DEINDUSTRIALISATION IN SOUTHERN AFRICA?

A GENERAL EQUILIBRIUM ANALYSIS

IDS WORKING PAPER 88[*]

David Evans

SUMMARY

This paper uses a computable general equilibrium (CGE) extension of earlier partial equilibrium analyses of static gains from regional economic integration in the Southern African Development Community (SADC) in Southern Africa. Both models are based on 37 sectors for each of 12 SADC countries. The most important changes to the partial equilibrium version are:

- a simple mark-up cost function determining the cost of production of domestically produced goods,

- a market clearing exchange rate and tax wedge between income,

- expenditure that simulates fiscal policy aimed at maintaining full employment at the initial wage.

The CGE model is used to explore the welfare effects and the changes in employment structure of the agreed SADC Free Trade Area (FTA). To highlight the deindustrialisation effects, these results are compared with Free Trade (FT). The preliminary findings are that the FTA leads to some net trade creation. The manufacturing sector suffers a marked decline under FT, particularly Textiles and Clothing whilst Mining employment is stimulated. It is argued that the formulation of a SADC industrialisation strategy needs both the results of the kind of CGE model discussed here, combined with sector studies and a political economy analysis.

ACKNOWLEDGEMENTS

Instititute of Development Studies
University of Sussex
Falmer BN1 9RE, UK
Tel +44 1273 606261
Fax +44 1273 621202
Email davide@ids.ac.uk

CONTENTS

ACRONYMS AND ABBREVIATIONS USED

CGE	Computable General Equilibrium
COMESA	Common Market for Eastern and Southern Africa
CU	Customs Union
EU	European Union
FT	Free Trade
FTA	Free Trade Area
IMF	International Monetary Fund
MFN	Most Favoured Nation
NICs	Newly Industrialising Countries
NTBS	Non-Tariff Barriers
OR	Open Regionalism
ROW	Rest of the World
SACU	Southern African Customs Union
SADC	Southern African Development Community
SADCC	Southern African Development Co-ordination Conference
SAPS	Structural Adjustment Programs
WTO	World Trade Organisation

SADC COUNTRIES INCLUDED

Angola
Botswana
Lesotho
Malawi
Mauritius
Mozambique
Namibia
South Africa
Swaziland
Tanzania
Zambia
Zimbabwe

SACU COUNTRIES WITHIN SADC

Botswana
Lesotho
Namibia
South Africa
Swaziland

THE ARGUMENT

1 REGIONAL INTEGRATION IN SOUTHERN AFRICA[1]

The Southern African Development Co-ordination Conference (SADCC) and its successor, the Southern African Development Community (SADC), had a strong anti-apartheid political orientation. Economic co-operation was based on a sectoral approach. The Windhoek Treaty of 1992 changed the basis of economic co-operation to allow for 'efficiency, economy and competitiveness'. This shift led to the SADC Protocol on Trade Co-operation (SADC, 1996) for the creation of a Free Trade Area (FTA). Currently, moves are already beginning for the formation of a Customs Union (CU) out of the FTA. The SADC FTA is but one of several regional moves towards greater economic integration, principally from the Common Market for Eastern and Southern Africa (COMESA) and the Cross-Boarder Initiative[2]. There are also a variety of bilateral agreements between regional partners, or between regional partners and international partners such as the European Union (EU).

Alongside the various moves towards regional integration, the World Bank Structural Adjustment Programs (SAPS) have operated on a unilateral basis, one dimension of which has been trade policy reform. Together with the moves to form the SADC FTA, the SAPS programmes have been dominant in regional trade policy for much of the 1990s. It is the contrasting moves towards trade policy liberalisation, via regional integration or via unilateral trade policy reform, which have provided much of the focus of the industrial strategy debate in Southern Africa. *The central question addressed in this chapter is: will a continuation of the SAPS route to the ultimate conclusion of unilateral Free Trade or FT lead to deindustrialisation of Southern Africa compared with regional integration through an FTA?*

2 TRADE CREATION AND TRADE DIVERSION

At the heart of the analysis of regional integration is the concept of trade creation and trade diversion. Terms of trade effects are also potentially important. Thus, regional integration through tariff variation has a total trade effect that is the sum of trade diversion and trade creation, less any loss of income through adverse terms of trade effects arising from the overall expansion of trade. In essence,

- **Trade creation** occurs when an economic union leads to the growth of intra union trade that exploits comparative advantage i.e. when the union members experiencing expanded trade have lower relative costs compared with the rest of the world (ROW) suppliers.
- **Trade diversion** takes place when an economic union leads to an expansion in intra union trade in which the relative costs are higher than for competitor countries in the rest of the world. That is, where the expanded intra-union trade is against comparative advantage.

---

[1] Much of the background material to this paper can be found in Evans (1996, 1997, 1998a and b), Mandaza et al 1998.

[2] The Cross-Boarder Initiative is discussed in (ADB et al 1992).

It follows from the above that an economic union improves members' welfare when trade creation outweighs trade diversion. This statement is qualified when the trade expansion worsens the terms of trade of members of the economic union. In which case, the union could lower welfare, even when trade creation outweighs trade diversion. A further qualification can be added. A customs union (CU) that is predominantly trade diverting can, by appropriate choice of the common external tariff, be transformed into a gainful and predominantly trade creating customs union.

Within the industrialisation debate, the rationale for concern over the effects of regional integration on the size of the industrial sector is both varied and imprecise. In this chapter, no particular stand is taken on these issues. Rather, the estimated impact of different types of regional integration is shown alongside the more standard welfare indicators.

3 THE OPTIONS

In principle, there are three basic options to consider:

- **Free Trade Area (FTA).** This applies when existing tariff structures applicable to non-member countries or the ROW are maintained as SADC moves towards FT within the group. Typically, rules of origin have to be applied to a FTA to prevent importation through the country with the lowest tariff for a particular sector.
- **Customs Union (CU).** The central difference between a CU and a FTA is that the CU has a common external tariff, thus dispensing with the need for rules of origin.
- **Open Regionalism (OR).** This may be just freer Most Favoured Nation (MFN) trade or it may have the ultimate objective of FT. It envisages a bargaining process concentrating initially on co-ordinated MFN trade policy reforms amongst the key member states.

It is important to note that a SADC FTA is critically dependent upon the successful operation of the rules of origin, whereby imports into a member state cannot be trans-shipped through another to realise the benefits of the lowest external tariff for a particular product within the FTA. However, it is likely that the administrative capacity of SADC customs authorities will be very weak. It is therefore unlikely that the rules of origin will be enforceable. If this observation is correct, then a SADC FTA will operate more or less as a CU in which the common external tariff is formed by the lowest tariff on each commodity in each of the member states of the proposed FTA. For simplicity this is called the CUmin. It is perhaps for this reason that just as ratification of the SADC FTA is about to be completed, moves are being made for a move on to a SADC CU. Thus, there are really two FTAs. The 'intended' FTA is interpreted as if the rules of origin could be strictly enforced without cost. The 'real' FTA with unenforceable rules of origin will be very much the same as the CUmin that resulted from the application of the minimum tariff on any item as the common external tariff for that item. A CUmin would in fact have a low external tariff, an obvious advantage for minimising trade diversion. In the SADC context, FT without co-ordination or negotiation with trading partners is the logical outcome of a trade policy reform process under World Bank SAPs or under the WTO. It is therefore appropriate to develop an analytical framework within which each of the options discussed can be modelled. This facilitates the analysis of the effects of each form of regional integration on the size and composition of the industrial sector.

4 METHODOLOGY USED IN THIS STUDY

My initial work on the impact of the SADC Free Trade Area FTA for SADC (Evans (1996, 1997)) relied on a simple partial equilibrium model and weak data set. The data set was greatly improved in Evans (1998a), but the earlier partial equilibrium methodology was retained. An extension to a Computable General Equilibrium or CGE framework was reported in Evans (1998b), and is also used in this study. The additional data requirements for the CGE version of the model, over and above the partial equilibrium version, were mainly on the demand side, and input/output coefficients. Whilst these data were assembled using strong assumptions, the main structural differences between SADC countries were preserved. Thus, it was judged that the extended data set was adequate for a first general equilibrium exploration of SADC integration.

Over-all, the CGE model is based on 12 SADC countries and 37 productive sectors for each country. There were 9 agricultural sectors, a mining sector, one non-traded service sector, and 26 manufacturing and mining sectors. The production and trade data are for the early to mid 1990s, and the tariff data are for the most recent year available. The database is described in Evans (1998a and 1999c forthcoming).

Some of the key assumptions and structural characteristics built into the general equilibrium model include:

- Armington functions on the import side where the share of imports in total supply of a tradable good is inversely related to the price of imports relative to the price of domestic production. Similarly, imports from within the SADC region and from the ROW are treated as imperfectly substitutable and responsive to relative price changes. It is therefore possible to use the Armington functions to construct a composite import commodity made up of imports from within SADC and from the ROW, and for this composite import to be imperfectly substitutable with import competing production. The composite importable commodity enters into domestic demand in a straightforward manner.

- Perfectly elastic supply of goods in each sector. Where there is excess capacity, both micro assumptions are likely to be good approximations. For agriculture, mining and manufacturing sectors operating close to full capacity, the supply response is likely to be exaggerated in a relative sense compared with what it would be with supply constraints being modelled.

- A mark-up model of domestic cost formation. The mark-up is on wages and intermediate input costs. The model assumes fixed coefficients in production for labour, as well as the more usual assumption of fixed proportions for intermediate inputs.

- A macro expenditure adjustment is made to maintain a full employment level at the initial constant wage. Balance of payments equilibrium is maintained via variation of the real exchange rate.

- Government expenditure and investment was held constant, whilst consumer demand and intermediate demand varied through price and income change.

- A micro-based welfare function was constructed, based on an estimate of the consumer surplus change net of estimated intermediate demand less the loss of tariff revenue and the lump sum tax or subsidy required to maintain macro economic balance.

