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No. 99/2

Competition and Business Confidence in Manufacturing Enterprises in Tanzania

by

Louise Grenier, Andrew McKay and Oliver Morrissey

DFID-TERP: CREDIT DISCUSSION PAPER 8 (CDP008)

This is Discussion Paper No. 8 in the CREDIT Project on 'Infrastructural and Institutional Constraints to Export Promotion', as part of the DFID Trade and Enterprise Research Programme (TERP). The TERP involves research projects by teams in CREDIT, CREEM (SMF, Nottingham), CSAE (Oxford) and IDS.

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Abstract
This paper is the second in an analysis of a survey of 83 manufacturing enterprises in Tanzania. The previous analysis reported that large firms are more likely to export than other firms, and more large firms sustain their investments than smaller firms. Also, parastatals, including firms with some government ownership, tend to be larger and are more likely to export and sustain investments than non-parastatals. This paper reports on further analysis of the nature of competition and evidence on business confidence and expectations. In particular, we identify whether competition is primarily with local firms or foreign firms, we construct measures of confidence based on expected trends in economic indicators and we identify whether firms believe government policy changes will affect them. Trade liberalisation has been associated with a perceived increase in competition from imports, and firms competing with imports have been constrained in their ability to increase prices. Firms producing traded goods (i.e. that compete with imports or with foreign firms in foreign markets) generally exhibit more concern, than firms that compete only with other domestic firms, about trends in economic variables and how changes in policy may affect them. Exporters appear somewhat more confident than non-exporters, as would be expected if liberalisation removes biases against exports. As would be expected, trade liberalisation appears to have been associated with increased competition, benefiting exporters but posing concerns for firms that compete with imports.

Outline
1. Introduction
2. Manufacturing in Tanzania
3. Competition Status
4. Confidence, Policy Expectations and Insulation
5. Conclusions

I INTRODUCTION

In a previous paper we analysed evidence on the structure of the manufacturing sector in Tanzania to try and identify the characteristics of exporters (Grenier *et al*, 1998). We focused in particular on two questions: are there identifiable features shared by firms which have higher levels of investment; and are there any characteristics identifying which firms are more likely to export? The core finding, in the current context, is that size, government ownership and investment are all linked to exporting (for the sample of firms in our survey). Large firms (100 employees or more) export in a larger proportion than not-large firms (41 per cent versus 14 per cent). This is also the case for parastatals (firms that are partly or fully owned by the government), and for firms that sustain their investments (firms that reported some investment in physical capital in each of the four years 1990-93). There is weak evidence that foreign ownership and the country of origin of the owner(s) are related to exporting.

In this paper we extend the analysis to investigate perceptions of the competitive environment in which firms find themselves. To do this we analyse responses to questions regarding where a firm's principal source of competition comes from – domestic firms, imports or foreign firms in foreign markets. We use this analysis to classify a firm's 'competition status' according to the reported perceptions of the firm. Firms are classified as 'non-traded' if they compete principally with Tanzanian firms in the local market; i.e. their output is non-traded in the sense that they do not compete with goods that are internationally traded. Alternatively, firms are classified as 'traded' if they compete primarily with imports in the local market or with foreign firms in foreign markets, or if they export some of their output.[1]

Having established competition status, we then consider information on business confidence and policy expectations, as represented by responses to questions on expected changes in the level of economic variables, such as inflation and business tax rates, and expected changes in policies, such as the Labour Code and import tariff schedule. We construct confidence scores based on whether, in respect of a specific

economic indicator or policy, firms on average expect an indicator to increase or decrease, and a policy to change. According to their expectations, firms can be confident (if they believe economic trends are relatively favourable) or pessimistic (if they expect unfavourable trends). We also investigate whether or not the firms feel 'insulated' from expected changes in policies. Our variable 'policy insulation' refers to firms who believe that policy changes will not affect their output; firms are not insulated if they believe that output is sensitive to policy.

Emphasis is placed throughout on determining whether differences in competition status are related to confidence, policy insulation, and to firm characteristics (such as size and ownership). The survey on which our analysis is based was conduced in early 1995, hence firm's perceptions relate to 1994. By that time, a significant degree of trade liberalisation had been implemented in Tanzania (most quantitative restrictions had been abolished, tariffs had been reduced and rationalised and the exchange rate had been liberalised, with substantial devaluation). We would expect, *a priori*, that firms producing traded goods were affected by this more than firms producing non-traded goods (for convenience, we will refer to the former as traded firms and the latter as non-traded firms). We can test if confidence and policy expectations differ depending on competition status. We can also investigate firm's reported source of increased competition; following trade liberalisation, we expect more competition from foreign imports. We can also investigate if there is a relationship between competition status and policy insulation; *a priori*, firms producing traded goods should be less insulated from trade policy.

Section 2 sets the scene, discussing various performance indicators for Tanzanian manufacturing in the early 1990s and including brief details of the survey used in the subsequent analysis. The evidence on competition status is presented, and related to firm characteristics, in Section 3. The findings on confidence and policy insulation are presented in Section 4, which also considers if these are related to firm characteristics. Section 5 concludes with some comments on the impact of trade liberalisation on Tanzanian manufacturing firms.

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1 If they export then, by implication, they compete with foreign firms in foreign markets. However, exporting firms will not necessarily report that foreign firms in foreign markets are a principal source of competition

II MANUFACTURING IN TANZANIA

We consider here the performance of the manufacturing sector over the period from 1976 (before economic crisis hit the economy) until 1994 (the year for which we will be examining micro survey evidence). Table 1 presents some data on trends in manufacturing GDP and investment over this period, along with the corresponding information for the economy as a whole. The period 1976-86 was one of relative and absolute decline of the manufacturing sector. Manufacturing output fell at an average rate of 3.6% per annum, and the contribution of the manufacturing sector to overall GDP fell from 13% in 1976 to 7.9% in 1986. Over the same period the contribution of the primary sector, chiefly agriculture, to GDP increased significantly, though overall GDP growth was slow at an average rate of only 1.5% per annum. Since 1986 (the start of economic reforms, see Basu and Morrissey, 1997; Morrissey, 1995), the manufacturing sector made an absolute, though not relative, recovery. Manufacturing output grew at an average rate of 3.7% per annum over the period 1986-94, though growth in other sectors of the economy (again chiefly the primary sector) meant that the contribution of the manufacturing sector to overall GDP scarcely changed. By 1994 the manufacturing sector accounted for only 7.6% of GDP.

Investment in the manufacturing sector shows a similar pattern of decline in the early 1980s, and gradual recovery thereafter. Over the recovery period levels of investment in Tanzania are high in general. Since the mid 1980s the proportion of overall GDP accounted for by gross fixed capital formation never falls below 30%; being relatively capital intensive, the manufacturing sector accounts for around one quarter of this investment. Table 1 also reports the proportion of manufacturing investment undertaken by the public sector; though high in the early 1980s, this has since remained in the range of 30-40% with no discernible trend. This proportion is similar to the proportion of manufacturing GDP accounted for by the public sector.

(they may, for example, only export a small share of output).

Table 1: Output and Investment Trends in Tanzania, 1976-1994

Year	*Overall GDP*	*Manufacturing GDP*	*Aggregate GFCF*	*Manufacturing GFCF*	*public sector share Manufacturing GFCF (%)*
1976	21652	2811	6272	1667	
1980	23419	2683	7751	1688	
1981	23301	2382	6664	1543	54.3
1982	23439	2304	6093	1935	61.3
1983	22886	2103	4421	1120	35.2
1984	23656	2159	4773	1183	31.4
1985	24742	2075	4708	1346	35.8
1986	25210	1991	6879	1463	28.4
1987	26453	2081	10733	2836	33.9
1988	27527	2228	10240	2741	38.9
1989	28626	2399	9165	1962	40.2
1990	29904	2338	12717	2816	27.2
1991	31609	2607	9476	2354	34.5
1992	32724	2719	10724	2609	33.8
1993	34088	2775	10774	2586	
1994	35122	2669	10603	2579	

Notes: Figures are in millions of Tanzanian Shillings at constant 1976 prices, unless otherwise indicated. GFCF is Gross fixed capital formation.
Source: Republic of Tanzania, Bureau of Statistics, *National Accounts of Tanzania, 1976-94*.

