

Cambridge University Press

978-0-521-08401-7 - Industrialization in an Open Economy: Nigeria, 1945-1966

Peter Kilby

Frontmatter

[More information](#)

INDUSTRIALIZATION
IN AN
OPEN ECONOMY:
NIGERIA
1945-1966

Cambridge University Press

978-0-521-08401-7 - Industrialization in an Open Economy: Nigeria, 1945-1966

Peter Kilby

Frontmatter

[More information](#)

INDUSTRIALIZATION
IN AN
OPEN ECONOMY:
NIGERIA
1945-1966

PETER KILBY

Wesleyan University

CAMBRIDGE
AT THE UNIVERSITY PRESS
1969

Cambridge University Press

978-0-521-08401-7 - Industrialization in an Open Economy: Nigeria, 1945-1966

Peter Kilby

Frontmatter

[More information](#)

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi

Cambridge University Press

The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org

Information on this title: www.cambridge.org/9780521071567

© Cambridge University Press 1969

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 1969

This digitally printed version 2008

A catalogue record for this publication is available from the British Library

Library of Congress Catalogue Card Number: 69-11149

ISBN 978-0-521-07156-7 hardback

ISBN 978-0-521-08401-7 paperback

Cambridge University Press

978-0-521-08401-7 - Industrialization in an Open Economy: Nigeria, 1945-1966

Peter Kilby

Frontmatter

[More information](#)

TO *MARIANNE*

Cambridge University Press

978-0-521-08401-7 - Industrialization in an Open Economy: Nigeria, 1945-1966

Peter Kilby

Frontmatter

[More information](#)

CONTENTS

<i>List of Tables and Figures</i>	ix
<i>Acknowledgements</i>	xi
<i>Map: Nigeria 1966</i>	<i>facing page 1</i>
Introduction	1
PART 1	
1 Growth of the Nigerian Economy 1900–1966	7
2 The Market	26
PART 2	
3 From Trade to Manufacture: The Mechanics of Import Substitution	53
4 Import Substitution: Case Studies and Policy Implications	81
PART 3	
5 Utilizing Domestic Resources: Processing for Export	137
6 Utilizing Domestic Resources: Applied Industrial Research	182
PART 4	
7 The Supply of Labour	201
8 Education and Skill Formation	234
9 Industrial Relations and Wage Determination: Failure of the Anglo-Saxon Model	267
PART 5	
10 Indigenous Enterprise	309
PART 6	
11 Conclusion: A Strategy for Industrialization	345
<i>Appendices</i>	365
<i>Bibliography</i>	384
<i>Index</i>	392

Cambridge University Press

978-0-521-08401-7 - Industrialization in an Open Economy: Nigeria, 1945-1966

Peter Kilby

Frontmatter

[More information](#)

LISTS OF TABLES AND FIGURES

Tables

1	Selected economic indicators, 1913-1966	9
2	Gross domestic product, investment and export earnings	10
3	Sectoral output as a share of gross domestic product	11
4	Sectoral growth: real output and price level	12
5	Export of principal products	14
6	Small industry in fourteen Eastern Nigerian towns, 1961	18
7	Employment and output of firms employing ten or more - 1964	20
8	Total foreign investment, 1964	21
9	The composition of import demand	27
10	Commodity imports : major items	29
11	Consumer household expenditure patterns	30
12	Growth in freight traffic	37
13	The extent of the road transport network, 1963	38
14	The cost of transport 1930-1963	39
15	Tariffs, value added and investment priority	48
16	The technological threshold and import substitution	54
17	Imports by country of origin	63
18	The changing composition of imports - selected commodities	64
19	UAC's gross investment by sector, 1956-1964	68
20	Industrial investments of the United Africa Company	69
21	Industrial investments of John Holt & Company	71
22	The growth of domestic cigarette production	82
23	The structure of tobacco taxation	87
24	Sales and expenditures of the Nigerian Tobacco Company, 1959	94
25	The Nigerian brewing industry, 1966	97
26	Star beer: prices, output, profit	98
27	Distribution of gross income, Star Beer, 1964	99
28	Distribution of gross income, Nigerian cement industry, 1963	104
29	Nigerian textile imports, piece goods	109
30	Textile imports by country of origin	110
31	Quantity, unit-price and duty for principal cotton textile imports	111
32	Principal Nigerian textile manufacturers at year of start-up	114
33	The Nigerian textile industry, 1965	115
34	Financial structure of selected Nigerian textile firms	119
35	Labour efficiency in two textile factories	123
36	Cost of production per square yard	126
37	Comparative production costs of grey cloth	127
38	Textile prices and profit margins	128
39	Value added and the extent of protection in the Nigerian textile industry	130
40	Establishments employing ten or more engaged in export processing, 1964	138
41	World exports of palm oil	141
42	Palm grove rehabilitation in Eastern Nigeria	144
43	Number of screw presses and producer price of palm oil in Eastern Nigeria, selected years 1930-1963	148
44	Four palm oil processing techniques	151

