent of total government revenues. Mauritius has an especially high dependence on import duties, which account for 32 percent of government revenues, while SACU is the opposite, with a very low dependence on import duties (3.6 percent of government revenue).

Except for SACU and Mauritius, therefore, inter-country differences in the revenue impact of SADC trade liberalization will depend on differences in trade patterns and tariff structures rather than differences in fiscal structures. Except for Mauritius, the SADC Member States do not place an especially heavy reliance on import duties in their overall revenue structures. Furthermore, many Member States are already engaged in fiscal reforms that will further diminish the importance of import duties in overall government revenues.

	% of Gov't. Rev. from All Import Duties
SACU	3.6
Malawi	15.9
Mauritius	31.9
Mozambique	15.9
Tanzania	13.2
Zambia	14.0
Zimbabwe	16.7

#### Table 4: Dependence of Member States on Import Duty Revenues

Since, as we have seen earlier, most SADC Member States do not source very large shares of their imports from within SADC, it appears likely that the revenue implications of SADC free trade will not be very important, at least for some Member States. It is important to recall as well, that tariff reductions under the Protocol will be phased in quite gradually. In particular, it is almost entirely imports with zero or very low duty rates that will be liberalized in the first few years of implementation of the Protocol.

### 5.2 Methodology

This study provides estimates of the direct import duty revenue impacts of the implementation of the SADC Trade Protocol according to the schedules of preferential tariff reductions agreed in the Trade Negotiation Forum (TNF) process. The base case trade data are those summarized in Table 2 above. These data were adjusted and elaborated in two ways.

First, the totals shown in the table were allocated across HS Tariff Code lines according to the proportions shown in detailed trade data provided by each Member State, either in the offers presented in the TNF process, or in customs data that was provided separately.

Second, growth of overall trade levels for each Member State was projected according to presumed rates of overall income growth in each country over the implementation period. These growth projections were conducted primarily to provide some basis for comparing customs revenue losses resulting from the Protocol with likely revenue growth arising from expected "normal" growth in levels of trade in the region. Estimates of *proportionate* reductions in import duty revenues (i.e. the proportionate reduction in revenues at any given level of trade) are unaffected by these income and trade growth projections.

## 5.3 Estimates of Customs Revenue Losses

Estimates of reductions in import duty collections resulting from implementation of the SADC Trade Protocol according to current plans are shown in Table 5. The estimates in the table represent the percentage difference between import duties that would have been collected without the Trade Protocol and those that will be collected in the presence of the tariff reduction program at several key stages in the implementation process – after four years, after eight years, and following the full implementation of SADC free trade. As mentioned earlier, the estimates are based on existing trade patterns and MFN tariff structures.

The estimates reflect differences in members' import propensities from other SADC countries, and in the tariff rates on such trade. They also reflect the effects of various existing preferential tariff schemes under SACU, COMESA and bilateral arrangements, as a result of which a great deal of intra-SADC trade is already duty-free or is burdened by very low rates.

	Percentag	e Reduction in Im	port Duties		
	After Four Years	After Eight Years	With SADC Free Trade		
SACU	2.6	3.6	3.9		
Malawi	1.5	42.6	50.3		
Mauritius	4.7	21.4	23.5		
Mozambique	6.4	33.6	34.0		
Tanzania	1.5	10.6	12.1		
Zambia	22.6	47.7	65.7		
Zimbabwe	13.8	37.8	41.9		

Note: Revenue reductions are measured as the proportional difference between import duties collected with the Protocol and without it.

Zambia and Malawi are shown to experience the largest percentage reductions in import duty collections (66 and 50 percent respectively) as a result of full implementation of the Trade Protocol. Zimbabwe and Mozambique face the next largest reductions, of 42 and 34 percent

respectively, at the end of the implementation period. SACU, Mauritius and Tanzania face relatively small reductions in duty collections, even after full implementation of SADC duty-free trade.

Equally interesting, however, is the timing of the revenue reductions. Despite its large revenue decrease at the end of the implementation period, Malawi faces a decline of only 1.5 percent in the first four years. This reflects the slow pace of the planned tariff reductions and the fact that early duty decreases are on goods that yield very little revenue at present. The same picture of a slow phase-in of revenue decreases carries over to all the other countries. While the ultimate reductions are sometimes quite large (expressed as a percent of import duty revenues that would be collected without the Protocol) the phase-in is very slow. This provides considerable time for fiscal adjustment.