Consider now the composition of activities making up the manufacturing sector. The small size of the sector means that statistics disaggregated by type of manufacturing activity can be quite volatile from one year to the next. Rather than using these statistics to examine changes over time, we consider the structure in a single year, 1990 (the latest year for which detailed information is available). Table 2 presents a disaggregation of the manufacturing sector into its main activities, reporting for each the contribution to overall value added, gross output and employment in 1990. It is clear that in terms of value added, the food sector predominates, accounting for more than half of manufacturing value added in that year (a similar pattern is observed for earlier years). The only other activities making significant contributions to manufacturing output in 1990 are chemicals, fabricated metals and papers. The textiles sub-sector only makes a very small contribution to manufacturing value added in 1990, but this may reflect exceptional features of that year as its contribution is significantly

higher in earlier years. Nonetheless its contribution to manufacturing value added is always significantly below its contribution to gross output (15.2% in 1990) and especially to employment (nearly 30% in 1990).

Table 2: Contribution of Main Sectors to Manufacturing, Tanzania 1990 (%)

Sector	*Contribution to value added*	*Contribution to gross output*	*Contribution to employment*
Food	51.4	36.0	37.7
Textiles	2.8	15.2	29.6
Wood	4.6	2.8	6.7
Paper	7.4	6.0	6.0
Chemicals	16.0	14.1	5.2
non-metal	3.2	4.0	3.4
Basic metal	4.3	7.7	1.1
Fabricated metal	9.3	13.5	9.2
ALL	100%	100%	100%

Note: Based on enterprises with at least ten full time employees.

Source: Republic of Tanzania, Bureau of Statistics, *Statistical Abstract, 1995.*

Table 3: Sector Contribution to Manufactured Exports, Tanzania 1990 (%)

Sector	*Contribution to manufactured exports*	*Contribution to gross output in manufacturing*	*% gross output exported*
Food	14.7	33.6	6.7
Textiles	56.2	21.4	40.4
Wood	6.9	3.5	30.2
Paper	3.5	3.6	15.0
Chemicals	10.7	11.9	13.7
Metals	8.0	24.6	5.0
Other	0.6	1.5	0.3
ALL	100%	100%	15.3%

Note: The definition of sub-sectors differs from that used in Table 2.

Source: Republic of Tanzania, Bureau of Statistics, *Revised National Accounts of Tanzania, 1976-1990.*

The manufacturing sector as a whole accounts for about 15% of exports in Tanzania. The importance of exporting varies across sub-sectors. Table 3 reports the contribution of different sub-sectors in manufacturing (with a slightly different disaggregation) to overall manufacturing exports in 1990, as well as the proportion of gross output exported by each sector. The majority of manufacturing exports in 1990 were from the textile sector, which exported 40% of its output. The wood sector exported 30% of its output in 1990, though the small size of this sector means that its contribution to overall manufactured exports was small. By contrast, the food sector accounts for 15% of manufactured exports, even though it only exports a small proportion of its gross output.

Survey evidence: characteristics of Tanzanian Manufacturers

The survey that forms the basis of the analysis in this paper was conducted in early 1995 as part of the African Economic Research Consortium's (AERC) collaborative research project on Regional Integration and Trade Liberalisation in Sub-Saharan Africa. A number of country case studies were undertaken as part of this project, most of which involved the conduct of a small, selective survey of manufacturing enterprises. These surveys were principally intended to collect information on the extent to which firms were engaged in international trade, and on how they were affected by changes in trade policy and by local regional integration arrangements. However, they also collected information on the characteristics of the enterprises themselves.

The survey conducted in Tanzania collected usable data on 83 manufacturing enterprises, covering the food, textiles, wood, paper, chemicals and metals sectors, and covering five main cities, including Dar-es-Salaam. The firms selected were predominantly if not exclusively within the formal sector, and the coverage of very small (or micro) firms is limited. Table 4 provides some summary information on the characteristics of the firms in the sample, reporting the distribution of firms by industry, size, age and legal status. Each of the industries and size categories (except micro firms) is quite well represented in the sample (although the numbers are not

intended to be representative at a national level).[2] Some 43% of the sample are classified as large, and some firms are very large; the mean firm size is 158, although the median size is only 80. Another significant characteristic of the firms covered by this survey is that there are very few 'young' firms; the average age of the firms is 22 years, and only 6.5 per cent of the surveyed firms were established in the five years preceding the survey. Among the 80 firms for which ownership (legal status) is known, slightly more than half are private enterprises with limited liability (including subsidiaries); most of the rest (29 percent) are partly or wholly government owned.[3]

Of course these various classification criteria are often correlated with each other. Rather than present more tables we simply summarise some of the most striking correlations (see Grenier *et al*, 1998). Firms in the chemical and food industries are more likely than average to be large, while firms in wood and paper are disproportionately small. Firms in the chemicals and wood industries are most likely to be private firms with limited liability. Foreign investment is more common in the chemicals industry than others, among older rather than younger firms, and among private firms with limited liability than other categories. Of the firms in the sample, public ownership (whole or partial) is most common in the textiles and paper industries, and publicly owned firms tend to be older and larger than average. Associations of this nature are relevant in interpreting results later.

2 The sector composition in Table 4 is based on number of reporting firms, hence cannot be compared to the sectoral composition figures in Tables 2 and 3. In general, the quantitative information in the survey (e.g. value of output, value of exports, cost of inputs) was of poor quality and consequently most of our analysis is qualitative (e.g. did firms export, did they sustain investment).

3 According to another question in the sample (see Table 9 below) nearly half of the 78 firms for whom it can be computed report some foreign involvement; these include some of the wholly or partly owned government firms in addition to a number of the private firms with limited liability.

Table 4: Summary of Characteristics of Firms in Sample

CHARACTERISTIC	*NUMBER*	*PERCENTAGE*
INDUSTRY (sector)		
Food	11	13.3%
Textiles	15	18.1%
Wood	12	14.5%
Characteristic	12	14.5%
Chemicals*	14	16.9%
Metals**	19	22.9%
ALL	83	100.0%
SIZE (number of full time employees)		
Micro (4 or less)	7	8.9%
Small (5 to 29)	24	30.4%
Medium(30 to 100)	14	17.7%
Large (101 or more)	34	43.0%
ALL	79	100.0%
AGE OF FIRM (years)		
5 years or less	5	6.5%
6 to 15 years	23	29.9%
16 to 25 years	22	28.6%
26 years or more	27	35.1%
ALL	77	100.0%
LEGAL STATUS		
Private, not limited liability	6	7.5%
Private, limited liability or subsidiary	44	55.0%
Government-owned (wholly or partly)	23	28.8%
Cooperative	7	8.8%
ALL	80	100.0%

Notes: Definition of sectors not identical to Tables 2 and 3; * chemical industry includes cement industry; ** metals includes basic metal and fabricated metal industries.
Source: Authors' computations from survey data.

III COMPETITION STATUS

We begin by considering reported competition in product markets (sales). Firms indicated which of the following is their main source of competition: none, domestic firms, imports, or foreign firms in export markets. The results for the full sample are provided in Table 5, classified according to whether firms export or not, whether they

sustained investment, and by size and ownership (parastatal or not). Overall, 90% of the firms either compete primarily with domestic firms or with imports. Examination of the raw data revealed that not all exporting firms reported foreign firms as their *main* source of competition. Few manufacturing firms in Tanzania *specialise* in exporting: only three of the fifteen exporters who reported the share of output exported indicated that they exported 50% or more of their output. The average proportion of output exported among those fifteen firms is 20%. Hence, it is not surprising to find that foreign firms in export markets are reported as the main source of competition by only four firms.[4] Nevertheless, we wish to define firms that export as traded.

