Trade liberalization and technology acquisition in the manufacturing sector: Evidence from Nigeria

By

Ayonrinde Folasade

National Centre for Economic Management

and Administration (NCEMA)

Ibadan

and

Olayinka Ola University of Ibadan

AERC Research Paper 117
African Economic Research Consortium, Nairobi
August 2002

© 2002, African Economic Research Consortium.

Published by: The African Economic Research Consortium

P.O. Box 62882 Nairobi, Kenya

Printed by: Printed by:

Majestic Printing Works

P.O. Box 42466 Nairobi, Kenya

Table of contents

Abstr List o	ract of Tables	
1.	Introduction	1
2.	An overview of the Nigerian manufacturing sector	4
3.	Empirical results	21
4.	Policy implications and conclusions	39
Notes References Appendix		41 43 46

List of tables

1	Characteria of the meanifest wine contouring Niconia	1
1.	Structure of the manufacturing sector in Nigeria	4
2.	Trends in import composition by major groups, 1986–1996	6
3.	Exports by economic sectors in selected years	7
4.	Composition of manufactured exports	7
5.	Selected features of the selected subsectors, 1996	8
6.	Trade reforms in Nigeria under the structural adjustment programme	12
7.	Indicative effective rates of protection in Nigeria, 1988–1994	14
8.	Nominal protection rates accorded by customs and	
	excise tariffs	14
9.	Sectoral distribution of questionnaire respondents	22
10.	Location distribution of questionnaire respondents	22
11.	Classification of industry by scale of operation	23
12.	Alternative measures of technology development indicator (TDI)	24
13.	Factors responsible for the choice of technology	26
14.	Number (percentage) of firms that reported technical support at start-up	27
15.	Technological linkages by subsector	27
16.	Percentage of firms that carried out technical changes	28
17.	Technological activities by industry	29
18.	Impact of trade liberalization on cost of inputs	29
19.	Perception of degree of competition during trade reforms	30
20.	Perceptions of degree of competition after trade	
	liberalization (subsector and size comparison)	30
21.	Perceptions of the impact of liberalization on firm profits	31
22.	Perceptonss of changes in output during liberalization by	
	subsector	31
23.	Specific policy reasons for the trend in output performance	32
24.	Perceptions of tariffs on imported inputs and competitive	
	imports	32
25.	Trade liberalization and composition of inputs	32
26.	Impact of trade reforms on access to technology imports	33
27.	Firms' perceptions of most important incentives under trade reforms	33
28.	Firms' perceptions of the impact of tariff policy on technology decisions	34
29.	Strategy implemented in response to tariff policy by subsector	34
30.	Strategy implemented in response to tariff policy by firm size	35

31.	Correlation matrix among alternative measures of technology	
	development indicator	35
32.	Determinants of technology development indicator under	
	liberalization (multinomial logit) (TD12)	36
33.	Determinants of technology development indicator under	
	liberalization (multinomial logit) (TD13)	37

Abstract

This study reports the impact of recent trade liberalization policies in Nigeria on the acquisition of technology by the Nigerian manufacturing sector. The report uses survey data from 94 manufacturing firms covering three sectors: textiles, chemicals and light engineering. The results suggest that the impact is limited. Some elements of trade liberalization such as the abolition of import licensing and lower tariffs increased the availability of competing goods and facilitated firms' access to imports. However, the increasing competitive environment is yet to generate remarkable improvement in the technological activities of the firms. The respondents acknowledged that the rapid depreciation of the naira following the adoption of the liberalization policy has raised the cost of capital goods. Most of the firms agreed with the broad thrusts of government liberalization policies, hence it is important for the government to consolidate and maintain the credibility of these policies.

TRADE LIBERALIZATION AND TECHNOLOGY ACQUISITION IN THE MANUFACTURING SECTOR

Ayonrinde Folasade Olayinka Ola

AFRICAN ECONOMIC RESEARCH CONSORTIUM

CONSORTIUM POUR LA RECHERCHE ECONOMIQUE EN AFRIQUE

AFRICAN ECONOMIC RESEARCH CONSORTIUM

P.O. BOX 62882 NAIROBI, KENYA

TELEPHONE (254-2) 228057 225234 215898 212359 332438 225087

TELEX 22480

FAX (254-2) 219308, 246708

E-MAIL: publications@aercafrica.org

WEB SITE: http://www.aercafrica.org

The principal objective of the African Economic Research Consortium (AERC), established in August 1988, is to strengthen local capacity for conducting independent, rigorous inquiry into problems pertinent to the management of economies in Sub-Saharan Africa.

In response to special needs of the region, AERC has adopted a flexible approach to improve the technical skills of local researchers, allow for regional determination of research priorities, strengthen national institutions concerned with economic policy research, and facilitate closer ties between researchers and policy makers.

Since its establishment, AERC has been supported by private foundations, bilateral aid agencies and international organizations.

SPECIAL PAPERS contain the findings of commissioned studies in furtherance of AERC's programmes for research, training and capacity building.

RESEARCH PAPERS contain the edited and externally reviewed results of research financed by the AERC.

It is AERC's policy that authors of Special and Research Papers are free to use material contained therein in other publications. Views expressed in the Special and Research Papers are those of the authors alone and should not be attributed to the AERC's sponsoring Members, Advisory Committee, or Secretariat.

Further information concerning the AERC and additional copies of Special and Research Papers can be obtained by writing to: African Economic Research Consortium, P.O. Box 62882, Nairobi, Kenya.