- An attempt was made to estimate SADC price elasticities of demand for exports to the ROW. This exercise was entirely unsatisfactory. Given the underlying weakness of these data, sensitivity tests were carried out in Evans (1998b, 1999b forthcoming). Here, only calculations for 'high' export demand elasticities were used.
- Solution of the model was achieved with a Gauss-Seidel iterative procedure.

5 DEINDUSTRIALISATION: WHAT IS IT ALL ABOUT?

Broadly speaking, the deindustrialisation thesis suggests that the removal of trade policy instruments in a developing economy will have an adverse effect on industrial output and employment, thereby prematurely truncating the process of industrialisation. The idea that the industrialisation process is truncated by trade policy reform arises from the suggestion that an important historical role of the trade policy instruments was to select industries for some kind of infant industry protection. This is not the place to enter into the debate on the efficacy of the selection process. Rather, the aim is to have a first look at the impact of trade policy reform on both economic welfare and the size and composition of the industrial sector.

In the Southern African context, the empirical dimension of the deindustrialisation issue is complicated by two considerations. First, there was some unilateral trade policy reform from the early 1990s through SAPS agreements with the World Bank and through the World Trade Organisation (WTO). This period of unilateral trade policy reform has given way to the multilateral reforms under the SADC agreement to introduce a FTA in 1996, now in its final stages of ratification. Empirically, it would have been desirable to trace first the effect of the various unilateral reforms on SADC countries, and then to assess the potential impact of the FTA, a CU and FT. However, the tariff database was for the most recent year in each of the SADC countries, so the empirical experiments only relate to the potential impacts of the FTA, a CU and FT. As already argued, since the 'intended' FTA to be modelled has unenforceable rules of origin and would, in practice, be much the same as the CUmin. This effectively means that the 'intended' FTA calculations are redundant. Furthermore, the model estimates with the CUmin are similar to FT. In these circumstances, the compromise made was to examine the model results for the 'intended' FTA, and an approximate 'CU' or 'FT' situation, captured by the potential FT results. The estimated aggregate welfare and industrialisation effects for the 'intended' FTA and FT are shown in the next section.

6 THE AGGREGATE EFFECTS OF THE FTA AND FT ON WELFARE AND INDUSTRIAL ACTIVITY

In Table 1 below, the aggregate welfare and industrialisation effects are shown for all SADC. In welfare terms, measured by changes in consumer surplus, the impact of the 'intended' FTA is quite modest in % terms, being 0.11% of the initial Final Demand. However, in absolute terms, the estimated gains are very substantial at $US1500m in 1991-93 prices. The raw numbers of employed persons actually falls slightly, reflecting an implicit rise in the average wage for all SADC since it is employment in wage units which is held constant.

8

Table 1: FTA Welfare and Employment Effects: % Change on Base

Large Export Elasticities, Market Clearing Taxes and Subsidy

	SADC tariffs		ROW tariff		Final	Consumer	Customs	Lump Sum	TOTAL	% Final	ToT	% SADC	% L	% L	% L
	pre	post	pre	post	Demand	Surplus	Revenue	Tax	GAINS	Demand	Pe/Pm	Imports	All	Indust.	Manuf.
Angola	10.1	0.0	10.8	10.8	6974	28.4	-34.1	14.7	8.9	0.13	0.999	20.2	-0.09	-0.38	-1.30
Botswana	0.5	0.0	11.8	11.8	3386	13.1	-8.2	-10.1	-5.2	-0.15	1.001	0.2	0.23	2.30	3.55
Lesotho	1.5	0.0	11.7	11.7	1279	15.4	-13.0	2.7	5.1	0.39	0.999	0.4	-0.15	6.61	10.32
Malawi	21.8	0.0	20.6	20.6	1886	72.3	-44.9	26.0	53.4	2.83	0.999	22.7	-0.04	1.97	1.99
Mauritius	24.5	0.0	22.7	22.7	2525	67.5	-38.3	-21.3	8.0	0.32	1.004	25.0	-0.90	-4.11	-4.11
Mozambique	19.5	0.0	12.0	12.0	1589	66.1	-59.7	6.8	13.1	0.83	0.989	19.0	-0.02	-0.11	-0.08
Namibia	0.1	0.0	12.6	12.6	1959	1.0	-0.7	-0.8	-0.6	-0.03	1.000	0.1	0.07	-0.24	-0.19
RSA	6.5	0.0	5.6	5.6	108822	108.2	-87.7	-6.6	13.9	0.01	1.001	20.8	-0.03	-0.13	0.00
Swaziland	0.1	0.0	6.3	6.3	1035	3.1	-0.5	1.3	4.0	0.38	1.003	0.3	-0.11	-0.57	-0.60
Tanzania	21.9	0.0	19.0	19.0	3315	7.0	-5.8	1.0	2.2	0.07	1.000	33.6	0.01	0.25	0.40
Zambia	14.0	0.0	11.4	11.4	1898	14.6	-48.3	2.0	-31.7	-1.67	0.998	18.8	-0.63	-0.97	-2.07
Zimbabwe	18.8	0.0	15.8	15.8	4240	118.9	-94.0	56.0	80.9	1.91	0.979	32.5	-0.21	3.16	4.41
SADC	**5.7**	**0.0**	**9.3**	**9.3**	**138909**	**516**	**-435**	**72**	**152**	**0.11**	**0.999**	**9.4**	**-0.07**	**0.02**	**0.12**

Notes: $USm average 1991-3 for financial variables; '000 for employment; Government revenue excludes grants; Imports and exports valued cif; Average tariff import weighted; ToT: Terms of Trade, average price exports/average price imports; L: Labour employed

A feature of the overall welfare and employment results for the 'intended' FTA is the marked unevenness of the changes. In the case of the of measured welfare changes, three out of 12 countries actually show a decline in measured welfare, namely Botswana and Namibia from the Southern African Development Community (SACU) and Zambia. For the employment effects, the unevenness of the impact is greater, with 7 out of 12 countries showing negative effects. The overall industrial and manufacturing employment changes have much larger orders of magnitude with 6 out of 12 countries showing gains. It is striking that the overall and industrial employment effects in each country do not correlate. To the extent that wage differentials capture skill differentials, the rise or fall in overall employment provides an indicator of changes in the skill composition of total output. It is apparent that the rise or fall in the level of employment does not correlate with the gains and losses for each country in moving to the 'intended' FTA. That is, there is no particular pattern of skill-based comparative advantage revealed by the results.

Table 2: FT Welfare and Employment Effects: % Change on Base

Large Export Elasticities, Market Clearing Taxes and Subsidies

	SADC tariffs		ROW tariff		Final	Consumer	Customs	Lump Sum	TOTAL	% Final	ToT	% SADC	% L	% L	% L
	pre	post	pre	post	Demand	Surplus	Revenue	Tax	GAINS	Demand	Pe/Pm	Imports	All	Indust.	Manuf.
Angola	10.1	0.0	10.8	0.0	6974	233.5	-196.0	107.7	145.2	2.08	0.998	9.5	-0.65	-1.73	-6.26
Botswana	0.5	0.0	11.8	0.0	3386	77.4	-38.8	5.0	43.6	1.29	1.012	-0.5	0.53	4.98	7.11
Lesotho	1.5	0.0	11.7	0.0	1279	24.9	-23.1	3.5	5.3	0.41	1.002	-0.6	-0.45	3.37	5.55
Malawi	21.8	0.0	20.6	0.0	1886	163.4	-99.8	65.4	129.0	6.84	0.996	16.4	0.09	-0.57	-0.57
Mauritius	24.5	0.0	22.7	0.0	2525	358.5	-363.6	12.6	7.5	0.30	0.981	20.1	-0.11	-10.79	-10.82
Mozambique	19.5	0.0	12.0	0.0	1589	136.6	-117.4	15.6	34.8	2.19	0.976	16.3	0.43	0.51	0.39
Namibia	0.1	0.0	12.6	0.0	1959	34.1	-17.0	5.5	22.7	1.16	1.009	-0.4	-0.78	-7.94	-13.04
RSA	6.5	0.0	5.6	0.0	108822	630.7	-775.2	287.2	142.6	0.13	0.989	14.2	0.05	0.04	-1.84
Swaziland	0.1	0.0	6.3	0.0	1035	8.6	-3.5	-0.5	4.5	0.44	1.007	1.0	0.01	-1.93	-2.10
Tanzania	21.9	0.0	19.0	0.0	3315	263.9	-211.8	23.1	75.2	2.27	0.975	19.2	0.39	5.30	7.36
Zambia	14.0	0.0	11.4	0.0	1898	205.5	-98.1	49.5	156.9	8.26	0.999	17.8	-0.99	-1.39	-3.80
Zimbabwe	18.8	0.0	15.8	0.0	4240	315.4	-273.6	67.7	109.5	2.58	0.956	23.0	0.30	1.58	1.54
SADC	**5.7**	**0.0**	**9.3**	**0.0**	**138909**	**2452**	**-2218**	**642**	**877**	**0.63**	**0.991**	**6.5**	**-0.07**	**-0.04**	**-1.49**

Notes: $USm average 1991-3 for financial variables; '000 for employment; Government revenue excludes grants; Imports and exports valued cif; Average tariff import weighted; ToT: Terms of Trade, average price exports/average price imports; L: Labour employed

In the case of the FT case, the estimated welfare effects dramatically increase to 0.63%. The absolute amount of the gain is $US87500m in 1991-3 prices is very large. These initial effects of FT suggest that the World Bank,

and standard neo-classical view, on the benefits of trade policy reform is correct. That is, there are substantial welfare gains to be reaped in SADC from FT. The country pattern of the overall employment change, and therefore implied skill-mix change, is quite different from that under the 'intended' FTA. However, the fact that the relative increase in SADC trade is substantial in both the 'intended' FTA and under FT suggests that the bulk of the increase in intra-SADC trade under the 'intended' FTA may be trade creating and not trade diverting. This point will be developed in the next section.