A majority (54%) of firms report domestic firms as the main source of competition, while 36% give imports. Exporters are more likely than non-exporters to declare imports as their main source of competition. Parastatals were more likely to report imports as the main source of competition, whilst a majority of non-parastatals (61%) indicated domestic firms as the main source of competition. Similarly, a majority of sustained investors cite imports as the main source of competition, whereas a majority of firms that do not sustain investment and of firms that are not large report domestic firms as the main source of competition. If we omit firms reporting no or foreign competition, the differences in percentages reporting domestic as against import competition are statistically significant for all four firm characteristics. It follows that we can anticipate a relationship between firm characteristic and competition status (traded or non-traded, see below).

4 Of the four firms that reported foreign firms in export markets as the main source of competition, two exported more than half of their output, one electricity the other sisal. The two others were non-exporting firms; this may appear bizarre and could be mis-reporting, but may be because the firms tried to export but were unsuccessful at the time of the survey (hence we define them as traded).

Table 5 Main Source of Competition by Firm Characteristic

	MAIN SOURCE OF COMPETITION				*N*
SAMPLE	none	domestic	imports	foreign	
all firms	4	44	29	4	81
row %	5%	54%	36%	5%	
EXPORT STATUS					
does not export	1	37	16	1	55
row %	2%	67%	29%	2%	
exports	3	7	9	2	21
row %	14%	33%	43%	9.5%	
column total %	5%	58%	33%	4%	100%
INVESTMENT					
not sustained	1	34	11	3	49
row %	2%	69%	22%	6%	
sustained investment	3	10	18	1	32
row %	9%	31%	56%	3%	
column total %	5%	54%	36%	5%	100%
OWNERSHIP					
non-parastatal	2	34	18	2	56
row %	4%	61%	32%	4%	
parastatal	2	8	11	2	23
row %	9%	35%	48%	9%	
column total %	5%	53%	37%	5%	100%
SIZE (employees)					
not-large (100 or fewer)	2	29	12	2	45
row %	4%	64%	27%	4%	
large (>100)	2	13	16	2	33
row %	6%	39%	48.5%	6%	
column total %	5%	54%	36%	5%	100%

Note: calculated by authors from survey responses. *N* indicates number of firms.

Our findings as reported in Table 5 can related to other studies. Helsinki School of Economics (1995) report on the RPED survey which allowed firms to list more than one main source of competition, and found that about three-quarters of firms nominated domestic firms while more than a third nominated imports. Compared to Helsinki School of Economics (1995: 40-1), we also find that proportionally more smaller firms face mostly domestic competition while larger firms are far more likely to report competition from imports. Both surveys find that firms in the wood sector

compete primarily with domestic firms whereas firms in the metal sector compete principally with imports. In our survey, the textile sector is divided almost equally between domestic and import competition, where imports are clearly the principal source of competition in the RPED survey.

Our measure of the degree of competition and its association with whether or not firms sustained nvestment is coarse but it is consistent with the findings of Bagachwa and Mbelle (1995) that investment is necessary but not sufficient for export competitiveness. We find that firms that compete with foreign firms are more likely to sustain investment, whereas firms that compete primarily with domestic firms are less likely to sustain investment.

Parker *et al* (1995) in their study of small manufacturing firms (with less than 50 employees) in five African countries, including Tanzania, also identify the main sources of competition. They find that 57% of the small Tanzanian firms in their sample compete with other small firms while another 30% compete with large local firms. In all but one country, the main competitors of small firms are small firms. The exception is Senegal where 35% of firms report competition from imports whereas 23% report competition from local small firms. Focusing on the firms in our sample with less than 50 employees, we also find that the majority of small firms compete with domestic firms (Table 6). In our sample, however, we have proportionally less firms competing domestically (65% compared to 91% in Parker *et al*) and more firms competing with imports (26% versus 9%). As both samples are small (less than 50 firms) perhaps one should not read too much into the differences.

Changes in Prices

Pricing behaviour is an important feature of competition. Firms in the survey reported the number of times the price of their main product changed in the last year and by how much (as a percentage of the price in the previous year). Most firms (40%) changed their price only once in the last year, 33% changed price twice and a few firms changed it four times or more; two reported no price change. The average percentage price change compared to the previous year was 20%, while the largest change reported was 100%.

Table 6 Main source of competition: Comparison with Parker *et al* (1995)

main source of competition	% of firms in our survey	% of firms in Parker *et al* survey	main competitors
no competitors	6%	0%	no competitors
domestic firms	65%	91%	small firms* (57%) large local firms (30%)
foreign competitors in export market	3%	0%	other types of competitors
imports	26%	9%	imports
number of firms	[N=34]	[N=48]	number of firms

Note: Results relate to firms with less than 50 employees only; * assuming that the small firms are domestic firms.

Table 7 Average Price Change by Firm Characteristic

CHARACTERISTIC	*percentage change in output price*		*N*
	mean (%)	std dev	
All firms	20.4%	17.3	69
EXPORT STATUS			
does not export	17.9	16.5	46
exports	23.9	17.6	18
INVESTMENT STATUS			
did not sustain investment	17.9	12.4	42
sustained investment	24.3	22.7	27
OWNERSHIP			
non-parastatal	18.3	17.3	46
parastatal	24.4	17.2	22
SIZE			
not large (<100 employees)	20.4	20.3	38
large (100+ employees)	21.4	12.8	29
MAIN COMPETITION			
none	33.7	29.0	3
domestic firms	21.1	18.0	36
foreign competitors	25.7	9.8	3
imports	17.6	15.5	27

Note: None of the differences in means are significant at the 10% significance level (t-test for independent samples or one-way ANOVA).

There is no significant difference in the mean percentage reported price change according to export status, parastatal status, investment status or size (Table 7). However, it is consistently the case that, on average, exporters, sustained investors and parastatals (and these may be the same firms) increase price by more than the average overall. Nor is there a significant difference in the mean percentage change that depends on the nature of the main source of competition. The mean change is however greatest for firms reporting no competition and lowest for firms competing with imports, as would be expected.

We do find a relationship between the percentage change in the price of output and the percentage price change in local inputs, although not with price changes in imported inputs. The coefficient of correlation between output price change and local input price change is 0.45 and significant, whereas the coefficient of correlation between output price change and imported input price is 0.10 and not significant. The latter is to be expected as only half the sample reported that they imported inputs, and imports were only a third of inputs on average for these firms. Furthermore, survey responses reveal that most firms (68%) set their price as a mark-up over costs, whereas few (ten per cent) link their price to that of competing imports.

Blanc (1997: 53-4), reporting on the RPED survey, also found that the majority of firms (87%) use mark-up pricing and only eight per cent reported that they adjust prices to imports or to main competitors. Among large firms, the most likely to compete with imports, just over 20% say they adjust prices to import prices. When this information is sought in a different way, firms clearly rank input costs as the most important determinant of prices, competition with domestic firms as important but competition with imports as not particularly important (large firms are again generally the exception, considering import competition important).

Movements in the exchange rate may have a bearing on our findings, especially for exporters but also those competing with imports. The information on pricing relates to 1993/94. The Tanzanian Shilling devalued some 40% between 1992/93 and 1993/94, and some 12% between 1993/94 and 1994/95. It is not unreasonable to suggest that respondents in the sample would have seen the price of imports increase by over 20% in the year preceding the survey (the principal tariff reductions had been implemented

in 1992 and the next set of reductions were in 1995). This would have permitted firms competing with imports to increase their prices (and in this context the mean increase in Table 7 is competitive). Firms relying on imported inputs could have passed on the increased cost. We know that imported inputs are of greater importance to firms that export than to firms that do not export (Grenier *et al*, 1998, see Table 9 below). Therefore it is not surprising that exporters increased their price by more than the average (Table 7). This may not have affected international competitiveness as there may not have been any change in price denoted in foreign currency (that would depend on the foreign market they were selling to).

