This work is licensed under a Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 Licence.

To view a copy of the licence please see: http://creativecommons.org/licenses/by-nc-nd/3.0/



Graduate training in economics in Nigeria and Ghana

S. Ibi Ajayi

African Economic
Research Consortium

Consortium pour la Recherche Economique en Afrique A SC C Special Paper 6

15W-108573



Graduate training in economics in Nigeria and Ghana

Other Publications in the AERC Special Papers Series

- Supply Response in the Context of Structural Adjustment in Sub-Saharan Africa by T. Ademola Oyejide, Special Paper 1.
- Structure, Development and Adaptation by Tony Killick, Special Paper 2.
- The African Debt Crisis by Joshua E. Greene and Mohsin S. Khan, Special Paper 3.
- Internal Debt Management in Africa by Alan R. Roe with Jonathan Griggs, Special Paper 4.
- Graduate Training in Economics for Africans: A Joint Report by S. Ibi Ajayi, H. Jacques Pegatienan and Mohamed Mukras, Special Paper 5.
- Graduate Training in Economics in Francophone West and Central Africa by H. Jacques Pegatienan, Special Paper 7.
- The State of Graduate Training in Economics in Eastern and Southern Africa by Mohamed S. Mukras, Special Paper 8.

Graduate training in economics in Nigeria and Ghana

S. Ibi Ajayi

Professor of Economics, University of Ibadan, Ibadan, Nigeria

> AERC Special Paper 6 Initiatives Publishers, Nairobi February 1990

© African Economic Research Consortium, 1990

Published by Initiatives Publishers, a division of Initiatives Ltd., P.O. Box 69313, Nairobi, Kenya, (Tel. 340650, Fax. 505920, Telex 22448) for the African Economic Research Consortium, P.O. Box 47543, Nairobi, Kenya

Printed by English Press Ltd., P.O. Box 30127, Nairobi, Kenya

Cataloguing in Publication Data

Graduate training in economics in Nigeria and Ghana/S. Ibi Ajayi—Nairobi, Kenya, Initiatives Publishers, Initiatives Ltd., 1990.

(African Economic Research Consortium (AERC) Special Papers Series; no. 6)

ISBN 9966-42-011-8

Contents

	of Tables nowledgements	vii viii
I	General introduction Genesis and objectives of the study Terms of reference Organization of the report Methodology	1 1 1 2 3
II	The state of graduate training in economics in Ghana Introduction Existing teaching capacity The teaching and learning environment The present graduate training programme Solving the problems The demand for economists Some other related issues Discussions with postgraduate students Assistance	4 4 6 7 9 10 11 12 12
Ш	The state of graduate training in economics in Nigeria Introduction Existing teaching capacity The teaching and learning environment The graduate training programme The demand for economics graduates Funding of local and overseas training Discussion with postgraduate students	14 14 16 21 25 27 28 28
IV	Summary of basic issues	30
V	Recommended measures Policies and activities to be undertaken by local and	33
	regional entities Activities leading to better rationalization of effort	33
	at the sub-regional and regional levels	34
	Activities that can be effectively pursued by AERC	34
	Activities of other external or international agencies	36

Issues meriting further study	. 37
Appendices	39
 List of participants in AERC's Nairobi workshop, 26 and 27 August 1989 	39
2. List of organizations, universities and persons visited or interview	ved 42
Notes References	44 45

List of tables

2.1	University of Ghana undergraduate courses	6
2.2	Qualifications of economics academic staff in Ghanaian universities	7
2.3	Comparison of fringe benefits enjoyed by university staff and workers in private and other institutions	8
2.4	Differences in additional fringe benefits between academic staff and workers in private and other institutions	9
2.5	University of Ghana, combined major degree output in economics, 1984–1988	10
3.1	Federal universities—first and second generation	15
3.2	Universities in Nigeria	15
3.3	Status of academic staff at selected first-generation universities	17
3.4	University of Ibadan graduates, 1970–1988	17
3.5	Qualifications of academic staff in four first-generation universities	18
3.6	Student enrolment by level of course, 1986/87 academic year	19
3.7	Graduate output by level of course	19
3.8	Economics graduates and postgraduates, University of Ibadan, 1984–1988	20
3.9	Economics graduates in Nigerian universities 1980–1988	20
3.10	Academic staff in Nigerian universities, by nationality	21
3.11	Total capital allocations in all Nigerian federal universities, 1981–1986	22
3.12	Recurrent appropriations of Nigerian federal universities	22
3.13	Total enrolment in Nigerian universities, 1980/81–1985/86	23
3.14	The four-year BSc degree programme at the University of Ibadan (economics courses)	26

Acknowledgements

I owe a debt of gratitude to the members of the Department of Economics at Ibadan and the Nigerian Institute of Social and Economic Research (NISER) who participated in a seminar that I organized to discuss economics graduate training. They gave invaluable information and ideas. I also thank the staff of the various universities visited for generous donations of their time, the graduate students in Ibadan, Lagos and Legon who were particularly helpful in providing frank and honest views, the officials of ministries, banks, and private organizations, etc., whom I interviewed, and all the research assistants who worked with me on the project. I am particularly grateful to Dr F.O. Ogwumike and Dr A. Soyibo who assisted in collecting some of the information. Dr Ogwumike read the preliminary draft and made very useful suggestions. I also thank the participants of the August workshop in Nairobi for their useful comments. Lastly, I thank AERC for the opportunity to carry out this study. I am solely responsible, however, for the views expressed in this report.