There is one important qualification to the FT results. Kaplinsky (1998) suggests that terms of trade effects have been important for the later developing East Asian Newly Industrialising Countries or NICs. The more mature East Asian NICs have been better able to offset any adverse terms of trade effects by constantly increasing the value-added content of their exports. In the case of SADC, the full open economy approach to industrialisation could run into similar terms of trade effects in crowded manufactured export markets if industrialisation for exports concentrates on the lower end of the quality range. Also, exports of primary commodities are higher in SADC than for in East Asia, so that adverse terms of trade effects could arise from the export of primary commodities as well. Ideally, it would be useful to illustrate this possibility by starting from empirical estimates of the elasticity of demand for SADC exports, and including these estimates in the export demand functions. Perhaps not surprisingly, the quest for empirical estimates of SADC export demand elasticities proved fruitless. However, the FTA and FT results for 'large' export elasticities can be compared with those for 'low' elasticities. The comparison of the two sets of results gives some idea of the sensitivity of the results to the export elasticity assumptions. In the case of the 'intended' FTA, the change in the export elasticity assumption has little impact on the overall welfare effects. However, in the FT case, the 'low' export elasticity assumption dramatically cut the gains from FT. This finding suggests that FT without a significant capacity to constantly upgrade products may have significant adverse terms of trade effects.

It is noteworthy that both the 'intended' FTA and FT lead to a substantial increase in intra-SADC trade. This suggests that the excluded dynamic effects that may arise from the 'intended' FTA or under FT may be significant. Possible dynamic effects include scale economies that may arise even when the scale effects are relatively small but can bring relatively big further specialisation gains, including the better use of infrastructure. Also excluded are the effects of the reinvestment of initial gains. As argued in Mandaza *et al.* (1998, Table 4 and discussion), inclusion of these dynamic effects could plausibly increase the size of the estimated benefits of the FTA estimated by around 4-6 times. A similar multiplier might be applied to the FT case since the dynamic benefits coverall of tradables and not just intra-SADC trade.

7 THE EFFECTS OF THE FTA AND FT ON SADC INDUSTRIAL STRUCTURE

Another way of looking at the industrialisation effects of the 'intended' FTA and FT is to look at the SADC-wide sectoral changes of employment. At the 37-sector level, the estimated changes in output, employment and wage unit measures are all the same in % terms because of the fixed proportions assumption. It is only when the % changes are aggregated that the results differ because the sector weight for each variable is different. Employment changes appropriately weighted are shown in Table 3 below for a 7-sector and a 4-sector aggregation of the model results.

Table 3: SADC FTA and FT Employment Effects for 7 Sectors: % Change on Base

Large Export Elasticities, Market Clearing Taxes and Subsidies

	7 Sectors				4 Sectors		
Sectors	L	FTA %	FT %	Sectors	L	FTA %	FT %
Agriculture	7420	-0.14	-0.07	Agriculture	7420	-0.14	-0.07
Mining	1130	-0.19	3.22	Mining	1130	-0.19	3.22
Food, tobacco, beverages	556	-0.44	0.01				
Textiles	254	0.70	-9.58	Manufacturing	2530	0.12	-1.49
Clothing	251	0.81	-4.31				
Other manufactures	1468	0.11	-0.17				
Services	8821	-0.05	-0.09	Services	8821	-0.05	-0.09
Total or Average	**19902**	**-0.071**	**-0.075**	Total or Average	**19902**	**-0.071**	**-0.075**

Notes: '000 for employment; L: Labour employed

The pattern of the results shown in Table 3 is clear. Generally, Mining performs better under FT than under the 'intended' FTA. Of the manufacturing sectors identified, only Food, Tobacco and Beverages follow the pattern of Mining. The rest of the manufacturing sector shows an increase in employment under the 'intended' FTA and a decline in employment under FT. Focus on the Manufacturing sector alone suggests that there is also trade diversion under the FTA, particularly for Textiles and Clothing. However, the overall results suggest that there is, on balance, trade creation. This is reflected in the same sign of the employment change for the two sectors with the highest initial employment, namely Agriculture and Services. Although the changes in employment in these sectors are small in % terms, both Agriculture and Services are large employers, dominating the trade diverting effects in Mining and Manufacturing. Thus, the changes in resource allocation under the FTA would appear, on balance, to be trade creating, not trade diverting. However, a more careful analysis of trade creation and trade diversion using the full 37 sector results is needed before a more definitive answer on trade creation and trade diversion can be reached.

8 IMPLICATIONS OF THE FINDINGS FOR THE DEINDUSTRIALISATION DEBATE

If deindustrialisation focuses only on the manufacturing sector, then it is clear that the move from the 'intended' FTA to FT will induce some deindustrialisation. When Mining is included, there is a powerful offset to this conclusion. Of the 4 manufacturing sectors identified, strongest deindustrialisation is in Textiles and Clothing. Should this be of concern, given that the effects identified are small in % terms? The answer to this question is both 'yes' and 'no'. The 'yes' part of the answer is that the model is static and excludes non-tariff barriers and dynamic influences. It is hard to judge how consideration of the Non Tariff Barriers (NTBs) would affect the answer. Only if the incidence of NTBs correlates with the height of tariffs would the pattern of the results be the same. However, in the case of dynamic effects, it is likely that the full dynamic effects would increase the orders of magnitude employment effects observed, but the patterns of change may well remain similar. Thus, the decline in Textiles and Clothing is of concern principally as an adjustment issue were FT to be implemented, an issue that does not arise under the 'intended' FTA. The 'no' part of the answer is that FT forces SADC to focus on comparative advantage, to weed out the last of the inefficient manufacturing sectors, and to take steps

to ensure that exporters have the capacity to upgrade their products to avoid terms of trade problems. Also, shifting the focus of industrialisation to linkages around Agriculture, Mining and Services has some merit.

9 CONCLUSIONS

In the end, a final view on the best strategy for industrialisation in SADC, around the 'intended' FTA, FT or a CUmin, which has not been analysed here, depends on a good deal more information than assembled in this paper. First, there is the more disaggregated view of the model results that can be obtained using the full 37 sectors. Second, an analysis of industrial effects of the CUmin is important because it avoids the worst of the potential terms of trade effects that may arise under FT. Third, I have emphasised the preliminary nature of the CGE modelling exercise. There will be high pay-off to further development of economic policy modelling of the Southern African region, first, with improved and more recent data, second, with labour force and household disaggregation, and third, with a better treatment of capital. Finally, such work can only complement both case studies and political economy research on micro and institutional aspects of the path toward regional integration.

APPENDIX: 7 SECTOR RESULTS IN DETAIL

Table A.1: FTA 7 Sector Disaggregated Industrialisation Effects: % Change on Base

Large Export Elasticities, Market Clearing Taxes and Subsidies

Angola

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	24.0	0.1	4.4	0.0	8.5	8.53	852	-0.03	1872.0	-0.07	9.3	3.88	29.5	0.00	0.0	43.85	16.9	-0.63	-0.5	3191.9	-0.07	2.9	-15.0	0.0
Mining	0.2	0.0	10.5	0.0	19.7	19.65	1219	-0.03	4198.0	-0.11	0.0	16.95	2.9	-0.21	0.0	0.00	3354.0	0.48	16.1	212.8	0.15	0.6	-0.3	0.0
Food, tobacco, beverages	39.4	2.9	4.2	0.0	12.0	11.99	538	0.22	269.8	-0.16	173.9	7.68	267.3	-4.27	2.0	0.53	65.5	1.64	-0.8	36.0	0.05	39.3	-26.8	0.0
Textiles	34.3	0.0	30.1	0.0	28.7	28.73	89	0.72	89.4	-9.85	32.1	73.79	61.6	-19.70	0.0	0.00	0.0	22.17	-11.5	13.2	-9.83	27.3	-48.0	0.0
Clothing	25.9	0.0	34.5	0.0	28.2	28.25	87	0.79	77.2	-5.49	9.6	94.88	27.6	-13.46	0.0	0.00	0.0	17.07	-5.4	7.7	-5.49	11.1	-39.3	0.0
Other manufactured	2.3	0.6	17.4	0.0	9.2	9.19	1209	0.05	683.0	0.06	28.2	15.85	1194.4	-0.34	1.4	21.75	223.1	0.97	1.9	64.8	0.19	114.7	-4.9	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.00	2981	-0.04	4781.8	-0.07	0.1	-0.07	0.1	-0.08	0.1	-0.01	0.1	-1.33	0.0	723.5	-0.07	0.0	0.0	0.0
Total or Average	13.8	0.1	10.1	0.0	10.8	10.8	6974	0.00	11971.2	-0.19	253.2	20.19	1583.4	-1.99	3.5	9.21	3659.5	0.53	0.0	4249.8	-0.09	196.0	-17.4	-3.7

Botswana

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	81.1	57.4	0.1	0.0	3.74	3.7	158	-0.03	201.4	-0.18	99.0	0.19	23.1	-0.02	17.2	2.84	12.8	-2.57	0.0	5.8	-0.09	1.0	-9.6	0.0
Mining	92.6	0.4	0.0	0.0	0.58	0.6	46	-0.06	142.9	-0.20	6.0	-0.02	0.5	0.13	4.6	6.62	1210.3	-1.86	-22.2	7.9	-1.65	0.0	-4.8	0.0
Food, tobacco, beverages	79.9	39.8	0.1	0.40	29.91	29.9	282	-0.04	137.4	-0.09	182.6	0.08	46.0	-0.40	102.4	9.99	154.7	-0.91	8.9	6.4	2.40	13.9	-1.4	0.0
Textiles	83.6	22.1	1.9	0.0	44.30	44.3	46	0.15	13.6	-2.16	66.1	1.72	13.0	-4.30	12.6	42.77	44.4	5.34	7.1	4.2	10.57	7.0	-21.4	0.0
Clothing	97.8	0.0	6.6	0.0	72.86	72.9	24	0.93	0.0	0.00	30.4	1.57	0.7	-14.58	0.0	0.00	0.0	0.00	-0.4	0.0	0.00	2.5	-83.2	0.0
Other manufactured	86.0	27.1	0.4	0.0	5.69	5.7	817	0.08	129.8	0.17	1095.9	-0.05	179.0	0.02	43.2	16.43	116.5	-0.04	6.6	14.4	2.01	14.5	-29.9	0.0
Services	45.8	50.0	0.0	0.0	0.00	0.0	2013	-0.07	3186.6	-0.12	0.1	3.24	0.1	0.09	0.1	0.01	0.1	-1.17	0.0	188.1	-0.12	0.0	0.0	0.0
Total or Average	84.9	10.5	0.5	0.0	11.8	11.8	3386	-0.03	3811.7	-0.12	1480.1	0.16	262.3	-0.31	180.1	13.05	1538.8	-1.42	0.0	226.8	0.23	38.8	-21.1	-4.1