Most firms report having experienced an increase in competition from their main competitors over the previous year. Some 79% of firms competing primarily with domestic firms report an increase in domestic competition and 82% of the firms competing with imports report an increase in competition from imports. A minority of firms experienced increased competition from a source other than their main source of competition: 11% of firms that compete with imports experienced an increase in domestic competition, almost 40% of the firms that compete with domestic firms experienced an increase in competition from imports. In all cases the association is statistically significant (Table 8). This is consistent with the view that trade liberalisation increases the competition facing all firms, and in particular increases the competition from imports.

Unfortunately, we have no information on the nature of this increased competition. The devaluation of the Tanzanian shilling was with respect to hard currencies, hence the price of imports from the 'North' would have increased. However, there may not have been any net devaluation against other developing countries, especially those in Africa (such as Kenya and South Africa). We conjecture that much of the increased import competition may have been from elsewhere in Africa. In the early 1990s, import prices in domestic currency should have risen as the effect of devaluation more than offset any tariff reductions. How a firm is affected will depend on the proportion of inputs that are imported and the source of imports (as this will determine any exchange rate effect), which feed in to any price effect. The effect of a price increase on competitiveness then depends on who competitors are. If they are domestic firms, they are likely to have been affected in a similar way. If they are foreign firms,

Tanzanian firms may suffer reduced competitiveness. There is no simple mapping of trade liberalisation (including devaluation) onto competitiveness, and it should be no surprise that the results form the survey are not clear on this matter.

Table 8 Changes in Sources of Competition and Price

	*SOURCE OF COMPETITION**			*PRICE*
domestic competition	*domestic firms*	*imports*	row total	*Mean change*
no increase	9 29% 21%	22 71% 85%	46%	18.2 (14.8)
increased competition	33 89% 79%	4 11% 15%	54%	20.6 (18.5)
column total %	62%	38%	100%	
import competition	*domestic firms*	*imports*	row total %	
no increase	25 83% 62.5%	5 17% 18%	56%	24.7 (21.3)
increased competition	15 39.5% 37.5%	23 60.5% 82%	44%	17.8 (13.6)
column total %	59%	41%	100%	

percentage price increase by firms that experienced	increased competition from domestic firms	
increased competition from imports	yes	no
yes	17.47% n=15	16.11% n=18
no	25.13% n=16	21.25% n=12

Notes: For mean price change, figure in parentheses is standard deviation; we cannot reject the hypothesis of equal mean in either case (t-test for independent samples). For price increase by increase in competition (bottom panel), we cannot reject the hypothesis of equal means across the four cells.

* The hypothesis of no association is rejected at the 10% significance level (chi-square test).

Firms that experienced an increase in competition from imports raised their output price on average by 18% while firms that did not experience such an increase raised their price by 25% (Table 8). This is a substantial difference in the expected direction, although not statistically significant. When we control for change in domestic competition, we still notice a difference between the two groups. Among the firms that experienced an increase in domestic competition, prices increased by 17.5% for firms that also reported increased import competition and by 25% for the firms that did not report an increase in import competition. Similarly, firms that did not experience an increase in domestic competition increased prices by 16% if they also reported increased import competition but by 21% if they did not report an increase in import competition. Although our results are not significant, they suggest that an increase in import competition is more likely to constrain price increases than is increased competition from domestic firms (perhaps because domestic firms all face the same conditions and cost increases).

Competition Status

It is clear that the relationship between source of competition and pricing is complex, especially as many factors alter together (sources of competition change, tariffs and exchange rates have offsetting effects, etc.). To focus our discussion we classify all firms into one of two groups. Non-traded firms are those that report no competition or that the main source of competition is from domestic firms, traded firms are those that report the main source of competition as foreign firms (imports or in foreign markets) or they export. As the dichotomy is based on the main source of competition reported, it is imprecise. However, this distinction does have the merit of splitting the sample into two groups of reasonable size (for some statistical analysis). The characteristics of firms according to this classification are reported in Table 9.

Table 9 Characteristics of Traded and Non-Traded Firms

CHARACTERISTIC	*Within traded*			*TRADED*	*NONTRADED*	*ALL*
	Export	*Non-export*	*not known*			
INDUSTRY						
Food	1	1	0	2	8	10
Textiles	4	4	1	9	6	15
Wood	4	0	0	4	8	12
Paper	3	0	2	5	7	12
Chemicals	3	5	1	9	4	13
Metals	6	7	1	14	5	19
ALL	21	17	5	43	38	81
SIZE						
100 employees or less	6	9	2	17	28	45
101 or more	13	7	3	23	10	33
ALL	19	16	5	40	38	78
YEAR ESTABLISHED						
1984 or later	2	3	0	5	9	14
1978 to 1983	3	6	1	10	8	18
1967 to 1977	7	1	2	10	11	21
1966 or before	7	6	1	14	9	23
ALL	19	16	4	39	37	76
LEGAL STATUS						
Parastatal (partial)	11	5	1	17	6	23
Other	9	12	4	25	31	56
ALL	20	17	5	42	37	79
INVESTMENT						
Sustained	14	7	4	25	7	32
not sustained	7	10	1	18	31	49
ALL	21	17	5	43	38	81

Table 9 continued:

CHARACTERISTIC	*Within traded*			*TRADED*	*NON-TRADED*	*ALL*
	Export	*Non-export*	*not known*			
FOREIGN INVOLVEMENT						
Firms with	11	10	3	24	12	36
Firms without	8	6	2	16	25	41
ALL	19	16	5	40	37	77
FOREIGN OWNERSHIP						
Firms with some	7	6	1	14	3	17
Firms without	10	10	4	24	35	59
ALL	17	16	5	38	38	76
FOREIGN-HELD EQUITY						
Average in %	31	9	0	17	6	12
(Std dev)	(33)	(18)	(0)	(27)	(23)	(26)
Number of firms	10	10	3	23	19	42
IMPORTED INPUTS						
Imports some raw material	15	9	4	28	14	42
Imports no raw material	4	7	1	12	22	34
ALL	19	16	5	40	36	76
IMPORTED INPUTS						
Average in %	48	41	23	42	26	35
(Std dev)	(40)	(43)	(43)	(41)	(39)	(41)
Number of firms	19	16	5	40	36	76

Notes: A firm has some foreign ownership if a positive amount of equity is foreign-held or if the owner reports a country of origin other than Tanzania. A firm has some foreign involvement if it reports some foreign ownership or if its owner reports one nationality other than Tanzanian or an ethnic origin other than African.

Source: authors computations from survey data.

About half the sample (43 out of 81 firms) is classed as traded, and half of these (21 firms) export. Large firms are more likely to produce traded goods, as are parastatals and firms that sustain investment. Traded firms are also more likely to have foreign ownership (14 traded firms report some foreign ownership, compared to three non-traded firms). Forty-two firms responded to the question on the percentage of equity held by foreigners (some of these, of course, reported the figure as zero). On average, 17% of equity is foreign-held for traded firms compared to six per cent in non-traded firms; exporting firms reported 31% foreign-held equity on average. Finally, we can note that 70% of traded firms (and almost 80% of exporters) use imported raw materials, compared to about 40% of non-traded firms. Furthermore, imported materials are 42% of inputs on average for traded firms (48% for exporters) but 26% of inputs for non-traded firms. Putting these results another way, non-traded firms are more likely to be small and private locally-owned.

We also consider a category of foreign involvement. Where the information is available, this includes firms that report some foreign ownership or the owner is not African-Tanzanian (i.e. reports a nationality other than Tanzania or is Tanzanian but not of African ethnic origin). Sixty per cent of traded firms report foreign involvement (compared to 37% with some foreign ownership); 32% of non-traded firms report foreign involvement (compared to only eight per cent with some foreign ownership). This is useful to capture the size of the ‘indigenous capitalist class’, those firms reported as owned by Africans, which accounts for 53% of all firms. Twice as many traded firms report foreign involvement as do non-traded firms.