I. General Introduction

Genesis and objectives of the study

This study was commissioned by the African Economic Research Consortium (AERC). It examines the state of graduate training in economics in Nigeria and Ghana, and is part of a larger study that covers other countries in sub-Saharan Africa.

The study focuses on the conditions for graduate training in Nigeria and Ghana, support for graduate training being pursued both within the region and overseas, and the likely requirements for graduate African economists for research, teaching, policy analysis and economic management. It identifies activities that could be undertaken by AERC consistent with its mandate and resources, and other activities that may lie outside the scope of AERC's own activities and mandate. The study also identifies areas which are relevant to graduate training in economics but which need to be studied further.

The objective of the study was not to compile a detailed inventory of the available facilities and human resources, or to make a precise estimate of the manpower requirements. I attempted an assessment of the adequacy of current programmes within and outside these countries, of immediate and long-term needs, and of the likely demands for economics graduates for teaching, research and management.

A preliminary report of this study was presented to a number of African scholars at a workshop held in Nairobi on 26 and 27 August 1989 (see Appendix A). The comments and observations made at the workshop have been incorporated into the final report, although adequate care has been taken to retain the author's independent thoughts.

Terms of reference

The terms of reference for this study were as follows:

"The overall purpose of this consulting contract is to examine the state of graduate training in economics for Africans, with particular reference to Nigeria and Ghana.

2 SPECIAL PAPER 6

In this respect you will undertake the following:

- (a) Examine the conditions affecting the quality and relevance of graduate training, overall numbers (stock) and annual output of MA and PhD graduates in the above-mentioned countries.
- (b) Ascertain the revealed and implicit demand for graduates for the purposes of economic research, training, and management, from academia, government and the private sector, and their views as to the responsiveness and relevance of current programmes.
- (c) In connection with (a) and (b), visit the above- mentioned countries, to obtain such reports, studies and other pertinent information as may be available, and to interview knowledgeable persons in academia, government, and the private sector. In this regard, you are strongly advised to arrange your visits and collaborate closely with participants in AERC activities.
- (d) To prepare a draft report of your findings that among other matters will:
 - Identify issues and concerns from the perspectives of individual countries, the sub-region, and the region's links to outside institutions and agencies.
 - Recommend measures to address these concerns in terms of:
 - policies and activities to be undertaken by local and regional entities.
 - activities leading to a better rationalization of effort at the sub-regional and regional levels.
 - activities that could be effectively pursued by AERC, consistent with its mandate and resources.
 - activities that could be effectively pursued by other external or international agencies.
 - significant issues meriting further study.
- (e) To prepare a consolidated draft report with the other two consultants, and present it to a meeting of academics and government officials, currently scheduled to be held in Nairobi on August 26 and 27 1989.
- (f) Subsequent to this meeting, to prepare a joint final report, to be presented to the AERC Executive Director not later than September 15, 1989."

Organization of the report

This report is divided into five sections, as follows: Section I, introduction; Sections II and III, basic issues in Ghana and Nigeria, respectively; Section IV, the major problems of graduate training in the two African countries; and Section V recommended measures.

Methodology

Personal interviews were held with various people in universities, ministries, financial institutions and organizations in Ghana and Nigeria (see Appendix B), and questionnaires were administered within the universities and to employers of economics graduates. In both countries, interviews were held with departmental heads, teaching staff involved in graduate training, graduate students and employers.

In Ghana, I discussed the issues with the Acting Head of the Department of Economics at the University of Ghana, and members of the academic staff. I also spoke with two of the three postgraduate students. I interviewed a number of other people, including the Deputy Minister for Higher Education, a member of the Research Department of the Bank of Ghana, the Director of Postal Services and a senior person in the Ministry of Finance and Economic Planning. I also held discussions with two members of staff of the University of the Cape Coast, including the Head of the Economics Department.

In Nigeria, staff of the Department of Economics at Ibadan and NISER discussed the issues of postgraduate training at a seminar. At the University of Lagos I had discussions with senior members of staff, including the Dean of Postgraduate Studies and the Dean of Social Sciences, and also with the Head of the Department of Economics and a senior member of the Department who was once the head. At the Obafemi Awolowo University, I had similar discussions with the Head of Department and academic members of staff. Other universities covered were the University of Ilorin, the University of Jos, and Ahmadu Bello University. The head of Department of Economics at Ilorin filled in the questionnaire sent to him. At Ibadan and Lagos, I also had the opportunity of holding discussions with postgraduate students.