Lesotho

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	82.6	97.9	0.0	0.0	0.7	0.7	101	-0.09	111.8	-0.34	80.7	0.10	17.0	-0.65	13.1	0.07	0.3	2.68	0.0	577.3	-0.29	0.1	-0.7	0.0
Mining	81.1	0.0	0.0	0.0	0.1	0.1	4	-0.22	1.5	-0.82	11.5	-0.83	2.7	-0.78	0.0	0.00	0.0	0.1	6.1	-0.82	0.0	-0.8	0.0	
Food, tobacco, beverages	88.2	30.7	0.0	0.0	18.3	18.3	303	-0.28	258.6	-0.33	133.5	-0.22	17.8	-0.46	20.6	-0.81	46.5	-5.21	-2.2	2.3	-0.92	3.3	-1.0	0.0
Textiles	96.8	62.5	13.1	0.0	48.7	48.7	47	1.27	9.9	-13.10	88.8	5.51	2.9	-28.23	7.4	48.21	4.5	40.04	1.0	6.9	18.63	13.1	-92.2	0.0
Clothing	99.7	0.0	1.4	0.0	74.9	74.9	46	0.30	0.0	0.00	61.5	0.41	0.2	-3.62	0.0	0.00	0.0	0.00	-0.2	0.0	0.00	1.0	-88.3	0.0
Other manufactured	90.6	51.7	0.0	0.0	11.4	11.4	312	-0.21	41.9	-0.56	473.0	-0.32	49.1	-0.21	5.8	5.73	5.4	-8.88	1.3	3.1	0.18	5.7	-1.5	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	466	-0.20	764.4	-0.33	0.1	0.32	0.1	0.32	0.1	-0.77	0.1	-9.74	0.0	247.4	-0.33	0.0	0.0	0.0
Total or Average	90.4	45.3	1.5	0.0	11.7	11.7	1279	-0.09	1188.1	-0.45	849.2	0.41	89.7	-1.28	47.0	7.96	56.7	-1.98	0.0	843.1	-0.15	23.1	-56.4	-31.4

Table A.1. Cont.: FTA 7 Sector Industrialisation Effects: % Change on Base

Malawi

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	43.9	6.6	18.4	0.0	4.8	4.8	171	-0.15	451.1	-0.89	9.3	23.32	11.9	-0.60	25.9	16.97	365.9	-0.31	1.2	329.6	-0.35	2.3	-76.3	0.0
Mining	62.5	0.0	6.1	0.0	9.0	9.0	0	0.09	0.0	0.00	0.6	1.87	0.4	-1.74	0.0	0.00	0.0	0.00	0.0	0.8	0.00	0.1	-53.7	0.0
Food, tobacco, beverages	90.3	34.2	20.8	0.0	20.8	20.8	318	-0.14	385.2	-1.90	36.8	18.92	4.0	-4.34	4.2	22.93	8.1	-5.35	-6.3	44.2	-1.50	8.5	-90.7	0.0
Textiles	59.9	99.8	39.3	0.0	35.2	35.2	32	0.61	53.1	-17.96	16.2	84.98	10.8	-27.50	14.4	139.06	0.0	21.47	8.8	8.3	15.52	10.2	-72.8	0.0
Clothing	81.3	98.1	40.0	0.0	39.9	39.9	15	1.12	18.6	-8.01	2.2	88.10	0.5	-24.25	1.9	208.80	0.0	36.55	2.0	3.8	12.14	1.1	-85.9	0.0
Other manufactured	33.5	48.3	19.9	0.0	20.7	20.7	274	1.25	222.3	-2.15	127.6	12.69	253.1	-3.08	13.2	13.60	14.1	27.77	-5.6	22.5	2.13	77.7	-34.9	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	1076	-0.19	1911.5	-0.35	0.1	-1.13	0.1	-0.98	0.1	0.81	0.1	7.11	0.0	201.0	-0.35	0.0	0.0	0.0
Total or Average	**40.7**	**13.3**	**21.8**	**0.0**	**20.6**	**20.6**	**1886**	**-0.02**	**3041.9**	**-1.11**	**192.8**	**22.72**	**280.8**	**-3.97**	**59.7**	**52.14**	**388.3**	**0.62**	**0.0**	**610.1**	**-0.04**	**99.8**	**-45.0**	**-9.9**

Mauritius

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	12.6	0.8	10.9	0.0	5.8	5.8	23	0.26	27.2	-0.19	8.1	15.21	56.2	-0.30	3.0	42.82	381.2	-2.17	-8.1	43.8	-1.46	4.2	-22.4	0.0
Mining	99.9	10.8	15.0	0.0	14.4	14.4	0	0.35	3.3	0.88	4.4	8.86	0.0	1.38	0.0	-1.33	0.1	-7.62	-0.4	0.2	0.74	0.7	-99.9	0.0
Food, tobacco, beverages	22.8	2.3	16.8	0.0	16.4	16.4	249	1.87	134.2	-3.23	46.7	18.17	158.1	1.34	1.1	19.39	45.6	-9.01	-14.5	13.4	-4.13	33.8	-21.9	0.0
Textiles	3.8	16.1	18.1	0.0	4.2	4.2	146	0.69	69.8	0.03	14.6	51.47	371.9	0.63	75.5	137.66	392.4	-1.49	88.4	4.8	18.25	18.5	-13.9	0.0
Clothing	2.1	0.1	71.4	0.0	74.2	74.2	151	1.13	208.7	0.93	0.2	251.48	11.8	9.26	0.2	156.58	302.1	-12.49	-39.7	69.8	-6.95	9.0	7.1	0.0
Other manufactured	10.7	3.8	30.6	0.0	32.6	32.6	482	2.79	223.3	0.24	98.5	24.42	819.2	1.26	6.5	7.57	165.4	5.67	-25.6	18.9	0.69	297.6	-9.2	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	1476	0.91	2928.7	1.81	0.1	4.80	0.1	4.93	0.1	2.48	0.1	-14.07	0.0	136.4	1.81	0.0	0.0	0.0
Total or Average	**10.9**	**6.3**	**24.5**	**0.0**	**22.7**	**22.7**	**2525**	**0.98**	**3595.2**	**1.42**	**172.7**	**25.02**	**1417.4**	**1.11**	**86.3**	**123.02**	**1286.8**	**-3.62**	**0.0**	**287.4**	**-0.90**	**363.6**	**-10.5**	**-4.5**

Mozambique

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	27.9	4.2	11.7	0.0	3.8	3.8	347	-0.03	642.0	-0.55	30.8	13.91	79.5	-1.58	6.7	29.88	153.5	6.35	8.7	8.1	0.35	6.7	-55.0	0.0
Mining	78.3	0.7	3.1	0.0	2.7	2.7	2	0.02	3.0	-2.06	2.3	3.81	0.6	-3.47	0.0	0.19	0.5	6.31	0.0	2.5	-0.81	0.1	-81.6	0.0
Food, tobacco, beverages	70.9	5.4	26.4	0.0	14.7	14.7	335	1.24	274.0	-6.51	118.9	21.97	48.8	-5.67	1.7	10.80	30.3	8.03	-20.8	25.1	-3.49	38.6	-82.5	0.0
Textiles	21.5	67.7	31.7	0.0	29.0	29.0	66	0.18	97.2	-4.07	9.0	86.98	33.0	-10.29	4.1	149.70	2.0	14.00	1.9	8.2	2.43	12.4	-30.9	0.0
Clothing	77.2	74.8	34.9	0.0	34.9	34.9	51	0.71	59.8	-8.39	6.5	92.18	1.9	-15.74	1.5	229.11	0.5	15.75	-2.2	3.1	-2.50	2.9	-80.8	0.0
Other manufactured	27.6	4.4	13.5	0.0	11.8	11.8	379	0.87	189.2	-1.04	127.6	7.70	334.0	-1.26	5.2	8.02	114.0	17.51	12.5	21.7	3.26	56.7	-31.6	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	409	0.05	664.7	0.07	0.1	-0.52	0.1	-0.46	0.1	1.23	0.1	11.99	0.0	31.4	0.08	0.0	0.0	0.0
Total or Average	**37.2**	**6.1**	**19.5**	**0.0**	**12.0**	**12.0**	**1589**	**0.30**	**1930.0**	**-1.65**	**295.2**	**18.96**	**497.9**	**-2.40**	**19.4**	**62.87**	**300.9**	**10.82**	**0.0**	**100.1**	**-0.02**	**117.4**	**-50.9**	**-10.8**