Cambridge University Press

978-0-521-08401-7 - Industrialization in an Open Economy: Nigeria, 1945-1966

Peter Kilby

Frontmatter

[More information](#)

TABLES AND FIGURES

Table

45	Estimated total palm oil production	153
46	Edible palm oil purchases and ENDC output	155
47	Marketing board purchases of palm oil	157
48	Performance of ENDC pioneer oil mills, 1956-1964	160
49	Average operational data per cwt. of oil produced for four processing technologies, 1964	161
50	Average labour requirements per cwt. of oil extracted by screw-press	163
51	Producer export prices of palm oil, edible grade	165
52	Volume of groundnut crushing, 1951-65	171
53	Value-added in groundnut processing, Britain and Nigeria	173
54	Tariff protection for processing industries in the developed countries	180
55	Reported employment in establishments of ten or more	203
56	Nigerian population movements, 1952-3	205
57	Supply of labour	211
58	Absence and turnover in three firms (1959)	214
59	Distribution of absenteeism in the WNDC rubber crêping factory	214
60	Labour turnover in five firms	215
61	Urban income-expenditure patterns	220
62	Selected intertemporal productivity measures, WAIFOR plantation	227
63	Rubber crêping inter-firm productivity comparisons	229
64	Nigerian educational system	235
65	Educational enrolment ratios, 1960 and 1965	236
66	Primary and secondary school student wastage rates	238
67	External examination results	239
68	Teachers by qualifications	240
69	Enrolment in government Trade Centres and Technical Institutes and Technical Colleges	244
70	Annual salary ranges for selected occupations, January 1965	256
71	Skilled manpower projection	263
72	Employer survey of intermediate manpower requirements	265
73	The structure of Nigerian trade unions	271
74	Reported labour disputes	275
75	Minimum unskilled wage rates	279
76	Urban wages and national <i>per capita</i> income	281
77	Government salary structure, 1965	305
78	Loan recovery performance of the Colony Development Board and the Federal Loans Board	324
79	Entrepreneurs' education and occupational background by size of firm	339

Figures

1	Nigerian exports, 1900-1966	8
2	Infant industry and tariff utilization	50
3	Fluctuations in daily production: five rubber crêping firms, December 1959	231
4	Minimum-maximum hourly output: five rubber crêping firms, December 1959	232
5	Wage determination in the unorganized labour market	277
6	Domestic production cost as a per cent of c.i.f. import cost	353
7	Choice of technique with dual factor markets	356

Cambridge University Press

978-0-521-08401-7 - Industrialization in an Open Economy: Nigeria, 1945-1966

Peter Kilby

Frontmatter

[More information](#)

ACKNOWLEDGEMENTS

The work on which this study is based began in 1959 when I first went to Nigeria under a Fulbright research grant to study labour productivity. From 1960 to 1962 I served with the U.S. Agency of International Development; during this period I was primarily concerned with the problems of indigenous enterprise. From 1962 to 1965, while at St Antony's College, Oxford, I was generously supported by a Foreign Area Fellowship. To all these sponsors I express my gratitude.