In addition, I visited the Ministry of Planning, Manpower Board, and the Ministry of Information. Vital information was obtained from the Director of the Academic Planning Unit of the National Universities Commission.

I consulted various documents including programmes, calendars, committee reports, national publications, and statistics digests.

II. The state of graduate training in economics in Ghana

Introduction

There are three universities in Ghana: the University of Ghana, the University of Science and Technology, Kumasi, and the University of the Cape Coast.

The University of Ghana

Conditions of life in Ghana in recent times have not been conducive to academic pursuit and this has inevitably had effects on both learning and teaching. A major factor affecting the intellectual climate is the poor remuneration for members of staff. Conditions of pay for university staff, and the emphasis placed on university teaching, have changed drastically since the 1960s. In recent times, the remuneration structure has been such that the university lecturers are at a disadvantage compared to their peers in employment outside the university. It has not been easy to attract well-qualified Ghanaians into the university and those who are there and are young and able are constantly searching for better pay and conditions outside the university and also out of the country.

The University of Ghana (formerly the University College of the Gold Coast) was established in 1948 under the aegis of the University of London for awarding degrees. This college eventually metamorphosed into an autonomous degree-granting body.

The University of Science and Technology, Kumasi

The University of Science and Technology, Kumasi was established in the 1960s specifically for the development of science and technology. In the process of growth, however, other disciplines not related to science or technology became part of the courses offered by the University. This arose partly out of the need to cater for increasing numbers of students seeking university admission in these non-science, non-technology areas and partly because of the desire that it should act like a conventional university. The University of Science and Technology does not offer postgraduate courses in economics but it does offer a postgraduate course in industrial management.

The University of the Cape Coast

The University of the Cape Coast was established in 1962 to cater for the growing demand for university education in Ghana, with special emphasis on education

The universities in Ghana were formerly under the National Council for Higher Education. After the abolition of this Council, a Higher Education Secretariat, with an Under-Secretary in charge, was established in the Ministry of Education and Culture to oversee the running of the universities and deal with all matters pertaining to them.

There is no coherently structured higher educational system that is linked to the other levels of education in Ghana. According to the University Rationalization Committee (URC), the absence of such a structure is "detrimental to the sustained and proper development of the country's human resources". The Committee further noted that the "mix of graduates is not properly balanced as far as national development is concerned since graduates in the arts and humanities far outnumber those in science and technology." There is a need to create a central administrative body to co-ordinate the activities of the universities.

Over the last decade, Ghana has faced serious economic hardship arising from high inflation, falling gross domestic product, declining foreign exchange reserves, high external debt, and falling revenue. Since education has to be met from the general purse, the universities cannot but be affected. The allocation of funds to universities has been declining in both nominal and real terms with a serious impact on facilities. Apart from the declining allocations to universities, the release of those that are allocated has not been timely or co-ordinated.

To appreciate the state of postgraduate training in economics in Ghana, and to see the extent of improvement or deterioration, it is necessary to take a historical perspective. Postgraduate training in economics has gone through various stages. The University of Ghana was once known for its high quality in the training of postgraduate students in economics. Indeed, out of the ten current members of staff, six obtained their master's degree in economics from this university. Two other members of staff who are on leave of absence and study leave, respectively, also had their master's degree from this university. The University of Ghana started the master's degree programme in economics in the early 1970s. The programme was discontinued in 1979, mainly due to lack of staff, but was resuscitated in the 1987/88 academic session.

The state of the postgraduate programme in economics at the University of the Cape Coast is not different. Though there is a two-year MA programme in economics, it has never been run regularly due, among other factors, to the poor staffing situation. The programme was started in 1976 and has been operated in an on-off fashion ever since. There are two students in the master's programme now.

Existing teaching capacity

The staffing situation in the departments of economics at the University of Ghana and the University of the Cape Coast, relative to the number of courses offered at both undergraduate and graduate levels, is poor. The wide array of courses available at the undergraduate level at the University of Ghana is shown in Table 2.1. The demand for undergraduate training is such that the postgraduate programme has understandably and unavoidably been left to suffer from the shortage of staff. The period in which postgraduates have been able to complete their courses has, therefore, varied with the vagaries in the tenure of the key members of staff.

Table 2.1 University of Ghana undergraduate courses

Level	Compulsory	Elective
FUE	Elements of economics	
	Introduction to the economy of Ghana	
	Elements of maths/statistics for economists	
Part I*	Micro-economic theory	Applied mathematics/ statistics for economists
	Macro-economic theory	Economic development and growth
Part II	Economic theory	Money and banking
	Econometrics	International economics
		Industrial Economics
		Public finance
		History of economic thought
		Agricultural economics
		Operations research
		Economic history
		Economic planning
		Long essay

Source: Department of Economics, Undergraduate Programme.

At the University of Ghana, there are 12 names on the staff list in the Department of Economics, but only ten are actually on the ground. There are eight academic members of staff in the Department of Economics at the University of the Cape Coast. All these members of staff are nationals.