Table A.1. Cont.: FTA 7 Sector Industrialisation Effects: % Change on Base

Namibia

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	92.7	87.7	0.7	0.0	5.8	5.8	80	0.02	189.8	0.03	58.6	0.20	4.6	-0.81	173.1	0.31	24.3	-0.26	0.4	195.1	0.14	0.7	-59.6	0.0
Mining	45.2	1.3	0.0	0.0	0.0	0.0	7	0.00	98.7	0.06	8.2	0.00	9.9	0.11	7.0	0.12	521.6	-0.39	-2.0	15.1	-0.31	0.0	0.1	0.0
Food, tobacco, beverages	82.0	32.9	0.0	0.0	16.7	16.7	234	0.07	105.2	-0.09	197.3	0.05	43.3	0.04	152.5	0.38	310.8	0.36	1.6	4.4	0.27	7.3	-0.7	0.0
Textiles	91.9	94.4	0.2	0.0	36.7	36.7	23	0.05	16.5	-0.44	51.2	0.44	4.5	-0.92	24.1	-0.67	1.4	1.27	-0.3	13.2	-0.51	1.7	-6.4	0.0
Clothing	93.3	0.0	0.2	0.0	75.3	75.3	32	0.11	0.0	0.00	43.9	0.26	3.1	-1.18	0.0	0.00	0.0	0.00	-0.1	0.0	0.00	2.5	-5.1	0.0
Other manufactured	91.8	33.8	0.0	0.0	7.4	7.4	399	0.04	76.5	0.06	719.5	0.03	63.9	0.08	34.1	3.02	66.7	-0.33	0.5	6.0	0.17	4.8	-1.2	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	1185	0.03	2368.1	0.05	0.1	0.13	0.1	0.08	0.1	0.07	0.1	-0.38	0.0	171.4	0.05	0.0	0.0	0.0
Total or Average	**89.3**	**29.7**	**0.1**	**0.0**	**12.6**	**12.6**	**1959**	**0.03**	**2854.7**	**0.05**	**1078.7**	**0.08**	**129.6**	**-0.03**	**390.9**	**0.51**	**924.9**	**-0.13**	**0.0**	**405.2**	**0.07**	**17.0**	**-4.4**	**-1.5**

South Africa

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	44.0	29.4	2.9	0.0	1.6	1.6	3175	0.01	7825.1	-0.11	302.2	5.43	384.3	-1.36	352.0	2.37	847.1	-0.57	-7.7	876.2	-0.07	14.9	-60.0	0.0
Mining	1.5	1.3	2.5	0.0	0.3	0.3	1526	0.01	7917.6	-0.01	23.0	5.88	1532.9	0.19	85.9	2.34	6639.1	-0.98	-67.1	668.5	-0.43	5.5	-10.0	0.0
Food, tobacco, beverages	52.2	96.5	0.9	0.0	12.1	12.1	11523	0.04	15706.2	0.01	376.7	1.03	344.6	0.05	936.2	5.10	34.1	0.89	44.0	241.8	0.25	44.9	-7.2	0.0
Textiles	19.6	54.9	23.9	0.0	31.7	31.7	788	0.13	1239.3	-6.45	153.3	89.19	629.1	-7.92	331.0	19.20	272.0	2.36	-17.1	90.5	-0.54	236.3	-22.2	0.0
Clothing	40.6	71.7	75.7	0.0	66.8	66.8	883	0.14	1191.2	-3.37	18.3	239.96	26.7	-4.67	160.9	9.70	63.6	2.09	-25.7	121.4	-1.64	31.7	-46.3	0.0
Other manufactured	2.4	34.3	3.7	0.0	4.5	4.5	24843	0.05	47399.1	-0.03	231.6	11.24	9561.2	0.16	3574.6	4.53	6841.5	-0.66	73.8	1040.2	0.18	442.0	-1.8	0.0
Services	62.9	50.0	0.0	0.0	0.0	0.0	66085	0.02	119109.4	0.03	0.1	9.77	0.1	0.24	0.1	0.01	0.1	-0.95	0.0	4830.8	0.03	0.0	0.0	0.0
Total or Average	**8.1**	**27.0**	**6.5**	**0.0**	**5.6**	**5.6**	**108822**	**0.02**	**200387.8**	**-0.05**	**1105.3**	**20.83**	**12478.9**	**-0.31**	**5440.7**	**5.50**	**14697.5**	**-0.73**	**0.0**	**7869.4**	**-0.03**	**775.2**	**-11.3**	**-0.4**

Swaziland

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	90.0	87.8	0.2	0.0	0.7	0.7	68	0.00	187.8	-0.09	68.2	0.28	7.6	-0.31	26.8	0.16	3.7	-4.27	-0.3	23.3	-0.13	0.2	-67.8	0.0
Mining	89.4	76.4	0.0	0.0	0.5	0.5	1	0.00	15.2	0.00	5.9	0.11	0.7	0.17	4.9	0.50	1.5	-2.59	0.0	0.9	-0.07	0.0	-0.3	0.0
Food, tobacco, beverages	99.2	47.1	0.1	0.0	17.1	17.1	287	0.03	306.8	-0.09	128.3	0.32	1.1	0.50	200.9	5.27	226.0	-2.87	3.7	8.1	-0.65	0.3	-33.4	0.0
Textiles	99.3	77.3	0.4	0.0	46.0	46.0	24	0.06	17.4	-2.58	59.0	1.03	0.4	-0.97	31.3	2.41	9.2	-4.27	-0.2	2.3	-0.15	0.4	-59.3	0.0
Clothing	99.2	0.0	0.0	0.0	72.4	72.4	5	0.13	0.0	0.00	7.1	0.20	0.1	-0.82	0.0	0.00	0.0	0.00	0.0	0.0	0.00	0.0	-7.5	0.0
Other manufactured	92.5	56.4	0.0	0.0	6.8	6.8	282	0.09	196.0	-0.31	459.8	0.20	37.5	0.20	61.1	-0.01	47.1	-4.25	-3.1	6.3	-0.69	2.6	-0.7	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	369	0.03	741.6	0.06	0.1	0.21	0.1	0.17	0.1	-0.05	0.1	-1.73	0.0	51.6	0.06	0.0	0.0	0.0
Total or Average	**92.0**	**53.1**	**0.1**	**0.0**	**6.3**	**6.3**	**1035**	**0.03**	**1464.8**	**-0.07**	**728.4**	**0.31**	**47.5**	**0.11**	**325.1**	**3.51**	**287.7**	**-3.16**	**0.0**	**92.5**	**-0.11**	**3.5**	**-13.8**	**-7.7**

Table A.1. Cont.: FTA 7 Sector Industrialisation Effects: % Change on Base

Tanzania Simulation of FTA

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	9.3	0.9	9.6	0.0	25.3	25.3	1257	0.00	2058.8	-0.01	1.3	15.40	13.1	-0.13	2.6	3.24	283.6	-0.25	-0.8	1818.2	-0.03	3.5	-3.9	0.0
Mining	3.0	0.3	18.4	0.0	16.6	16.6	18	0.03	26.3	-0.02	0.3	9.43	10.0	-0.01	0.0	1.59	1.1	-0.12	0.0	105.9	-0.03	1.7	-3.3	0.0
Food, tobacco, beverages	9.3	3.5	29.6	0.0	25.1	25.1	117	0.49	26.3	-0.14	10.0	46.78	97.8	-4.07	3.0	6.54	82.6	-0.14	-0.6	69.9	0.03	27.6	-13.0	0.0
Textiles	1.5	1.0	37.4	0.0	15.5	15.5	71	0.06	41.3	-0.59	1.1	93.40	71.2	-0.92	0.3	129.55	32.9	0.88	0.4	58.4	0.65	11.4	-4.4	0.0
Clothing	0.2	0.0	26.5	0.0	14.4	14.4	24	0.03	4.1	0.53	0.1	81.10	24.6	-0.23	0.0	0.00	1.0	1.71	0.0	4.7	0.76	3.6	-0.6	0.0
Other manufactured	1.0	5.6	13.9	0.0	18.7	18.7	755	0.07	180.9	-0.01	9.2	14.84	870.9	-0.07	4.7	25.79	79.8	0.92	1.1	66.2	0.56	164.1	-0.9	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	1073	0.01	1474.5	0.01	0.1	0.03	0.1	0.02	0.1	0.10	0.1	-0.09	0.0	1472.5	0.01	0.0	0.0	0.0
Total or Average	**2.0**	**2.2**	**21.9**	**0.0**	**19.0**	**19.0**	**3315**	**0.03**	**3812.2**	**-0.01**	**22.1**	**33.62**	**1087.8**	**-0.49**	**10.8**	**17.91**	**481.2**	**0.04**	**0.0**	**3595.9**	**0.01**	**211.8**	**-2.7**	**-0.5**

Zambia Simulation of FTA

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	29.4	22.9	6.2	0.0	5.2	5.2	93	-0.01	459.2	-0.24	13.6	8.10	32.6	-0.90	9.8	24.25	32.9	2.51	2.4	41.3	0.39	2.5	-33.7	0.0
Mining	64.7	0.1	11.3	0.0	11.2	11.2	4	0.00	203.9	-0.67	19.3	9.09	10.5	-1.02	0.6	1.41	1122.8	3.20	34.2	60.1	2.61	3.3	-65.2	0.0
Food, tobacco, beverages	89.6	69.2	18.8	0.0	8.2	8.2	350	0.27	438.6	-2.29	43.6	26.67	5.1	-1.92	2.5	19.53	1.1	2.45	-11.0	19.1	-6.89	8.6	-95.4	0.0
Textiles	57.1	7.8	18.1	0.0	20.1	20.1	30	0.19	70.5	-10.58	19.3	51.12	14.5	-11.65	1.1	128.46	12.5	2.41	-6.5	19.1	-6.89	6.4	-59.8	0.0
Clothing	90.3	58.3	24.8	0.0	24.9	24.9	57	0.11	82.0	-3.15	3.4	79.56	0.4	-4.89	1.3	235.14	0.9	3.73	0.3	20.6	0.49	0.9	-90.7	0.0
Other manufactured	37.0	22.8	13.3	0.0	11.6	11.6	479	0.79	552.6	-2.51	231.3	11.77	393.1	-3.22	11.7	15.85	39.7	3.21	-19.3	94.0	-1.94	76.3	-42.4	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	887	-0.04	1855.5	-0.08	0.1	-0.17	0.1	-0.18	0.1	9.33	0.1	4.72	0.0	82.9	-0.07	0.0	0.0	0.0
Total or Average	**41.8**	**2.2**	**14.0**	**0.0**	**11.4**	**11.4**	**1898**	**0.10**	**3662.3**	**-1.03**	**330.6**	**18.82**	**456.2**	**-3.26**	**27.0**	**33.56**	**1210.0**	**3.18**	**0.0**	**380.1**	**-0.63**	**98.1**	**-49.2**	**-10.5**