For our analysis, some foreign ownership is of greater interest as this may be more closely related to performance indicators. We can note that the number of firms with some foreign ownership is quite evenly spread across industry sub-sector, size category and age. Two of the 17 government-owned firms have some foreign-held equity while three of the four firms with mixed public and private ownership report some foreign ownership; about a third of the firms with some foreign ownership also have some government ownership. About two-thirds of firms with some foreign ownership sustained investments, compared to half of firms with no foreign ownership.

Table 10 Competition, Export and Foreign Ownership Status

	some foreign ownership	*no foreign ownership*	*All*
Traded	14	24	38
Column %	82%	41%	50%
Non-traded	3	35	38
Column %	18%	59%	50%
Total	17	59	76
Exporters	7	10	17
Column %	44%	18%	24%
Non-exporters	9	46	55
Column %	56%	82%	76%
Total	16	56	72
of which:			
Exports out of Africa	3	7	10
Column %	43%	70%	59%
Exports within Africa	4	3	7
Column %	57%	30%	41%
Total	7	10	17

Note: calculated by authors from survey responses. Figures are number of firms.

Table 11 Main Source of Financing and Ownership

Financing of start-up capital			
With some foreign ownership		*With no foreign ownership*	
1- investment by a parent company	50.0 %	1- subscription by shareholders	26.6 %
2- subscription by shareholders	35.7 %	2- personal savings	22.2 %
3- personal savings	14.3 %	3- investment by a parent company & domestic bank loan & other unspecified sources	13.3 %
Remaining sources	0%	Remaining sources	24.6 %

	Financing of 1993 investments		
	with some foreign ownership	*with no foreign ownership*	*all*
Personal savings	7.7	17.2	14.3
Company earnings	61.5	55.2	57.2
Domestic bank loan	15.4	6.9	9.5
Foreign bank loan		3.4	2.4
Other (unspecified)	15.4	17.2	16.6
total	100	100	100
number of firms	13	29	42

Note: Figures relate to percentage of the firms using the given source as main source. Only firms with 100% of financing accounted for are included. Figures may add up to more than 100% if two sources are used equally as the main sources.

Tables 10 and 11 provide more detailed information. Table 10 shows that 82% of firms with some foreign ownership are traded, compared to 41% of firms without foreign ownership. Furthermore, 44% of firms with some foreign ownership export, compared to 18% of firms without foreign ownership. Firms with some foreign ownership are far more likely to produce traded goods, but no more likely to export. Firms with no foreign ownership are more likely to produce non-traded goods and far more likely not to export. It is perhaps surprising that firms without foreign ownership are the more likely to export outside of Africa. One explanation is that foreign firms invest to gain access to the African market (although the numbers of firms for which data are available are too few for proper analysis).

There is a significant difference in the source of start-up capital (Table 11). Fifty per cent of firms with some foreign ownership report investment by a parent company as the main source of start-up capital, and a further third report subscription by shareholders. The latter accounts for 27% of start-up finance for firms without foreign ownership, and investment by a parent is a relatively minor source; personal savings are an important source. The distinction is less pronounced when we consider the source of funds for investment, although personal savings are again far more important for firms without foreign ownership.[5]

IV CONFIDENCE, POLICY EXPECTATIONS AND INSULATION

In this section we investigate business confidence and policy expectations as represented by responses to questions on expected changes in the level of economic variables, such as inflation and business tax rates, and expected changes in policies, such as the Labour Code and import tariff schedule. We construct confidence scores

5 The percentage of firms without foreign ownership reporting personal savings as a source of funds may appear low. Often, respondents will not report personal savings as they may fear having to reveal where these savings came from. In terms of financing for investment, other (unspecified) is likely to comprise mostly savings.

based on whether, in respect of a specific economic variable, firms on average expect the level to increase or decrease (within the next year). We distinguish between 'local' variables, which should not have an effect on trade (although they do affect the competitiveness of local firms), and 'open' variables, such as tariffs or the exchange rate, which affect cross-border transactions. We then relate confidence scores to firm characteristics. When investigating policy changes we focus on whether or not the firms feel 'insulated' from expected changes in the policies (i.e. will the changes affect their performance).

Business Confidence

In the survey, firms were presented with a list of ten variables and asked to indicate whether they expected the variable to have increased (relative to the current value) one year from now and three years from now. The variables and responses are reported in Table 12. The findings reported are for one-year expectations (the answers for three-year expectations were broadly similar but less complete and less consistent). One variable (employment) can be considered an indicator of expected firm performance. Overall, firms are quite evenly spread in their expectations on this, with a slight balance towards employment falling. We can note that parastatals are more likely to expect a decline in employment than firms in general, which may reflect expectations on privatisation.[6] The other variables are inputs related to policy. Most are easy to interpret (bank lending rates, tax rates, inflation). It is not obvious how to interpret responses to the exchange rate. We assume that if respondents expect the exchange rate to increase they mean that they expect devaluation (number of shillings to the dollar increases). This is a reasonable interpretation given that the currency had been devaluing for almost ten years.

Our indicator of overall confidence on each variable is the mean score. The mean score is based on the direction of change expected (averaged over all respondents): a positive value implies an expectation of an increase in the variable, a value of 0 implies no change, and a negative value implies a decrease. A clear majority of firms expect

6 Evidence in Blanc (1997: 28) shows that the mean number of employees in parastatal firms fell significantly between 1993 and 1996, from almost 350 to just under 100. Mean employment fell by a similar proportion overall, and fell in all ownership categories except private, foreign owned firms.

the inflation rate, exchange rates, bank lending rates and duties on consumer imports to increase; the mean score on all these variables is greater than 0.4, and as high as 0.75 for the exchange rate. On balance, omitting those expecting no change, a majority of firms expect business taxes, duties on imported inputs and, less so, personal taxes to increase. The mean scores for these variables are all positive although, in the case of personal taxes, only slightly so (a mean score as low as 0.12 suggests an average expectation of no change). Export duties are expected to fall on balance (although a clear majority expect no change).

Table 12 Expectations and Business Confidence

	% firms expecting value to be				
variable	Lower %	Unchanged %	Higher %	*N*	mean score*
number of employees	30	46	24	63	-0.06
local bank lending rates	16	24	60	50	0.44
official exchange rate	8	9	83	53	0.75
parallel exchange rate	7	17	76	46	0.70
business tax rates	9	43	48	54	0.39
personal tax rates	16	55	29	49	0.12
inflation rate	8	17	75	52	0.67
import duties on inputs	14	46	41	44	0.27
tariffs on consumer goods	10	24	66	41	0.56
export duties	26	61	13	31	-0.13

Notes: All figures rounded to nearest percentage point. Question asked is: What is the most likely level of [variable] in one year from now compared with now?

- A value of 1 is assigned to ‘higher’, a value of 0 is assigned to ‘unchanged’, and a value of -1 is assigned to ‘lower’. Then the mean for all firms is calculated.

In general, an increase in the variable (positive mean score) can be interpreted as firms expecting a deterioration in the policy environment; firms would not be expected to favour an increase in lending rates, inflation or taxes. Employment is an obvious

exception (a negative value represents unfavourable expectations). We interpret a devaluation (positive mean score for the exchange rate) as an unfavourable expectation: although some firms competing with foreign firms (imports or exports denominated in given world prices) would benefit from devaluation, in general it suggests macroeconomic instability. Similarly, increased import duties would benefit firms competing with imports, although those using imported inputs would suffer and prices facing owners as consumers would increase.

Overall, there is a pronounced pessimism (consequently too few firms can be classed as confident to be analysed statistically as a group). We can note that the prevailing pessimism is not reflected in employment expectations.[7] The least pessimistic expectations are regarding export duties, although we can note that these were actually quite low by the time of the survey. The failure of the government to achieve a degree of macroeconomic stability, despite reforms since the mid-80s (Morrissey, 1995), is evident in the pessimistic expectations regarding inflation and devaluation. The evidence on tariffs is interesting, as the government was supposed, in terms of agreements with the World Bank, to be continuing a policy of import liberalisation. Most quantitative restrictions on imports had been removed by 1992 (a possible explanation for the increased competition form imports reported earlier), but domestic business had lobbied the government to retain tariff protection, while arguing for reduced tariffs (or increased exemptions) on imported intermediate inputs. This seems to be reflected in the expectations.