In assessing the quality of teaching staff for graduate training, two major criteria can be used. These are the qualifications and teaching experience of staff

^{*} All economic majors are required to offer all the four papers (courses).

and leadership as characterized by the status they have already attained in academia. With regard to qualifications and experience, most of the members of staff of the Universities of Ghana and the Cape Coast have been teaching for several years. Table 2.2 gives the qualifications of academic staff of the two universities. About 33% of the members of staff at the University of Ghana have both MSc and PhD degrees. Those with PhD degrees received them from Britain, the United States and Canada. Thirty-eight percent of the eight members of staff of the Department of Economics at the University of Cape Coast have PhD degrees from Britain, the United States of America and Canada.

At the University of Ghana, the areas of specialization cover quantitative economics, international economics, monetary economics, public finance, economic development, industrial economics, and the economy of Ghana. The overlap in the areas of specialization is useful for, when one member of staff is on leave, there is at least one other member of staff who can take over his responsibilities.

Table 2.2 Qualifications of economics academic staff in Ghanaian universities

University	Qualifications of staff			Where PhD obtained	
	MSc (no PhD)		BSc only		
University of Ghana	8	4	-	USA, Canada , Britain	
University of Cape Coast	3	3	2	USA, Canada	

Source: Compiled from academic staff list of the universities.

There is no such diversity of areas of specialization at Cape Coast. This is primarily due to the small number of staff in the Department of Economics. The departure of just one member of staff can drastically affect the quality of the programme.

The second aspect that is important is the academic status of staff. This inevitably affects leadership in research and postgraduate training. There is no Professor of Economics in any of the universities at present. At the University of Ghana, all the members of staff are lecturers.

At the University of Cape Coast, even though the department is headed by a non-PhD lecturer with considerable teaching experience, four of the present eight members of the academic staff are senior lecturers, while the remaining four are lecturers.

The teaching and learning environment

The teaching and learning environment in Ghana varies from one university to the other. At the University of Ghana, Legon, there is a central library for the university and there is no separate postgraduate section. The Central Library 8 SPECIAL PAPER 6

subscribes to between 60 and 70 economics journals including the American Economic Review, Economic Journal, Economica, Econometric Theory, Journal of Development Economics, and the Journal of Econometrics and International Monetary Economics. These journals are not up to date, however, and in almost all cases there is only one copy. There is a small library in the Department of Economics with a seating capacity of 30–40. There are a few books.

There is a central university computer facility. The Department of Economics, however, has three personal computers for both staff and students. These computers were not bought from the University fund but obtained through outside grants. The location of the PCs in the Department makes for easy access, but the number is not sufficient for both staff and students.

The University of the Cape Coast has a mainframe computer for the university as a whole, but there are no computers in the Department of Economics. Even though there is a Departmental library, it has a limited quantity of books and journals. The University library is inadequate and ill-equipped in terms of the quantity and quality of journals.

Table 2.3 is a comparison of the fringe benefits enjoyed by university staff as compared with workers in the private sector and other institutions.

Table 2.3 Comparison of fringe benefits enjoyed by university staff and workers in private and other institutions

Item	Private and other Institutions	Universities
Health	Free	Free but pay for maintenance
Electricity	Subsidized to those housed	Pay up to 200 units for senior members only
Water	Subsidized to those housed	Unmetered houses charged up to \$200 per month (GWSC)
Rent	20% of basic salary	20% of basic salary to all grades

Source: University Rationalization Committee Final Report 1988, Vol. II, p. 31.

Conditions of life in Ghana in recent times have not been conducive to academic pursuit and this has inevitably had effects on both learning and teaching. A major factor affecting the intellectual climate is the poor remuneration for members of staff. Conditions of pay for university staff, and the emphasis placed on university teaching, have changed drastically since the 1960s. In recent times, the remuneration structure has been such that the university lecturers are at a disadvantage compared to their peers in employment outside the university. It has not been easy to attract well-qualified Ghanaians into the university and those who are there and are young and able are constantly searching for better pay and conditions outside the university and also out of the country.

Apart from those benefits shown in Table 2.3, I was told that other fringe benefits that are important include official cars, house furniture and petrol al-

lowances. These allowances are shown in Table 2.4.

Table 2.4 Differences in additional fringe benefits between academic staff and workers in private and other institutions

Item	Private and other institutions	Universities
Furniture	Most senior members have soft furnishing	Only hard furnishing available to those who are lucky to get housing
Official car	Free use of official car	No official car
Petrol	Generous allowance for petrol per week	No petrol allowance to senior members. Heads of department get four gallons a week free

Source: Obtained from interviews.

From discussions with members of staff both at Legon and Cape Coast, it appeared that the intellectual climate is gradually being effaced. At neither institution is there any policy of regular staff departmental seminars. At the Cape Coast, teaching takes up all staff time leaving none for research or departmental seminars. Consequently, the Department does not have any regular publications, even though members of staff still publish their research work. There are no regular postgraduate student seminars in either of the two institutions.