Zimbabwe

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	18.6	13.3	21.1	0.0	22.2	22.2	341	-0.19	720.6	-1.28	21.8	25.13	95.6	0.02	72.8	16.71	474.2	-3.38	-9.4	309.6	-1.28	25.8	-18.1	0.0
Mining	76.3	18.2	5.0	0.0	6.0	6.0	110	-0.31	332.9	-1.30	35.2	0.91	10.9	-0.65	13.7	10.95	61.6	-7.27	-3.2	49.6	-1.79	2.4	-73.1	0.0
Food, tobacco, beverages	35.6	52.9	22.2	0.0	19.2	19.2	713	-0.40	869.0	-1.35	20.4	39.80	36.8	0.04	41.5	30.34	37.0	-7.33	1.6	42.1	-0.16	11.6	-39.1	0.0
Textiles	51.8	63.7	31.4	0.0	30.1	30.1	138	0.06	210.2	-18.42	38.4	114.19	35.8	-13.56	47.5	97.22	27.1	-7.28	4.3	25.3	1.93	22.8	-59.2	0.0
Clothing	41.2	58.7	92.6	0.0	92.0	92.0	41	-0.61	52.6	-3.68	0.6	231.78	0.9	4.86	18.2	221.85	12.8	-15.36	36.6	20.1	43.70	1.4	-38.5	0.0
Other manufactured	25.4	47.3	18.4	0.0	14.6	14.6	1373	0.31	1169.5	-4.58	342.3	15.26	1004.0	-3.25	216.5	17.72	241.1	-4.38	-29.9	110.3	-0.44	209.6	-32.9	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	1525	-0.59	2446.4	-0.94	0.1	-2.95	0.1	0.40	0.1	3.60	0.1	-10.09	0.0	684.2	-0.95	0.0	0.0	0.0
Total or Average	**27.8**	**32.5**	**18.8**	**0.0**	**15.8**	**15.8**	**4240**	**-0.21**	**5801.3**	**-2.46**	**458.8**	**32.47**	**1184.2**	**-3.16**	**410.3**	**36.86**	**853.9**	**-4.42**	**0.0**	**1241.2**	**-0.21**	**273.6**	**-34.4**	**-6.5**

Notes: $USm average 1990-2 for financial variables; Government revenue excludes grants; '000' for employment Imports and exports valued fob; Average tariff uses import weights; D: Domestic demand;
SM: Import competing production; MS: imports from SADC; MR: Imports from the Rest of the World; ES: Exports to SADC; ER: Exports to the Rest of the World;
dBOP: change in Balance of Payments;
L: Labour employed; CR: Customs Revenue; GR: Government Revenue; tMS1,M: Tariffs, SADC, initial, import weighted; tMS2,M: Tariffs, SADC, initial, import weighted, final; tMR1,M: Tariffs, SADC, initial, import weighted, R: Rest of the World.

Table A.2: FT 7 Sector Industrialisation Effects: % Change on Base

Large Export Elasticities, Market Clearing Taxes and Subsidies

Angola

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	24.0	0.1	4.4	0.0	8.5	0.00	852	-0.20	1872.0	-0.50	9.3	3.96	29.5	0.00	0.0	37.58	16.9	-8.12	-1.7	3191.9	-0.56	2.9	-100.0	0.0
Mining	0.2	0.0	10.5	0.0	19.7	0.00	1219	-0.20	4198.0	-0.70	0.0	17.84	2.9	27.82	0.0	0.00	3354.0	2.82	93.3	212.8	0.86	0.6	-100.0	0.0
Food, tobacco, beverages	39.4	2.9	4.2	0.0	12.0	0.00	538	1.14	269.8	-1.63	173.9	0.26	267.3	4.36	2.0	-4.59	65.5	21.80	1.7	36.0	0.58	39.3	-100.0	0.0
Textiles	34.3	0.0	30.1	0.0	28.7	0.00	89	1.95	89.4	-28.71	32.1	43.85	61.6	30.82	0.0	0.00	0.0	63.66	-33.0	13.2	-28.66	27.3	-100.0	0.0
Clothing	25.9	0.0	34.5	0.0	28.2	0.00	87	2.36	77.2	-21.50	9.6	72.12	27.6	47.84	0.0	0.00	0.0	46.43	-20.2	7.7	-21.49	11.1	-100.0	0.0
Other manufactured	2.3	0.6	17.4	0.0	9.2	0.00	1209	2.06	683.0	-2.54	28.2	7.53	1194.4	4.50	1.4	12.02	223.1	7.22	-39.7	64.8	-3.68	114.7	-100.0	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.00	2981	-0.34	4781.8	-0.54	0.1	-0.52	0.1	-0.55	0.1	-1.26	0.1	-14.57	0.0	723.5	-0.54	0.0	0.0	0.0
Total or Average	13.8	0.1	10.1	0.0	10.8	0.0	6974	0.07	11971.2	-1.07	253.2	9.45	1583.4	6.24	3.5	2.36	3659.5	3.37	0.0	4249.8	-0.65	196.0	-100.0	-21.3

Botswana

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	81.1	57.4	0.1	0.0	3.74	0.0	158	-0.03	201.4	-1.16	99.0	1.20	23.1	4.16	17.2	-0.42	12.8	-6.11	-3.0	5.8	-1.39	1.0	-100.0	0.0
Mining	92.6	0.4	0.0	0.0	0.58	0.0	46	-0.11	142.9	-0.45	6.0	1.56	0.5	0.80	4.6	7.71	1210.3	-1.91	-22.9	7.9	-1.72	0.0	-100.0	0.0
Food, tobacco, beverages	79.9	39.8	0.1	0.0	29.91	0.0	282	1.06	137.4	-0.87	182.6	-2.54	46.0	19.82	102.4	8.50	154.7	4.88	11.7	6.4	3.89	13.9	-100.0	0.0
Textiles	83.6	22.1	1.9	0.0	44.30	0.0	46	1.10	13.6	-12.08	66.1	-10.54	13.0	82.21	12.6	21.92	44.4	37.14	14.7	4.2	24.96	7.0	-100.0	0.0
Clothing	97.8	0.0	6.6	0.0	72.86	0.0	24	1.71	0.0	0.00	30.4	-0.80	0.7	139.35	0.0	0.00	0.0	0.00	-0.7	0.0	0.00	2.5	-100.0	0.0
Other manufactured	86.0	27.1	0.4	0.0	5.69	0.0	817	0.81	129.8	-0.66	1095.9	0.04	179.0	4.69	43.2	10.64	116.5	5.56	0.1	14.4	3.33	14.5	-100.0	0.0
Services	45.8	50.0	0.0	0.0	0.00	0.0	2013	-0.12	3186.6	-0.19	0.1	3.42	0.1	-0.14	0.1	0.06	0.1	-0.28	0.0	188.1	-0.19	0.0	0.0	0.0
Total or Average	84.9	10.5	0.5	0.0	11.8	0.0	3386	0.13	3811.7	-0.33	1480.1	-0.55	262.3	11.47	180.1	9.07	1538.8	0.43	0.0	226.8	0.53	38.8	-100.0	-19.2

Lesotho

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	82.6	97.9	0.0	0.0	0.7	0.0	101	-0.09	111.8	-0.56	80.7	0.64	17.0	-1.70	13.1	-1.53	0.3	13.57	-0.4	577.3	-0.63	0.1	-100.0	0.0
Mining	81.1	0.0	0.0	0.0	0.1	0.0	4	-0.26	1.5	-0.99	11.5	-0.88	2.7	-1.46	0.0	0.00	0.0	0.00	0.1	6.1	-0.99	0.0	-100.0	0.0
Food, tobacco, beverages	88.2	30.7	0.0	0.0	18.3	0.0	303	-0.29	258.6	-0.39	133.5	-1.81	17.8	11.97	20.6	-1.42	46.5	4.71	2.2	2.3	0.23	3.3	-100.0	0.0
Textiles	96.8	62.5	13.1	0.0	48.7	0.0	47	1.60	9.9	-16.32	88.8	3.42	2.9	70.96	7.4	13.99	4.5	59.59	-1.7	6.9	9.52	13.1	-100.0	0.0
Clothing	99.7	0.0	1.4	0.0	74.9	0.0	46	0.77	0.0	0.00	61.5	0.63	0.2	154.62	0.0	0.00	0.0	0.00	-0.6	0.0	0.00	1.0	-100.0	0.0
Other manufactured	90.6	51.7	0.0	0.0	11.4	0.0	312	0.17	41.9	-0.62	473.0	-1.42	49.1	12.92	5.8	5.59	5.4	-1.00	0.4	3.1	0.66	5.7	-100.0	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	466	-0.20	764.4	-0.32	0.1	-0.21	0.1	-0.23	0.1	-0.03	0.1	-1.40	0.0	247.4	-0.32	0.0	0.0	0.0
Total or Average	90.4	45.3	1.5	0.0	11.7	0.0	1279	0.00	1188.1	-0.50	849.2	-0.59	89.7	11.67	47.0	1.85	56.7	8.50	0.0	843.1	-0.45	23.1	-100.0	-55.6

Table A.2. Cont.: FT 7 Sector Industrialisation Effects: % Change on Base

Malawi

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	43.9	6.6	18.4	0.0	4.8	0.0	171	-0.46	451.1	-1.93	9.3	23.30	11.9	3.45	25.9	14.08	365.9	6.40	24.5	329.6	1.18	2.3	-100.0	0.0
Mining	62.5	0.0	6.1	0.0	9.0	0.0	0	-0.09	0.0	0.00	0.6	-0.68	0.4	-0.19	0.0	0.00	0.0	0.00	0.0	0.8	0.00	0.1	-100.0	0.0
Food, tobacco, beverages	90.3	34.2	20.8	0.0	20.8	0.0	318	-1.24	385.2	-3.42	36.8	18.62	4.0	28.27	4.2	19.64	8.1	-5.89	-7.6	44.2	-3.05	8.5	-100.0	0.0
Textiles	59.9	99.8	39.3	0.0	35.2	0.0	32	0.54	53.1	-29.44	16.2	68.94	10.8	51.42	14.4	107.86	0.0	41.95	-1.9	8.3	-0.16	10.2	-100.0	0.0
Clothing	81.3	98.1	40.0	0.0	39.9	0.0	15	0.81	18.6	-9.94	2.2	78.52	0.5	70.34	1.9	201.75	0.0	64.23	1.5	3.8	9.78	1.1	-100.0	0.0
Other manufactured	33.5	48.3	19.9	0.0	20.7	0.0	274	3.36	222.3	-5.26	127.6	6.27	253.1	6.75	13.2	15.87	14.1	68.82	-16.0	22.5	2.37	77.7	-100.0	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	1076	-0.80	1911.5	-1.43	0.1	-4.03	0.1	-3.66	0.1	2.49	0.1	25.07	0.0	201.0	-1.43	0.0	0.0	0.0
Total or Average	40.7	13.3	21.8	0.0	20.6	0.0	1886	-0.33	3041.9	-2.58	192.8	16.40	280.8	8.75	59.7	43.42	388.3	8.43	0.0	610.1	0.09	99.8	-100.0	-22.0