7 A similar pattern of expectations is reported in Blanc (1997: 125).

Table 13 Business Confidence on 'Local' Variables

Table 14 Business Confidence on ‘Open’ Variables

We now investigate the relation between expectations and firm characteristics; details are reported in Tables 13 and 14. Differences in expectations may arise due to differences in information. For example, parastatals might be better informed due to their closer ties to the government. Alternatively, it could be that large firms have different expectations regarding a policy due to their lobbying power (this may be especially true of parastatals that feel more favourably treated). Differences might also be due to differences in attitudes. For example, the firms that export and/or sustain investment may do so because they have more optimistic expectations, at least regarding their competitiveness. Furthermore, traded firms are likely to be affected by devaluation and changes in tariffs in a different way than non-traded firms. We define 'optimism' and 'pessimism' as relative concepts, given that firms are pessimistic overall, and obtain some significant differences in expectations according to firm characteristics.

Confining attention first to 'local' economic variables (Table 13), we find that parastatals are relatively more optimistic than their counterparts (not parastatals). The differences are statistically significant for lending rates, business taxes (regarding both of which parastatals, that expect a decrease, may be favourably treated) and inflation, but is also evident for personal income tax. Large firms are significantly more optimistic than not-large firms with respect to lending rates, business tax rates and inflation. As parastatals tend to be large firms[8], it is not clear how independent the two effects are (we could not use cross-tabulation to separate the effects as some cells had too few observations for statistical significance).

There are other differences, although not statistically significant. Firms that sustain their investments appear less pessimistic than their counterparts with respect to lending rates, business taxes and inflation. The same is true of exporters relative to non-exporters. Results are mixed in comparing traded and non-traded firms, although the latter tend to be more pessimistic regarding lending rates and personal taxes. If there is a pattern, it is that exporters (a sub-set of traded) and those that sustain investment (which may be exporters), are the least pessimistic (these, of course, are also more

[8]Sixty-eight per cent of the parastatals are large firms while only thirty-two per cent of the non-parastatals are large.

likely to be large and/or parastatal. Although we restrict attention to 'local' variables, traded firms *per se* are not less confident. A plausible interpretation is that it is size and public ownership which influence expectations, such that traded firms that are parastatals or relatively large will tend to be more confident.

Turning to 'open-economy' variables (Table 14), we again find that parastatals are relatively more optimistic than their counterparts, significantly so regarding tariffs on inputs and export duties (if decline in such taxes implies relatively less pessimism). Large firms are more optimistic than not-large firms, but the difference is significant only for the exchange rate. Exporters are more optimistic about export duties, which they expect will fall, than non-exporters, but are significantly more pessimistic about the exchange rate (they all expect devaluation, which may reflect their better information and greater concern). We reiterate that devaluation may benefit exporters: if the world price is given in hard currency (e.g. dollars), devaluation increase what they receive in domestic currency (increasing the profit margin).

Firms that sustain investment are slightly unusual: they are pessimistic (more likely to expect an increase) regarding tariffs on inputs, but optimistic regarding export duties and exchange rates. In general, traded firms are more pessimistic than non-traded, but the difference is significant only for tariffs on inputs. It appears that traded firms expect an increase in tariffs on inputs. The same is true for firms that sustain investment (significantly) and for exporters and larger firms (but not significantly). In this context, it is surprising that the reverse is true for parastatals. It would appear that privately owned traded firms anticipated an increase in tariffs. As it transpired, their expectations were wrong, as tariffs were reduced in subsequent years. The more important issue, however, is not what was expected but how firms perceived the effect on them.

Expectations of Government Policy

Respondents in the survey were given a list of eight policies and asked whether they expected important changes in these policies and whether these changes would affect their output. A full list of the policies and the responses, categorised by specific firm

characteristics, are given in Tables 15-19. Some policies had a direct correspondence to the economic variables discussed above (exchange rate, bank lending, tariffs, business and personal taxes, and regional trade barriers). Unfortunately, about half of the firms had no definite policy expectation (i.e. they either did not respond or replied 'can't tell' rather than replying yes or no). Thus, we had insufficient observations to relate confidence to policy expectations.[9]

Among the firms that have definite policy expectations a small majority, between 52% and 65%, expect important changes in the Labour Code, Investment Code, Exchange Rate Policy, Import Tariff Schedule, Business Tax Schedule, and Personal Income Tax Schedule within the next year. In the case of Bank Lending Policy, the proportion of firms that expect changes is higher (79%). Regarding policies for Reductions in Regional Trade Barriers, only six of the fifteen firms that gave a definite answer expect important changes in the policy (as the sample is so few, results have been omitted from the tables). There was information on the expected direction of a policy change, and on whether the change would increase or reduce output. However, the numbers of respondents according to the direction of change and effects is too small for statistical analysis.[10]

We use the notion of 'insulation' to refer to cases where firms believe the policy will change, but that they will not be affected (hence are insulated). As for confidence, we can identify certain open policies that affect cross-border transactions – exchange rate, tariffs and regional trade barriers. We would expect that traded firms are less likely than non-traded to be insulated from these policies. The evidence is in Table 15, and in most cases a larger proportion of traded firms report that they will be affected. The only significant difference is in personal income tax, a local policy, where traded firms are more insulated (perhaps, in this case, because they are less likely to be small, private locally-owned firms). Regarding the open policies, non-traded firms appear more likely to be affected by changes in tariffs. This may reflect expectations about

9 In general, the rate of agreement exceeded 50% for most pairwise cases, and was highest at 65% for lending. In the latter case, 34 firms responded to both the questions, expectations regarding bank lending rates and Bank Lending Policy. Two firms responded that both (rates and policy) would remain the same (no change), six that both would be 'lower' and 14 that both would be 'higher'.

10 In most cases, few if any (rarely more than one) firms believed policy changes would lead to increased output.

increased competition, given that almost 40% of firms competing locally reported increased competition from imports (Table 8), although the differences are not significant. We can note that although a higher proportion of the non-traded firms that expect a change in tariffs believe output will be affected, a larger number of traded firms believe that changes in tariff policy will affect output. Furthermore, relative to the total sample size (Table 9), a greater proportion of traded firms than non-traded firms expect changes in the policy (32% as against 18%) while similar proportions expect the changes to affect output (see Table 20).

Exporters appear to be more insulated from changes in policies than non-exporters (Table 16). The proportion of exporters that do not expect to be affected by changes is greater than the proportion of non-exporters unaffected for all policy areas, although the difference is only significant for Personal Income Tax and Exchange Rate Policy. As exporters tend to be large and/or parastatals, it is unsurprising they feel relatively unaffected by income tax. That exporters are unaffected by the exchange rate is unsurprising if they are price takers on the world market. That non-exporters are apparently affected is more surprising; it may be that they compete with imports, or use imported inputs. The general degree of insulation may be because exporters are more competitive as they sell on foreign markets and consequently are better prepared to withstand changes in policy. Alternatively, the lack of an effect on output might be due to a difference in the nature of the changes expected; exporters may foresee less drastic changes than the non-exporters (this is perhaps unlikely as exporters are, in general, more likely to expect policy changes than non-exporters).[11]

11 This data is not reported, although it can be computed from data in Tables 16 and 5.

Table 15 Policy Insulation by Competition Status

	expect important changes in the policy one year from now	
POLICY	*change does not affect output*	*change affects output*
a) Labour Code		
non-traded	4 44%	5 56%
traded	4 31%	9 69%
b) Investment Code		
non-traded	5 46%	6 54%
traded	4 33%	8 67%
c) Exchange Rate Policy		
non-traded	5 56%	4 44%
traded	8 53%	7 47%
d) Bank Lending Policy		
non-traded	9 53%	8 47%
traded	8 38%	13 62%
e) The Import Tariff Schedule		
non-traded	2 29%	5 71%
traded	6 43%	8 57%
f) The Business Tax Schedule		
non-traded	5 46%	6 54%
traded	6 46%	7 54%
g) Personal Income Tax Schedule**		
non-traded	4 40%	6 60%
traded	10 71%	4 29%

** The hypothesis of no association is rejected at the 15% significance level (chi-square tests; small sample reservations apply).