A Consultancy Services Unit is about to be started at Legon, but the operational details are not yet available. The consultancy that exists at Cape Coast caters for the Peace Corps for a small part of the year. At Legon, there are opportunities for economists to do some extra work (consultation, extra teaching in other schools) in Accra to earn further income. Such opportunities for extra income at the Cape Coast are negligible.

The present graduate training programme

Ghana will not be able to produce the postgraduate economists that she needs if the present situation continues. The postgraduate programmes suffer from the instability of lecturers, poor library facilities, lack of emphasis on research and inadequacy of facilities and equipment.

The quality of the programmes in terms of analytical skills development and contextual relevance is not in doubt. What is in doubt is the capacity (in terms of men and materials) to execute them. Apart from the basic tools imparted to all economics students throughout the world, some courses taught are relevant to the local situation. This is true of most courses in money and banking, industrial economics, and the economy of Ghana, and at the Cape Coast, the courses in economic growth and development are approached from the problem-solving angle. Though the universities feel that the present syllabi cover all the problems of the third world, there is a need for development of integrated courses on third-world issue. It would, therefore, be necessary for some international orga-

10 SPECIAL PAPER 6

nization to bring together African scholars to discuss syllabi, and their coverage and relevance for modern third-world economies.

An examination of the undergraduate programmes shows that the courses being taught are adequate for entry into postgraduate programmes and the content is adequate preparation for postgraduate training (see Table 2.1).

The graduate programme at the University of Ghana consists of three compulsory courses and two elective courses. These are in addition to the thesis which is required before the master's degree can be obtained. The compulsory courses are microeconomics and macroeconomics, while the elective courses consist of all those available at the undergraduate level (see Table 2.1) except operations research and economic planning.

The number of undergraduates over the last four years is shown in Table 2.5. From this table, one can calculate the potential demand for postgraduate training.

Table 2.5 University of Ghana, combined major degree output in economics, 1984–1988

Year	Number
1984/85	38
1985/86	46
1986/87	53
1987/88	87

Source: Department of Economics files.

In the past, there have been a number of sources of funding for graduate training in economics. These are Government of Ghana scholarships, the Ford Foundation, university scholarships, the Bank of Ghana, and Fulbright Junior Research Fellowships. Recently, these sources have either dwindled or disappeared completely. For example, the University of Ghana scholarship that used to be available for overseas training is now mostly tenable in Ghana. Similarly the subsidy which students used to receive is no longer available. A modest loan is available for subsistence. Although fees and accommodation are free, charges may be levied for accommodation commencing in 1990.

Solving the problems

Some suggestions were made as to how these problems of graduate training in Ghana might be alleviated. They fall into four major categories.

The first is the adequacy of facilities. This is broadly defined to include an increase in the number of staff available for training students, availability of computing facilities and equipment, and the availability of current journals. Apart from an increase in remuneration and improvement in other conditions of ser-

vice, there are various methods of increasing the number of staff. The first is to augment the regular staff through support of visiting professors or senior lecturers on sabbatical leave from other universities. Secondly, other visiting staff could be supported for shorter periods.

The second group of solutions consists of those that will improve the efficiency or quality of the teachers. This will consist of making available funds for carrying out relevant research and for attending short courses and workshops outside the country. Funds are also needed for textbook writing.

The third group of solutions consists of improving the environmental factors that affect the recruitment and stability of staff within the university system. These would consist of a more competitive salary structure, availability of research funds, fringe benefits such as a staff housing scheme, adequate facilities for acquiring personal transport, non-taxable inducement allowances and promotion prospects.

Some of these measures are of a long-term nature, while others can be dealt with in the short-run. Improvements in salaries depend on the recovery of the economy and this may have a long-term horizon. The need to eliminate the wide gaps in salaries and benefits between the university and other employers is urgent and immediate action can be taken to correct these imbalances.

Fourthly, there is a need to keep students in the programme. One way of doing this is to make sure that there are enough members of staff to teach all the courses in the programme. The second is the provision of financial incentives for students to stay in the programme as well as facilities for them to carry out their research effectively. This would be possible if scholarships, fellowships, thesis fellowships or other forms of support were available.

The demand for economists

The demand for economists in Ghana is difficult to estimate in view of the lack of access to any manpower survey for the country. From my interviews with ministries, universities and financial institutions, it seems that there is a demand for trained economists, though it is difficult to assess the exact number. There is demand for economists in three areas. First, people with higher degrees in economics, preferably with PhDs, are needed for university teaching and research. Second, economists are needed for policy analysis and economic management in the ministries, government parastatals and financial institutions. The research department of the Bank of Ghana, for example, employs a large number of economists. Third, my interviews showed that there are still vacancies for economists with quantitative skills able to address basic economic issues. Various ministries and the postal services are also interested in employing competent economists.

12 SPECIAL PAPER 6

Some other related issues

There is one area of postgraduate training on which strong feelings were expressed. Some people I interviewed felt that what is needed now is capacity building for Ghana. They felt that attempts should be made to develop facilities for the training of economics postgraduates up to the master's level, but that given the present capacity constraints Ghana cannot train PhDs. Candidates for PhD can be sent to other African countries with the required capacity until Ghana's capacity is built up. However, once this is achieved, it would be cheaper to train such PhDs domestically. Therefore, capacity building, though a gradual process, should be pursued with vigour.