Much of the information in this book was collected by personal interviews over the period 1959-65, more than four hundred in all. While it is impossible to thank everyone who has given of his time and knowledge, I would like to acknowledge those upon whom I placed particularly heavy demands. In the United Africa Company and its subsidiaries I am especially indebted to C. E. Abebe, Dr Edward Hallett, F. J. Harlow, F. S. Haywood, J. Hunt and F. J. Pedler. Extensive data, including written histories of the activities of their company, were kindly supplied by W. H. L. Gordon, W. T. G. Gates, A. C. Pace and G. W. E. Tait of John Holt & Company. Detailed information on the cement industry was generously given to the writer by J. D. Milne of Associated Portland Cement Manufacturers, J. A. Mackintosh and Leslie Hewitt of the Tunnel Portland Cement Company, and the General Manager of Nemco Ltd. My knowledge of the Nigerian textile industry owes much to Paul Barnes of English Sewing Cotton, Alan Smith and R. F. Miles of Kaduna Textiles Ltd, and E. Hallett of the United Africa Company. For the history and operations of the Nigerian Tobacco Company I am indebted to J. H. Maslen, Anthony Jellings, Adrian Howard, G. C. Hargrove and I. H. M. Mason.

Other individuals who provided valuable information on more than one occasion are David Buchman of Chase Manhattan Bank, S. H. Hughes of the Commonwealth Development Corporation, Christopher Leventis of A. G. Leventis Ltd, A. E. Peel of British Oil & Cake Mills, and Michael Aidin of the Sierra Leone Development Corporation. I owe a particularly large debt to D. L. Payne of D. L. Payne Ltd and G. G. Asnane of K. Chelleram Ltd, not only for the many hours they spent in discussion with me, but for educating me to the central importance of market strategy in explaining investment behaviour.

Of the many Nigerian businessmen who were kind enough to submit to lengthy interview, I would like to single out the following: J. O. Odoeme, E. A. Idowu, John Okwesa, T. A. Oni, Joseph Asaboro, J. A. Odutola, J. Ade Tuyo, S. O. Gbadamosi, John Edokpolo, D. N. Oji,

Cambridge University Press

978-0-521-08401-7 - Industrialization in an Open Economy: Nigeria, 1945-1966

Peter Kilby

Frontmatter

[More information](#)

xii

ACKNOWLEDGEMENTS

Sir Mobolaji Bank Anthony, S. I. Fawehinmi and C. T. Onyekwulo. Among the Levantine businessmen who kindly gave me their time, I would like to thank Charles Gazal, George Calil, John Abdalla, G. M. Rokas, E. S. Mandrides and Saul Raccah.

Turning from the commercial sector, I received much help in assembling data from the following individuals: John Adler of the World Bank, R. A. Clarke of the Federal Ministry of Finance, Ken Masters of the Department of Statistics, Robert Ward of Arthur D. Little Inc., Norman Schmidt of the I.L.O., J. W. Gailler of the Federal Ministry of Education, Richard Sharpe of the E.W.A. advisory group to the National Manpower Board, Paul J. Bennett of the U.S. Embassy, D. A. Borrie of the Nigerian Employers Consultative Association, Elizabeth Orr of the Tropical Products Institute, James S. Raj of the Nigerian Industrial Development Bank and Petter Schimmin of the Eastern Nigeria Development Corporation. I would also like to record my thanks to the following organizations upon which I relied time and time again for information and expert opinion: Federal Ministry of Labour, Federal Loans Board, Federal Institute of Industrial Research, United Africa Company and Arthur D. Little, Inc.

The final version of this study has gained much from the criticisms of earlier chapter drafts by a large number of individuals. However I would like to single out for special thanks Werner Baer, William J. Barber, A. O. Hirschman, W. R. Hughes, E. F. Jackson, Bruce F. Johnston, Stanley Lebergott, William Mudd, Hla Myint, Richard Sharpe, Paul Streeten and Robert J. Willis.

Part of chapter 5 appeared in the May 1967 issue of *Food Research Institute Studies*; the material in chapter 9 was published in substantially its present form in the July 1967 issue of the *Journal of Developing Areas*. I am grateful to the editors of these journals for permission to use this material.

PETER KILBY

Middletown, Connecticut