Mauritius

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	12.6	0.8	10.9	0.0	5.8	0.0	23	0.69	27.2	-0.69	8.1	12.93	56.2	3.24	3.0	41.32	381.2	18.53	69.0	43.8	12.67	4.2	-100.0	0.0
Mining	99.9	10.8	15.0	0.0	14.4	0.0	0	0.58	3.3	5.09	4.4	11.67	0.0	11.40	0.0	-0.72	0.1	5.73	-0.5	0.2	5.08	0.7	-100.0	0.0
Food, tobacco, beverages	22.8	2.3	16.8	0.0	16.4	0.0	249	5.08	134.2	-15.08	46.7	17.38	158.1	18.17	1.1	11.76	45.6	-25.81	-49.0	13.4	-11.77	33.8	-100.0	0.0
Textiles	3.8	16.1	18.1	0.0	4.2	0.0	146	1.84	69.8	3.82	14.6	46.13	371.9	4.54	75.5	104.94	392.4	30.61	168.0	4.8	37.57	18.5	-100.0	0.0
Clothing	2.1	0.1	71.4	0.0	74.2	0.0	151	3.17	208.7	-8.58	0.2	237.49	11.8	233.55	0.2	132.48	302.1	-24.21	-103.3	69.8	-17.78	9.0	-100.0	0.0
Other manufactured	10.7	3.8	30.6	0.0	32.6	0.0	482	13.11	223.3	-7.96	98.5	17.54	819.2	17.69	6.5	5.68	165.4	53.74	-82.5	18.9	3.23	297.6	-100.0	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	1476	2.10	2928.7	4.17	0.1	10.29	0.1	11.44	0.1	0.58	0.1	-32.73	-0.1	136.4	4.17	0.0	0.0	0.0
Total or Average	10.9	6.3	24.5	0.0	22.7	0.0	2525	2.96	3595.2	1.91	172.7	20.07	1417.4	15.52	86.3	94.06	1286.8	15.13	0.0	287.4	-0.11	363.6	-100.0	-42.6

Mozambique

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	27.9	4.2	11.7	0.0	3.8	0.0	347	-0.05	642.0	-0.82	30.8	13.21	79.5	0.44	6.7	26.56	153.5	9.97	12.7	8.1	0.27	6.7	-100.0	0.0
Mining	78.3	0.7	3.1	0.0	2.7	0.0	2	0.10	3.0	-0.92	2.3	2.63	0.6	-1.90	0.0	-0.64	0.5	27.19	0.1	2.5	3.29	0.1	-100.0	0.0
Food, tobacco, beverages	70.9	5.4	26.4	0.0	14.7	0.0	335	1.57	274.0	-7.58	118.9	20.39	48.8	7.12	1.7	7.45	30.3	17.88	-22.3	25.1	-3.18	38.6	-100.0	0.0
Textiles	21.5	67.7	31.7	0.0	29.0	0.0	66	1.29	97.2	-16.72	9.0	60.21	33.0	44.29	4.1	121.31	2.0	60.01	-14.3	8.2	-9.74	12.4	-100.0	0.0
Clothing	77.2	74.8	34.9	0.0	34.9	0.0	51	1.89	59.8	-7.58	6.5	76.68	1.9	68.02	1.5	229.05	0.5	64.94	-2.8	3.1	-1.33	2.9	-100.0	0.0
Other manufactured	27.6	4.4	13.5	0.0	11.8	0.0	379	3.39	189.2	-3.02	127.6	6.10	334.0	5.00	5.2	6.71	114.0	49.02	26.9	21.7	8.60	56.7	-100.0	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	409	0.20	664.7	0.32	0.1	-0.93	0.1	-0.81	0.1	2.36	0.1	25.38	0.0	31.4	0.32	0.0	0.0	0.0
Total or Average	37.2	6.1	19.5	0.0	12.0	0.0	1589	0.81	1930.0	-2.61	295.2	16.27	497.9	7.31	19.4	55.02	300.9	26.01	0.0	100.1	0.43	117.4	-100.0	-21.3

Table A.2. Cont.: FT 7 Sector Industrialisation Effects: % Change on Base

Namibia

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	92.7	87.7	0.7	0.0	5.8	0.0	80	0.07	189.8	0.07	58.6	0.46	4.6	4.02	173.1	-1.13	24.3	5.83	-1.0	195.1	-0.10	0.7	-100.0	0.0
Mining	45.2	1.3	0.0	0.0	0.0	0.0	7	0.01	98.7	0.01	8.2	1.04	9.9	0.04	7.0	-1.86	521.6	0.03	0.0	15.1	0.01	0.0	-100.0	0.0
Food, tobacco, beverages	82.0	32.9	0.0	0.0	16.7	0.0	234	0.72	105.2	-2.79	197.3	-1.87	43.3	20.99	152.5	-0.72	310.8	7.49	16.6	4.4	2.95	7.3	-100.0	0.0
Textiles	91.9	94.4	0.2	0.0	36.7	0.0	23	0.45	16.5	-6.61	51.2	-2.58	4.5	76.34	24.1	-39.77	1.4	19.67	-11.2	13.2	-24.71	1.7	-100.0	0.0
Clothing	93.3	0.0	0.2	0.0	75.3	0.0	32	1.33	0.0	0.00	43.9	-8.60	3.1	149.22	0.0	0.00	0.0	0.00	-0.9	0.0	0.00	2.5	-100.0	0.0
Other manufactured	91.8	33.8	0.0	0.0	7.4	0.0	399	0.88	76.5	0.01	719.5	0.32	63.9	5.38	34.1	-0.21	66.7	5.49	-3.5	6.0	0.93	4.8	-100.0	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	1185	0.03	2368.1	0.07	0.1	0.15	0.1	0.11	0.1	0.00	0.1	-0.68	0.0	171.4	0.07	0.0	0.0	0.0
Total or Average	89.3	29.7	0.1	0.0	12.6	0.0	1959	0.17	2854.7	-0.08	1078.7	-0.45	129.6	16.10	390.9	-3.28	924.9	3.12	0.0	405.2	-0.78	17.0	-100.0	-33.3

South Africa

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	44.0	29.4	2.9	0.0	1.6	0.0	3175	-0.01	7825.1	-0.05	302.2	3.88	384.3	-2.53	352.0	2.78	847.1	11.61	106.1	876.2	1.14	14.9	-100.0	0.0
Mining	1.5	1.3	2.5	0.0	0.3	0.0	1526	-0.03	7917.6	0.00	23.0	6.44	1532.9	-1.28	85.9	2.32	6639.1	9.33	633.5	668.5	4.24	5.5	-100.0	0.0
Food, tobacco, beverages	52.2	96.5	0.9	0.0	12.1	0.0	11523	0.01	15706.2	-0.46	376.7	-0.06	344.6	21.35	936.2	2.70	34.1	13.43	-43.9	241.8	-0.25	44.9	-100.0	0.0
Textiles	19.6	54.9	23.9	0.0	31.7	0.0	788	0.76	1239.3	-41.60	153.3	49.89	629.1	76.03	331.0	12.03	272.0	29.44	-438.8	90.5	-21.48	236.3	-100.0	0.0
Clothing	40.6	71.7	75.7	0.0	66.8	0.0	883	0.37	1191.2	-7.44	18.3	225.50	26.7	201.66	160.9	5.01	63.6	27.25	-70.4	121.4	-4.46	31.7	-100.0	0.0
Other manufactured	2.4	34.3	3.7	0.0	4.5	0.0	24843	0.15	47399.1	-1.94	231.6	10.45	9561.2	9.81	3574.6	3.00	6841.5	9.96	-184.9	1040.2	-0.20	442.0	-100.0	0.0
Services	62.9	50.0	0.0	0.0	0.0	0.0	66085	-0.08	119109.4	-0.14	0.1	6.50	0.1	-2.10	0.1	0.86	0.1	8.83	0.0	4830.8	-0.14	0.0	0.0	0.0
Total or Average	8.1	27.0	6.5	0.0	5.6	0.0	108822	-0.02	200387.8	-0.88	1105.3	14.19	12478.9	12.14	5440.7	3.53	14697.5	10.22	0.0	7869.4	0.05	775.2	-100.0	-3.3

Swaziland

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	90.0	87.8	0.2	0.0	0.7	0.0	68	0.07	187.8	0.09	68.2	0.83	7.6	-0.62	26.8	-1.18	3.7	3.77	-0.7	23.3	-0.01	0.2	-100.0	0.0
Mining	89.4	76.4	0.0	0.0	0.5	0.0	1	0.04	15.2	0.75	5.9	0.80	0.7	0.49	4.9	0.89	1.5	8.68	0.1	0.9	1.34	0.0	-100.0	0.0
Food, tobacco, beverages	99.2	47.1	0.1	0.0	17.1	0.0	287	0.42	306.8	0.11	128.3	0.74	1.1	43.74	200.9	2.93	226.0	7.71	21.7	8.1	3.00	0.3	-100.0	0.0
Textiles	99.3	77.3	0.4	0.0	46.0	0.0	24	0.36	17.4	-7.68	59.0	3.12	0.4	98.54	31.3	-41.91	9.2	3.77	-15.0	2.3	-24.39	0.4	-100.0	0.0
Clothing	99.2	0.0	0.0	0.0	72.4	0.0	5	0.89	0.0	0.00	0.1	0.13	0.1	156.53	0.0	0.00	0.0	0.00	-0.1	0.0	0.00	0.0	-100.0	0.0
Other manufactured	92.5	56.4	0.0	0.0	6.8	0.0	282	0.81	196.0	-0.14	459.8	0.79	37.5	4.59	61.1	-3.75	47.1	3.81	-6.1	6.3	-0.53	2.6	-100.0	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	369	0.34	741.6	0.68	0.1	0.07	0.1	0.02	0.1	0.91	0.1	9.85	0.0	51.6	0.68	0.0	0.0	0.0
Total or Average	92.0	53.1	0.1	0.0	6.3	0.0	1035	0.29	1464.8	0.28	728.4	1.00	47.5	5.52	325.1	-3.01	287.7	6.90	0.0	92.5	0.01	3.5	-100.0	-55.6