Discussions with postgraduate students

I held detailed discussions with two of the three postgraduate students in economics who started the two-year MPhil programme in February 1989. Both of them had their first degrees from the University of Ghana-one in mathematics and statistics, the other in economics. One of the students had considerable working experience before deciding to pursue postgraduate training, while the other recently completed his national service year and decided to go to graduate school after he had failed to find a job. Both students are self-sponsored and receive the C50,000 loan that they consider to be too little for their needs-mostly food, clothing and purchase of books and materials.

They discussed at length with me the nature of their programme as well as their particular interests. Some problems they mentioned are as below.

Books and journals

The students complained about the non-availability of books in the library. Most essential books are borrowed from lecturers on a short-term basis. There are also problems with journals. Most of the relevant ones are either not on the library's subscription list or the issues are out of date, and they cannot be taken away from the library. Students are allowed to photocopy required sections of the journals but there is only one photocopying machine so they have to leave material for several days before it is ready for collection. Two problems result from this. One is that photocopies of articles that need to be read quickly cannot be easily obtained, and the second is that other students needing the books are deprived of their use during the time it takes to make photocopies. Photocopying is also expensive.

The Department only has one photocopier. Another is required for use by students in the Departmental library.

Facilities

The students felt that some required facilities are not available, while others are

inadequate. There is no Departmental vehicle and it was felt that one would be very useful to both students and lecturers in carrying out their research.

The computer facilities in the Department are inadequate for both lecturers and students. The students require more computers and an assistant who can operate the existing computers. At present, the only person who is conversant with the computers is the Head of Department.

Some lecture rooms are in a bad state of disrepair and sometimes there are not enough chairs.

Assistance

I asked the students for their ideas on the kind of assistance they would like to have to improve their conditions and the programme. The following suggestions emerged:

- Assistance to students. Students believe it would be beneficial to have support for thesis writing. This would remove many of their financial worries and enable them to concentrate on their studies.
- Support for students for outside research or skill acquisition.
- Occasional outside lecturers. Some exposure to outside expertise from other African universities. Seminars on special topics would widen the students' outlook.

III. The state of graduate training in economics in Nigeria

Introduction

In discussing graduate training in economics in Nigeria it is necessary to take a brief look at the history of university education and the growth of the National Universities Commission, the body responsible for overseeing universities in the country.

The University College, Ibadan was established in 1948 and awarded University of London degrees. The University College subsequently metamorphosed into the University of Ibadan in 1962. Other universities established between 1960 and 1962 were:

- The University of Nigeria, Nsukka, 1960 (the first Nigerian-initiated university);
- The University of Ife, now Obafemi Awolowo University, 1961 (founded by the Western Region government);
- The University of Lagos, 1962 (established by the Federal Government);
- Ahmadu Bello University, Zaria, 1962 (established by the Northern Region Government).

The University of Benin was established in 1972 following the cessation of the Nigerian Civil War in 1970. The Third National Development Plan made provision for the establishment of the "Seven Sisters" or Second Generation Universities in 1975. These universities are shown in Table 3.1. Today, there are 20 Federal universities and nine State universities in Nigeria, as shown in Table 3.2.

Nigeria's national policy document on education describes in detail how the universities are to make an optimum contributions to national development.³ This document also emphasized that a greater proportion of education expenditure would be devoted to science and technology. Serious attempts are being made to enforce a ratio of 60:40 for science and liberal arts students, both in admissions and the disbursement of funds for departments. It is expected that the ratio should be firmly established by 1990. This emphasis seems to ignore the role of social sciences and the humanities in the application of science and

technology. What is often ignored is that, while science and technology are the springboard for development, there is also a link between science and technology and economic development.

Table 3.1 Federal universities—first and second generation

The second secon	
First generation	Second generation
University of Ibadan	University of Jos
University of Lagos	University of Calabar
University of Nigeria, Nsukka	Bayero University, Kano
University of Benin	University of Maiduguri
Ahmadu Bello University, Zaria	University of Sokoto
Obafemi Awolowo University, Ife-Ife	University of Ilorin
	University of Port-Harcourt

Source: NUC records.

Table 3.2 Universities in Nigeria

Federal universities

- 1. Ahmadu Bello University (ABU, Zaria)
- Tafawa Balewa University (Bauchi)
- 3. Federal University of Technology, Akure (FUT, Akure)
- 4. Bayero University, Kano (Bayero)
- 5. University of Benin (Benin)
- 6. University of Calabar (Calabar)
- 7. University of Ibadan (Ibadan)
- 8. Obafemi Awolowo University (lle-lfe)
- 9. University of Ilorin (Ilorin)
- 10. University of Jos (Jos)
- 11. University of Agriculture (Makurdi)
- 12. University of Lagos (Lagos)13. University of Agriculture (Abeokuta)
- 14. University of Maiduguri (Maiduguri)
- 15. Federal University of Technology, Minna (Minna)
- 16. Federal University of Technology, Yola (FUT, Yola)
- 17. University of Nigeria, Nsukka (UNN)
- 18. Federal University of Technology, Owerri (FUT, Owerri)
- 19. University of Port-Harcourt (Port-Harcourt)
- 20. Usman Dan Fodio University (Sokoto)

Continued . . .