In this respect, it is actually much more relevant to view the loss of import duties in relation to their role in the entire revenue systems of the Member States. Table 6 shows the import duty revenue losses arising from the Trade Protocol, expressed as a percentage of total government revenues.

	Percentage Reduction in Government Revenues									
	After Four Years	After Eight Years	With SADC Free Trade							
SACU	0.1	0.1	0.1							
Malawi	0.2	6.8	8.0							
Mauritius	1.5	6.8	7.5							
Mozambique	1.0	5.3	5.4							
Tanzania	0.2	1.4	1.6							
Zambia	3.2	6.7	9.2							
Zimbabwe	2.3	6.3	7.0							

#### Table 6: Import Duty Losses Relative to Government Revenues

Note: Revenue reductions are measured as the proportional difference between revenue collections with the Protocol and without it.

Even after full implementation of SADC duty-free trade, SACU and Tanzania experience losses of only 0.4 and 1.6 percent of government revenues respectively. Malawi, Zambia and Zimbabwe have the highest dependence on intra-SADC tariff revenues at the moment, and hence suffer the greatest proportionate revenue losses, of 8, 9.2 and 7 percent respectively. Mauritius, despite its extremely heavy reliance on tariff revenues, faces a revenue loss of only 7.5 percent with full SADC duty-free trade. This is due to a combination of relatively low amounts of trade with SADC and the existence of COMESA preferences on a significant proportion of that trade.

Table 6 also shows the extent of back-loading of revenue losses under the Protocol. For all Member States except Zambia and Zimbabwe, the revenue losses in the first four years are

extremely small. And even for Zambia and Zimbabwe, the import duty losses by the end of the fourth year represent only 3 and 2 percent respectively of total government revenues.<sup>4</sup>

It also should be recalled that the estimates reported here and attributed to SADC assume that 1998 MFN tariff structures remain in place. To the extent that countries are undertaking more general tariff reforms in their MFN regimes, the revenue losses that will be attributable to SADC will be smaller than those reported here.

The revenue losses estimated here are not large. Reductions of 7, 8 or 9 percent from a particular revenue source that are predicted to occur eight years or more in the future can easily be made up through relatively small tax reforms, much less extensive than are already underway in several Member States. Reduced dependence on import duties is a key component of tax reform in any forward-looking developing economy – trade liberalization and tax reform are closely related elements of efficiency-enhancing policy reform.

Even in the absence of major tax reform, several years of normal economic growth would suffice to make up the revenue losses predicted for most members. Table 7 shows indices of estimated import tariff collections after four years and after eight years of SADC implementation and normal economic growth. Under these rather conservative growth projections, SACU, Mauritius and Tanzania are all projected to experience growing import duty collections over the entire period shown. Among the other four members, only two (Zambia and Zimbabwe) are predicted to experience reductions in the level of import duty revenues in the first four years of implementation of the Protocol.

	Base Year	Year 4	Year 8
SACU	100	110	124
Malawi	100	112	75
Mauritius	100	121	132
Mozambique	100	118	98
Tanzania	100	117	119
Zambia	100	89	69
Zimbabwe	100	94	79

 Table 7: Index of Levels of Import Duty Revenues During SADC Implementation

Note: The base year is 2000, except for SACU (2001) and Mauritius (1998).

# 6. Conclusion

From the very narrow perspective of a customs collector, implementation of the SADC Trade Protocol might appear to pose serious problems in some countries. In Zambia and Malawi import duty collections after full implementation of SADC free trade are predicted to fall by 66 and 50 percent respectively relative to what they would be in the absence of the Protocol and of any other reductions in import tariffs. Zimbabwe and Mozambique are predicted to face

<sup>&</sup>lt;sup>4</sup> Recall from Table 4 that import duties account for only 14.0 and 16.7 percent of government revenues in Zambia and Zimbabwe respectively.

reductions of 42 and 34 percent respectively. The decreases in Mauritius, Tanzania and SACU will be much lower, only 24, 12 and 4 percent respectively of customs revenues.