Table A.2. Cont.: FT 7 Sector Industrialisation Effects: % Change on Base

Tanzania Simulation of FTA

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	9.3	0.9	9.6	0.0	25.3	0.0	1257	0.09	2058.8	-0.09	1.3	11.80	13.1	35.96	2.6	-1.39	283.6	8.16	18.2	1818.2	-0.47	3.5	-100.0	0.0
Mining	3.0	0.3	18.4	0.0	16.6	0.0	18	1.34	26.3	0.77	0.3	9.35	10.0	7.79	0.0	2.94	1.1	16.86	-0.6	105.9	1.42	1.7	-100.0	0.0
Food, tobacco, beverages	9.3	3.5	29.6	0.0	25.1	0.0	117	4.06	26.3	-12.07	10.0	27.51	97.8	6.17	3.0	-9.28	82.6	12.02	0.7	69.9	7.29	27.6	-100.0	0.0
Textiles	1.5	1.0	37.4	0.0	15.5	0.0	71	2.24	41.3	-14.55	1.1	66.02	71.2	13.15	0.3	122.34	32.9	42.00	3.4	58.4	11.02	11.4	-100.0	0.0
Clothing	0.2	0.0	26.5	0.0	14.4	0.0	24	3.66	4.1	-9.44	0.1	40.91	24.6	6.64	0.0	0.00	1.0	71.74	-1.0	4.7	6.08	3.6	-100.0	0.0
Other manufactured	1.0	5.6	13.9	0.0	18.7	0.0	755	6.40	180.9	-1.21	9.2	5.16	870.9	8.03	4.7	24.13	79.8	69.48	-19.6	66.2	4.30	164.1	-100.0	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	1073	0.31	1474.5	0.43	0.1	0.61	0.1	0.64	0.1	-0.83	0.1	-9.45	0.0	1472.5	0.43	0.0	0.0	0.0
Total or Average	**2.0**	**2.2**	**21.9**	**0.0**	**19.0**	**0.0**	**3315**	**1.29**	**3812.2**	**-0.19**	**22.1**	**19.19**	**1087.8**	**8.50**	**10.8**	**11.39**	**481.2**	**21.45**	**0.0**	**3595.9**	**0.39**	**211.8**	**-100.0**	**-17.3**

Zambia Simulation of FTA

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	29.4	22.9	6.2	0.0	5.2	0.0	93	-0.01	459.2	-0.34	13.6	9.04	32.6	2.13	9.8	21.15	32.9	11.87	4.1	41.3	0.12	2.5	-100.0	0.0
Mining	64.7	0.1	11.3	0.0	11.2	0.0	4	0.02	203.9	-0.05	19.3	9.42	10.5	8.34	0.6	-0.40	1122.8	7.65	82.4	60.1	6.46	3.3	-100.0	0.0
Food, tobacco, beverages	89.6	69.2	18.8	0.0	8.2	0.0	350	0.28	438.6	-3.13	43.6	31.91	5.1	24.92	2.5	4.06	1.1	-19.70	-15.3	62.1	-2.22	8.6	-100.0	0.0
Textiles	57.1	7.8	18.1	0.0	20.1	0.0	30	0.43	70.5	-21.96	19.3	52.60	14.5	47.79	1.1	82.47	12.5	-18.14	-18.5	19.1	-20.07	6.4	-100.0	0.0
Clothing	90.3	58.3	24.8	0.0	24.9	0.0	57	1.12	82.0	-1.65	3.4	74.18	0.4	65.30	1.3	224.26	0.9	21.90	0.1	20.6	1.99	0.9	-100.0	0.0
Other manufactured	37.0	22.8	13.3	0.0	11.6	0.0	479	4.11	552.6	-3.25	231.3	10.20	393.1	7.65	11.7	5.99	39.7	15.70	-52.6	94.0	-2.82	76.3	-100.0	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	887	-0.15	1855.5	-0.31	0.1	0.17	0.1	0.23	0.1	5.18	0.1	-24.18	0.0	82.9	-0.31	0.0	0.0	0.0
Total or Average	**41.8**	**2.2**	**14.0**	**0.0**	**11.4**	**0.0**	**1898**	**0.43**	**3662.3**	**-1.53**	**330.6**	**17.77**	**456.2**	**8.78**	**27.0**	**24.37**	**1210.0**	**7.75**	**0.0**	**380.1**	**-0.99**	**98.1**	**-100.0**	**-21.3**

Zimbabwe

Sectors	shares		pre and post-tariffs				levels and percentage changes																	
	MS%	ES%	tMS1,M	tMS2,M	tMR1,M	tMR2,M	D	%	SM	%	MS	%	MR	%	ES	%	ER	%	dBOP	L	%	CR	%	GR%
Agriculture	18.6	13.3	21.1	0.0	22.2	0.0	341	-0.10	720.6	-3.08	21.8	21.83	95.6	15.87	72.8	16.46	474.2	22.14	97.0	309.6	1.76	25.8	-100.0	0.0
Mining	76.3	18.2	5.0	0.0	6.0	0.0	110	-0.22	332.9	-0.96	35.2	0.08	10.9	2.18	13.7	13.10	61.6	13.81	9.6	49.6	1.74	2.4	-100.0	0.0
Food, tobacco, beverages	35.6	52.9	22.2	0.0	19.2	0.0	713	0.11	869.0	-2.41	20.4	32.84	36.8	41.39	41.5	33.10	37.0	17.06	-2.8	42.1	-0.36	11.6	-100.0	0.0
Textiles	51.8	63.7	31.4	0.0	30.1	0.0	138	0.47	210.2	-33.32	38.4	100.88	35.8	95.27	47.5	80.34	27.1	7.48	-34.1	25.3	-10.48	22.8	-100.0	0.0
Clothing	41.2	58.7	92.6	0.0	92.0	0.0	41	-0.65	52.6	-7.57	0.6	231.41	0.9	230.62	18.2	205.90	12.8	-13.75	31.7	20.1	38.02	1.4	-100.0	0.0
Other manufactured	25.4	47.3	18.4	0.0	14.6	0.0	1373	2.54	1169.5	-10.18	342.3	9.69	1004.0	11.78	216.5	17.26	241.1	18.45	-94.5	110.3	-1.62	209.6	-100.0	0.0
Services	50.0	50.0	0.0	0.0	0.0	0.0	1525	-0.52	2446.4	-0.83	0.1	-4.96	0.1	-1.24	0.1	4.82	0.1	3.11	0.0	684.2	-0.83	0.0	0.0	0.0
Total or Average	**27.8**	**32.5**	**18.8**	**0.0**	**15.8**	**0.0**	**4240**	**0.30**	**5801.3**	**-4.48**	**458.8**	**23.01**	**1184.2**	**15.62**	**410.3**	**34.26**	**853.9**	**19.27**	**0.0**	**1241.2**	**0.30**	**273.6**	**-100.0**	**-19.0**

Notes: $USm average 1990-2 for financial variables; Government revenue excludes grants; '000' for employment Imports and exports valued fob; Average tariff uses
import weights; D: Domestic demand;
SM: Import competing production; MS: imports from SADC; MR: Imports from the Rest of the World; ES: Exports to SADC; ER: Exports to the Rest of the World;
dBOP: change in Balance of Payments;
L: Labour employed; CR: Customs Revenue; GR: Government Revenue; tMS1,M: Tariffs, SADC, initial, import weighted; tMS2,M: Tariffs, SADC, initial, import
weighted, final; tMR1,M: Tariffs, SADC, initial, import weighted, R: Rest of the World.

REFERENCES

African Development Bank et al, 1992**, Cross Boarder Initiative, Eastern and Southern Africa and Indian Ocean,** Workshop Proceedings, 2 volumes, Harare.

Evans, H.D., 1996 and 1997, **Study of the Impact of the Removal of Tariffs for the Free Trade Area of the Southern African Development Community SADC**, Occasional Paper No 5, Commonwealth Secretariat, December. Based on a report prepared for the SADC Industry and Trade Co-ordination Division SITCD, with the Assistance of the Commonwealth Secretariat, 1996.

Evans, H.D. with the assistance of Marie-Jo Cortijo, 1998a, 1999b forthcoming, **The Regional Trade Model of Southern Africa: Model Extension, New Data and Results**, Report commissioned by the Industrial Development Corporation of South Africa, draft. Institute of Development Studies at the University of Sussex. Also IDS Working Paper.

Evans, H.D., 1999a, 'Deindustrialisation in Southern Africa? A General Equilibrium Analysis', IDS Working Paper, forthcoming.

Evans, H.D., 1998b, 'Options for Regional Integration in Southern Africa', Background paper prepared for the September Forum 1998, Trade and Industrial Policy Secretariat, IDRC, Johannesburg. Also IDS Working Paper forthcoming.

Kaplinsky, R., 1998, '"If you want to get somewhere else, you must run twice as fast as that!": The roots of the East Asian Crisis', paper presented to the East Asia Crisis Workshop, IDS.

Mandaza, I., P. Holmes and (H.). D. Evans, 1998, 'The Costs of Non-integration in SADC', report prepared for the SADC Secretariat, March.