... Continued

State universities

- 21. Anambra State University of Technology (ASUTECH)
- 22. Bendel State University (Bendel)
- 23. Bendel State University (Abraka Campus)
- 24. Cross River State University (Abraka Campus)
- 25. Imo State University (IMOSU)
- 26. Lagos State University (LASU)
- 27. Ondo State University (OSUA)
- 28. Ogun State University (OSU)
- 29. Rivers State University of Science and Technology (RSUST)

Source: JAMB Annual

The National Universities Commission (NUC) was established by Decree No. 1 of 1974 at a time when all the universities in the country were owned by the Federal Government. Universities receive grants from government which are channelled through the NUC. Up to 1987, the block grants given to the universities covered recurrent running costs, teaching and research equipment, purchases and capital costs. Research and postgraduate development were subsumed under recurrent expenditures. This led to an emphasis on undergraduate training and inadequate allocation of funds for research and postgraduate development. In order to eliminate these deficiencies, the Research and Postgraduate Development Division was created in 1987.

Of the 29 universities listed in Table 3.2, less than a dozen offer postgraduate courses in economics.

Existing teaching capacity

The level of staffing varies from one department of economics to another, but no one department can claim to have all the staff it needs. Table 3.3 shows the status of the academic staff in four first-generation universities. At Ahmadu Bello University, where less than 50% of the staff have PhDs, the issue of staff development is taken seriously and the Department is seeking places for staff to obtain postgraduate training both at home and abroad. The Department also has its own postgraduate programme. Staff members who join have a carefully planned programme to enable them complete their training in a reasonable time.

At the University of Ibadan, there are 23 full-time members of staff and up to 12 associate lecturers. Of the full-time staff, nine are professors, seven are senior lecturers, six are lecturers and one is an assistant lecturer. Only three persons in the lectureship category do not have PhDs. Two of the three have submitted their theses for oral examination and the remaining one is completing his degree in France through a scholarship offered by the French Government. Thus, from these two examples, it can be seen that substantial differences may

GRADUATE TRAINING IN ECONOMICS IN NIGERIA AND GHANA

exist even among the first-generation universities.

Table 3.3 Status of academic staff at selected first-generation universities

University	Academic status (No.)						
	Professor	Assistant Professor	Senior Lecturer	Lecturer	Assistant Lecturer		
Ahmadu Bello University	2	_	5	7	6		
University of Ibada	n 9	_	7	6	1		
University of Lagos	6	3	5	4	_		
Obafemi Awolowo University	_	1	2	8	5		

In order to assess the quality of teaching staff for postgraduate training in economics in Nigeria, two criteria are required. These are the qualifications and experience of the teaching staff and the status they have attained in academia. Most of the academic members of staff of the universities visited received their postgraduate training in Britain, the United States, Canada, and Poland.

In recent times the University of Ibadan has acquired a considerable reputation as a postgraduate school, and has trained not only its own staff but the staff of economics departments of sister universities (Table 3.4). Six of the members of staff obtained their PhDs from Ibadan. Table 3.5 gives the distribution of qualifications among the four first-generation universities. While 83% of the staff at Ibadan have both MSc and PhD degrees, only 33% and 19% at Ahmadu Bello University and Obafemi Awolowo Universities, respectively, have them.

Table 3.4 University of Ibadan graduates, 1970–1988

Year	1st class	2nd class upper	2nd class lower	Third class	Pass	Total
First de	gree graduates					
1979	-	31	93	11	_	125
1984	-	4	97	2	1	74
1985	-	11	62	2	1	76
1986	-	10	62	-	5	77
1987	-	20	69	-	1	90
1988	-	14	58	5	3	80
Total		90	411	20	11	

Continued . . .

...Continued

V	Was MDs MDs MDs MDs Table							
Year	MSc	MPhil	PhD	MBF	MBA	Total		
Higher deg	gree graduands							
1979	8	1	1	_	_	10		
1984	29	-	-	24	34	87		
1985	26	-	-	30	35	91		
1986	10	-	3	32	29	74		
1987	14	-	-	41	39	94		
1988	13	-	2	59	36	100		
Total	100	1	6	186	173			

Source: University of Ibadan Calendar, 1979-1988.

The specialization fields of the members of staff in Nigerian universities cover all the major areas in economics. In most of the universities there is evidence that supervision of postgraduate students is not a problem, even though the number being supervised by an individual lecturer may be larger than desirable.