From a broader economic policy perspective, however, the problems are much less serious than they might appear to a customs collector.

First, these revenue losses do not represent an economic cost to the Member States. The direct revenue impacts estimated here are simply a transfer from the countries' treasuries to the industrial users and final consumers of taxed imports.

Second, SADC Member States generally rely to a relatively small and shrinking extent on import duties as a source of government revenue. Relative to overall government revenues, the reductions in import duty collections are not nearly as serious as they appear initially. The import duty losses in Zambia, Malawi and Zimbabwe due to full implementation of SADC free trade represent reductions of only 9, 8 and 7 percent respectively in total government revenues. In Mauritius and Mozambique, the reductions are only 8 and 5 percent of government revenues, and in Tanzania and SACU only 1.6 and 0.1 percent.

Third, although import duties are relatively easy to administer in many developing countries, they are also one of the most economically costly forms of taxation in any country. Trade liberalization and tax reform that reduce reliance on trade taxes are key elements of the process of economic reform aimed at creating a development-friendly economic environment. A number of SADC Member States are already well along the path of such policy reforms. As a result, the import duty losses attributable to SADC will be smaller than those estimated here. If the pressure of import duty losses from SADC tariff reductions creates an additional incentive to pursue such complementary programs of tax and trade policy reform, that will be another significant benefit of the Trade Protocol.

Fourth revenue reductions due to the Trade Protocol will be phased in very slowly, and in many cases will be more than balanced by the positive revenue impacts of normal economic growth, especially in the early stages of implementation. In the first four years, only two countries are predicted to face actual revenue losses, and even after eight years, three countries will still collect more import duties than in the base year.

# References

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# Annex: Basic Trade Data

The basic trade data used in this study are based on 1998 trade flows of the SADC Member States. Aggregate imports are derived from World Bank statistics (World Development Reports) and then disaggregated according to country data from the SADC Secretariat or presented in connection with tariff reduction offers and/or separately provided customs data. Table A-1 is the basic trade matrix for 1998.

For subsequent years, imports were assumed to grow in accordance with overall economic growth. Tables A-2 and A-3 show the resulting trade flow matrices for 2004 and 2008 respectively.

_	Angola	Botswana	Lesotho	Malawi	Mauritius	Moz.	Namibia	S. Africa	Swaziland	Tanzania	Zambia	Zimbabwe	ROW	All Imports
Angola	0	0	0	3	0	502	0	0	26	563	613	4508	2113791	2120006
Botswana	0	0	491	2387	300	0	4774	1780702	0	1800	4000	73354	519192	2387000
Lesotho	0	202	0	148	805	0	0	772556	494	0	0	553	88242	863000
Malawi	0	1274	1315	0	1911	9555	538	249067	5096	6370	8918	59960	292996	637000
Mauritius	0	42	0	430	0	4620	1302	240240	69300	220	1	4942	1988902	2310000
Mozambique	0	11	13	12686	0	0	420	318500	12118	64	245	29293	536652	910000
Namibia	1600	2496	3	0	0	26	0	1249920	2	2	1800	20232	403918	1680000
South Africa	0	566274	110494	87726	11710	58484	248210	0	519600	8287	116968	219087	27295162	29242002
Swaziland	0	14	172	4	431	6377	47	745955	0	1	0	1375	134724	889100
Tanzania	0	499	0	1453	795	4359	1	119146	10171	0	14530	12488	1289561	1453004
Zambia	0	4200	60	2100	700	265	700	264600	4200	4200	0	116620	302355	700000
Zimbabwe	378	41399	13	12425	7997	21212	6132	943079	13323	11142	18384	0	1696516	2772000
Rest of World	3454022	1487429	96959	461439	1789751	125600	1314676	21787194	218290	710950	648541	1737468	0	33832321
Total	3456000	2103840	209520	580800	1814400	231000	1576800	28470960	852621	743600	814000	2279880	36662012	
less ins., freight														
Exports fob	2880000	1948000	194000	528000	1680000	210000	1460000	26362000	789464	676000	740000	2111000	33946307	