Table 16 Policy Insulation by Export Status

POLICY	*expect important changes in the policy*	
	does not affect output	*affects output*
a) Labour Code		
does not export	4 27%	11 73%
exports	3 50%	3 50%
b) Investment Code		
does not export	5 33%	10 67%
exports	4 50%	4 50%
c) Exchange Rate Policy**		
does not export	6 40%	9 60%
exports	6 75%	2 25%
d) Bank Lending Policy		
does not export	10 40%	15 60%
exports	6 50%	6 50%
e) The Import Tariff Schedule		
does not export	3 23%	10 77%
exports	4 57%	3 43%
f) The Business Tax Schedule		
does not export	8 40%	12 60%
exports	3 60%	2 40%
g) Personal Income Tax Schedule*		
does not export	7 44%	9 56%
exports	7 87.5%	1 12.5%

* The hypothesis of no association is rejected at the 5% significance level or
** rejected at the 10% significance level (chi-square tests; small sample reservations apply).

Table 17 Policy Insulation by Investment Status

POLICY	*expect important changes in the policy*	
	does not affect output	*affects output*
a) Labour Code		
does not sustain investment	4 31%	9 69%
sustains investment	4 44%	5 56%
b) Investment Code		
does not sustain investment	5 36%	9 64%
sustains investment	4 44%	5 56%
c) Exchange Rate Policy		
does not sustain investment	7 50%	7 50%
sustains investment	6 60%	4 40%
d) Bank Lending Policy		
does not sustain investment	10 40%	15 60%
sustains investment	8 57%	6 43%
e) The Import Tariff Schedule		
does not sustain investment	4 31%	9 69%
sustains investment	4 50%	4 50%
f) The Business Tax Schedule		
does not sustain investment	8 44%	10 56%
sustains investment	3 43%	4 57%
g) Personal Income Tax Schedule		
does not sustain investment	9 53%	8 47%
sustains investment	5 62.5%	3 37.5%

The hypothesis of no association cannot be rejected for any policy (chi-square tests; small sample reservations apply).

Table 18 Policy Insulation by Ownership

POLICY	*expect important changes in the policy*	
	does not affect output	*affects output*
a) Labour Code		
non-parastatal	5 33%	11 67%
parastatals	2 33%	3 67%
b) Investment Code*		
non-parastatal	8 53%	10 47%
parastatals	1 14%	4 86%
c) Exchange Rate Policy		
non-parastatal	8 53%	9 47%
parastatals	4 50%	2 50%
d) Bank Lending Policy		
non-parastatal	11 48%	15 52%
parastatals	5 36%	6 64%
e) The Import Tariff Schedule		
non-parastatal	5 33%	10 67%
parastatals	3 50%	3 50%
f) The Business Tax Schedule		
non-parastatal	7 44%	12 56%
parastatals	4 44%	2 56%
g) Personal Income Tax Schedule		
non-parastatal	8 47%	9 53%
parastatals	6 75%	1 25%

* The hypothesis of no association is rejected at the 10% significance level (chi-square tests; small sample reservations apply).

Table 19 Policy Insulation by Size

POLICY	*expect important changes in the policy*	
	does not affect output	*affects output*
a) Labour Code		
not-large firms	3 23%	10 77%
large firms	5 56%	4 44%
b) Investment Code		
not-large firms	5 36%	9 64%
large firms	4 44%	5 56%
c) Exchange Rate Policy		
not-large firms	6 50%	6 50%
large firms	7 58%	5 42%
d) Bank Lending Policy		
not-large firms	9 43%	12 57%
large firms	8 47%	9 53%
e) The Import Tariff Schedule*		
not-large firms	2 20%	8 80%
large firms	6 54.5%	5 45.5%
f) The Business Tax Schedule		
not-large firms	5 38.5%	8 61.5%
large firms	6 50%	6 50%
g) Personal Income Tax Schedule		
not-large firms	8 53%	7 47%
large firms	6 60%	4 40%

* The hypothesis of no association is rejected at the 10% significance level (chi-square tests; small sample reservations apply).

Investment status does not appear to have any relationship to policy insulation (Table 17). In respect to virtually all policies, sustained investors tend to be more insulated than non-investors (i.e. the proportion of investors affected by policy change is lower than the proportion of non-investors affected), but the difference is never significant. The situation for parastatals is more mixed, but significant only in respect of the Investment Code (Table 18). As this Code relates to privatisation, it is not surprising that parastatals feel sensitive. As the Code is also concerned with attracting foreign investors, it is not surprising that the majority of firms, parastatals or not, believe that output will be affected. While large firms are generally more insulated than smaller firms in respect of all policy areas, this is only significant for tariffs (Table 19). Although large firms are evenly split about whether changes in tariffs will affect output, a clear majority of smaller firm believe they will be affected. There is no obvious reason for this, especially as large firms seem more likely to expect an increase in tariffs. If smaller firms are more likely to expect tariff reductions, they are more likely to expect increased competition from imports, which may explain the result.

Summary

Our principal interest was to see if confidence indicators and policy insulation are related to competition status. In this regard, the survey does not yield clear results. There is no particular reason why firms producing non-traded goods should be more or less confident than firms producing traded goods in general. There may, however, be differences in expectations towards local and international policies according to whether a firm's output is traded or non-traded. We found no statistically significant difference in the confidence scores, except that traded firms were more likely to expect tariffs on inputs to increase. As traded firms use relatively more imported inputs than non-traded firms, this is interpreted as pessimism on the part of traded firms (the expectation, it transpired, was incorrect). The results in general suggest that traded firms are less pessimistic than non-traded firms with respect to local variables, lending rates and income tax rates, but marginally more pessimistic regarding open economy variables (tariffs, export duties and exchange rates). The pattern of results, albeit insignificant in most cases, is as would be expected.

Table 20 Number of Forms Affected by Selected Policy Changes

POLICY TYPE	*TRADED*	*NON-TRADED*	*ALL*
LABOUR CODE			
change would affect output	9	5	13
would not affect output	4	4	9
ALL	14	8	22
INVESTMENT CODE			
change would affect output	8	6	14
would not affect output	4	5	9
ALL	12	11	23
EXCHANGE RATE			
change would affect output	7	4	11
change would not affect output	8	5	13
ALL	15	9	24
BANK LENDING			
change would affect output	13	8	21
would not affect output	8	9	17
ALL	21	17	38
IMPORT TARIFFS			
change would affect output	8	5	13
would not affect output	6	2	8
ALL	14	7	21
BUSINESS TAX			
change would affect output	7	6	13
would not affect output	6	5	11
ALL	13	11	24
PERSONAL INCOME TAX			
change would affect output	4	6	10
would not affect output	10	4	14
ALL	14	10	24

Note: authors' computations from survey data.

Table 20 shows that, for all policies except personal income tax, traded firms are more likely to report that a policy change would affect output, relative to non-traded firms

and relative to the number of traded firms that say output will not be affected. Non-traded firms tend to be more insulated from Labour Code, Investment Code, exchange rate and bank lending policies (i.e. a lower proportion respond that policy changes will affect their output) than traded firms. Furthermore, traded firms are more likely to anticipate changes in both local and open-economy policies (a greater number tend to expect changes, as can be seen from Table 20, even compared to sample size, Table 9). Traded firms appear more insulated regarding personal income taxes, which is consistent with their greater size on average; there is no difference regarding business tax policy. Whilst a greater proportion of non-traded firms that anticipate changes in tariffs report that output will be affected, perhaps reflecting increased competition from imports, a greater number of traded firms report that output will be affected. These findings suggest that there is a relationship between expectations regarding economic policies and competition status, and that it is traded firms who appear most concerned about trends in economic variables and policy changes.

V CONCLUSION

Tanzania has implemented a significant degree of trade liberalisation over the past decade, and the survey reported here was during the liberalisation period. We now consider if the results from analysing the survey, limited as they may be, can inform our understanding of how liberalisation affects manufacturing firms. There is no clear *a priori* answer to the question of whether economic reform has a positive or negative impact on the manufacturing sector. The effects in a specific country will depend on the composition of manufacturing, the nature of reforms and the mechanisms through which different types of economic reform affects the manufacturing sector.

Our particular concern is with trade liberalisation (trade policy having previously been highly protective) and related real exchange rate devaluation (the real exchange rate typically having been overvalued). The latter should include liberalisation of the exchange rate regime so that, for example, importers can gain access to foreign exchange more easily and exporters can retain foreign exchange earnings. These policy measures can impact on the manufacturing sector through various channels.

Considering trade liberalisation, measures to liberalise imports (through reduced protection or relaxing restrictions on imports) will make them cheaper and/or more easily available. This is clearly beneficial to manufacturing firms using such imports as inputs in their production, and equally clearly represents increased competition for those producing import substitutes as outputs. These import liberalisation measures themselves also reduce implicit taxation of exports, thereby increasing incentives to export. Other measures to increase incentives to export, such as removing export taxes where they existed, can also be expected to have a beneficial impact on exports.

The impact of exchange rate devaluation on the industrial sector is also ambivalent, perhaps more so. Assuming that a real devaluation is achieved, the price of tradable goods (importables and exportables) will rise relative to non-tradables. Firms producing tradable goods (i.e. exports or import substitutes, comparable to what we have termed traded firms) should benefit if the price changes are passed on to them; those producing non-tradables (comparable, though not necessarily identical, to our non-traded firms) are likely to lose. However, it is also important to consider the impact on imported inputs. Sectors which use imported inputs obviously now pay more for their imports, which reduces the benefit of the devaluation for firms producing tradable goods or increases the adverse effect if the firms use imported inputs to produce non-tradable goods. The overall impact will obviously vary from sector to sector and from country to country.

While these may be the aspects of trade liberalisation most directly affecting the manufacturing sector, other measures involved in economic reform programmes can also be expected to have an impact. Privatisation is one factor, clearly important to parastatals. Fiscal and monetary restraint are common components of economic reform programmes involving elements of stabilisation, and these will most likely have an adverse effect on the manufacturing sector in the short-term. Monetary and fiscal contraction generally serve to reduce demand; in the public sector they are likely to reduce budget funding available to parastatals and may increase the cost of borrowing for private firms. Such impacts are likely to be adverse, though if they ultimately lead to the achievement of macroeconomic stability this may have an offsetting positive impact in the medium to long term.

Another common component of many economic reform programmes is financial reform, which aims to increase the efficiency with which the financial sector operates, especially where this was previously subject to repression. Financial liberalisation should ease the access of firms to borrowing in order to finance new investment, though it may also result in higher interest rates. The combined effect on investment (where financing by external borrowing is important) is ambivalent.

There are many other policy measures commonly involved in economic reform programmes that will also have an indirect impact on the manufacturing sector. The above hopefully serves to illustrate the complexity of the issue, as well as to identify the most important channels through which reform can impact on the manufacturing sector. It is important to recognise that it is in the nature of economic reform that there will be structural changes in the economy; some sectors are likely to contract while others expand. This can be beneficial from the point of view of economic efficiency (although such gains tend to be long-run).

While the survey reported on here is a snap-shot, so we are unable to look at performance over time (and how this may have been affected by liberalisation), we can comment on the perceptions and expectations of firms. Our classification of firms into those producing traded and non-traded goods facilitates linking the survey results to the points raised above. Liberalisation should have the greatest impact on traded firms, beneficial for those exporting but threatening for those competing with imports. Given that devaluation and import liberalisation can have off-setting effects on the price of imports, the net impact on firms using imported inputs is less clear.

Domestic firms are the main source of competition for most firms in our survey. Foreign competitors in export markets are very exceptionally the main source of competition. This is not surprising given how few firms specialise in exporting (the 23% of the sample who are exporters export on average 20% of their output). One implication is that the beneficial effects of liberalisation for exporters will only have a marginal impact on Tanzanian manufacturing, although clearly a few firms benefit. Exporting firms do not appear to have been constrained in their ability to increase price (perhaps because of devaluation). Most firms reported an increase in competition from their main competitors, and this is more likely to constrain the ability to increase

price of firms competing with imports than of firms competing locally. Furthermore, a significant proportion of firms report increased competition from imports (including many firms that did not nominate imports as their principal source of competition). This is as would be expected during liberalisation.

Overall, firms expect economic indicators (inflation, lending rate, exchange rate) and taxes to increase, except for duties on exports. The results in general suggest that traded firms are less pessimistic than non-traded firms with respect to local variables, but marginally more pessimistic regarding open economy variables. Traded firms are more likely to anticipate changes in both local and open-economy policies, and in general feel less insulated from policy changes. This is at least consistent with the view that firms producing traded goods would be more concerned with economic policy, especially trade taxes and the exchange rate. Exporters are more likely than non-exporters to feel insulated from policy changes. This is consistent with liberalisation benefiting exporters, but only having a marginal effect. As exporters tend to be larger firms that sustain investment, they may be in a better position than other firms to withstand adverse economic trends.

One predicted general gain from economic liberalisation is that it should encourage investment. We cannot comment on trends in investment, although we can offer some observations. Firms producing traded goods are more likely to have sustained investment; three-quarters of the firms that sustained investment were traded. Similarly for exporters; two-thirds of exporters sustained investment. Company earnings were the single most important source for financing investment. As trade liberalisation should improve export opportunities, earnings of exporters should increase thereby enhancing their ability to sustain investment. The evidence on price changes is consistent with this. The situation of traded firms that compete with imports is more ambiguous; the threat of increased import competition can to some extent be off-set by cheaper imported inputs. Consequently, it is not surprising that survey results were somewhat mixed in this regard.

Liberalisation should also increase the incentives for new investment, manifested in privatisation and foreign investment. The survey evidence doers not permit us to comment directly on this, although some inferences can be drawn. In Tanzania, unlike

other African countries, parastatals tend to export in a greater proportion than private firms (in the sample), and tend to be older larger firms. It is likely that firms are parastatal (i.e. were placed in public ownership) because they are in an export sector, rather than export because they are parastatals. This suggests that parastatals, at least those that export, would prove attractive to foreign investors. We can note that parastatals are less likely than non-parastatals to feel insulated from changes in the Investment Code, perhaps because it relates to privatisation. The process of privatisation has been slow in Tanzania, but we would expect a likely way it can proceed is through foreign investors taking equity shares in parastatals. In this regard, we can note that about a third of the firms in the sample with some foreign ownership are parastatals, and foreign investment is more common in older firms (that are more likely to be parastatals). Furthermore, foreign investment is predominantly in traded firms; about 80% of firms in the sample with foreign ownership are traded, and about half of these export.

The survey evidence reported here, while limited, does conform to broad expectations. Trade liberalisation has been associated with a perceived increase in competition from imports, and firms competing with imports have been constrained in their ability to increase prices. Traded firms exhibit some concern (generally more so than non-traded firms) about trends in economic variables and how changes in policy may affect them. Exporters appear somewhat more confident than non-exporters; they are less likely to expect increases in inflation, lending rates and taxes, more likely to expect devaluation (which may benefit them), and marginally less likely to feel that policy changes will affect them. The perceptions of Tanzanian firms are consistent with the changing policy environment that one anticipates during trade liberalisation.

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