#### Table A-1: Trade Matrix 1998 (US\$ thousands)

Note: Imports in rows, exports in columns

	Angola	Botswana	Lesotho	Malawi	Mauritius	Moz.	Namibia	S. Africa	Swaziland	Tanzania	Zambia	Zimbabwe	ROW	All Imports
Angola	0	0	0	5	0	826	0	0	30	1013	898	5718	2257909	2266398
Botswana	0	0	495	2954	403	0	5309	2448141	0	2458	4445	70550	420561	2955317
Lesotho	0	213	0	174	1027	0	0	1009514	410	0	0	505	67938	1079782
Malawi	0	1726	1622	0	3138	14565	732	418837	5446	10642	12122	70537	290300	829668
Mauritius	0	67	0	773	0	8351	2100	479070	87829	437	2	6894	2336808	2922331
Mozambique	0	16	18	21111	0	0	627	588786	14238	117	366	37883	584516	1247677
Namibia	1663	2615	3	0	0	31	0	1624992	2	3	1892	18401	309399	1958999
South Africa	0	1008353	179096	174547	25275	117171	443748	0	729890	18196	208971	338752	35544967	38788966
Swaziland	0	15	164	4	549	7537	50	972683	0	2	0	1254	103505	1085764
Tanzania	0	817	0	2657	1577	8027	2	242033	13131	0	23859	17746	1543452	1853302
Zambia	0	5204	67	2908	1051	369	871	406970	4106	6417	0	125480	273998	827442
Zimbabwe	403	44500	13	14923	10419	25654	6617	1258247	11298	14767	19827	0	1333620	2740286
Rest of World	3616664	1569553	93130	544065	2289147	149117	1392803	28535847	181709	925046	686609	1591971	0	41575662
Total	3618730	2633079	274608	764121	2332586	331647	1852859	37985120	1048089	979099	958989	2285692	45066973	
less ins., freight														
Exports fob	3015608	2438036	254267	694656	2159802	301497	1715611	35171407	970453	890090	871809	2116381	41728679	

#### Table A-2: Trade Matrix 2004 (\$US thousands)

Note: Imports in rows, exports in columns

	Angola	Botswana	Lesotho	Malawi	Mauritius	Moz.	Namibia	S. Africa	Swaziland	Tanzania	Zambia	Zimbabwe	ROW	All Imports
Angola	0	0	0	6	0	993	0	0	35	1146	1023	6633	2624785	2634621
Botswana	0	0	571	3365	464	0	6048	2778552	0	2783	5068	81891	489162	3367905
Lesotho	0	238	0	194	1160	0	0	1121752	465	0	0	574	77364	1201748
Malawi	0	1961	1858	0	3593	17396	828	471908	6260	11957	13721	81280	335198	945958
Mauritius	0	77	0	880	0	10042	2391	543450	101630	494	2	7998	2716599	3383564
Mozambique	0	18	21	24438	0	0	726	679115	16752	135	424	44687	690914	1457229
Namibia	1884	2998	3	0	0	37	0	1847928	2	3	2161	21400	360574	2236991
South Africa	0	1135241	203323	195615	28678	138698	497341	0	831376	20264	234413	386857	40675845	44347651
Swaziland	0	17	191	5	635	9105	57	1108381	0	2	0	1462	120870	1240725
Tanzania	0	907	0	2935	1763	9364	3	266362	14741	0	26377	19974	1740728	2083153
Zambia	0	5963	78	3316	1214	444	993	462512	4759	7273	0	145844	319116	951514
Zimbabwe	459	51350	15	17141	12116	31125	7602	1440103	13190	16856	22796	0	1564233	3176987
Rest of World	4150233	1822748	109060	628951	2679172	182076	1610210	32868735	213497	1062624	794478	1875337	0	47997120
Total	4152576	3021518	315119	876847	2728796	399280	2126199	43588799	1202707	1123539	1100462	2673936	51715388	
less ins., freight														
Exports fob	3460480	2797702	291777	797133	2526663	362982	1968703	40359999	1113617	1021399	1000420	2475867	47884619	

#### Table A-3: Trade Matrix 2008 (\$US thousands)

Note: Imports in rows, exports in columns