 Table 3.5
 Qualifications of academic staff in four first-generation universities

University	Qualifications of staff			Where PhD obtained
	MSc (no PhD)	MSc and PhD	BSc only	
Obafemi Awolowo (OAU)	9	3	4*	USA, Ife, Britain
Ahmadu Bello (ABU)	13	7	1	Canada, Britain, USA Poland
Ibadan (UI)	4	19	_	
Lagos (Unilag)	8	10	-	Britain, USA, Lagos

Source: As for Table 3.3.

* Undergoing training for PhD.

All the teaching staff are experienced. The shortest period for teachers at the University of Ibadan, for example, is six years, while some members of staff have been there for over 20 years. At Ahmadu Bello University, only four members of staff have joined the Department recently, and some others have been teaching for seventeen or eighteen years.

The issue of status is important in Nigerian academia. A faculty member's seniority level affects leadership in the area of research and postgraduate train-

ing. Most of the first-generation universities have professors or readers. The norm for academic staff ratios is as follows:

Professorial/Readership position	20%
Senior Lectureship position	25%
Assistant Lecturers to Lecturer I	55%

While there is some top-heaviness in the older first-generation universities, the second-generation universities are still striving to achieve this norm. This is illustrated in Table 3.3 where, for example, in Ibadan about 39% of full-time staff are professors.

Most Nigerian universities now run a four-year degree programme and the demand for undergraduate teaching is high. Apart from students majoring in economics, there are a large number of students who take economics either as a subsidiary option or as a teaching subject (for those in the Faculty of Education). The implication of this is that most of the teachers' time is needed for undergraduate teaching and supervision. The magnitude of this demand can be seen from Table 3.6.

Table 3.6 Student enrolment by level of course, 1986/87 academic year

Level of course	Enrolment	Percentage
Sub-degree	21,416	14.2
First degree	118,028	78.4
Postgraduate diploma	900	0.6
Higher degree courses	10,269	6.8

Source: National Universities Commission.

The graduate output between 1980/81 and 1984/85, for which data are available, is shown in Table 3.7.

Table 3.7 Graduate output by level of course

Academic year	Sub-degree	Undergraduate	Postgraduate
1975	804	5,160	477
1980/81	2,816	9,662	1,402
1984/85	4,017	20,236	3,297
1986/87	4,094	21,770	4,394

Sources: 1. 1975/76–1984/85 flgures from NUC, Twenty-five years of centralized

university education, p. 146.
2. 1986/87 figures from *NUC Annual Report*, 1987.

20 SPECIAL PAPER 6

The number of economics graduates from the University of Ibadan for the period 1984–1988 is shown in Table 3.8. The total number of graduates from all Nigerian universities is shown in Table 3.9.

Table 3.8 Economics graduates and postgraduates, University of Ibadan, 1984–1988

	First degree	MSc	PhD
1984	74	29	_
1985	76	26	_
1986	77	10	_
1987	90	14	_
1988	80	13	2

Source: University of Ibadan Calendar, various years.

 Table 3.9
 Economics graduates in Nigerian universities, 1980–1988

Year	First degree	Postgraduate
1980/81	452	23
1981/82	422	29
1982/83	693	46
1983/84	573	66
1984/85*	393	32
1985/86	654	64
1986/87	782	113
1987/88**	766	104

Source: Data supplied by NUC Academic Planning Unit.

Notes

Figures exclude UNN, Benin, Kano and Maiduguri graduates.
 Figures exclude Zaria, Uniport graduates.

The ratio of expatriate to local staff in Nigerian universities is relatively low. The available figures are given in Table 3.10. The historical trend shows that in 1965/66 only 46% of the staff were Nigerian, but by 1985/86, the percentage of Nigerians had risen to 86%. Figures released recently by the NUC show that in 1986/87 only 10.9% of the academic staff were non-Nigerians.

As far as economics departments are concerned, less than 1% of the academic staff are non-Nigerians. At Ahmadu Bello University only two of the members of staff (one Ghanaian and one Pole) out of a total of 21 of staff are foreigners. At Ibadan and Lagos, all the staff are Nigerians.

Table 3.10 Academic staff in Nigerian universities by nationality

0	Nigerian	Non-Nigerian	Total	% Nigerian
1965/66	560	648	1,208	46.4
1970/71	1,603	652	2,255	71.1
1975/76	3,113	942	4,055	76.8
1980/81	5,118	1,548	6,666	76.8
1985/86	9,507	1,509	11,016	86.3

Source: NUC.

The student-teacher ratio in economics departments varies widely, but most are understaffed. Some departments have a total enrolment of 400 undergraduates. This number would require about 27 teaching staff and none of the universities has as many as that.

Recently, it has been difficult to attract qualified manpower into the university system. There has also been a brain drain away from the university, either out of the country or to the private sector. Certainly, economics has been less hard hit by the first trend than, for example, medicine, but the attractiveness of international jobs is a definite threat to domestic manpower.

Academic staff in economics departments can be categorized into three main groups. There are those who are good teachers and who enjoy the work and the security that it gives in terms of the absence of fierce competition for positions. The second group are those who enjoy both teaching and research and have access to different kinds of research grants. Third are those who have stayed in the university for some time and who do not consider the option of change desirable.

The teaching and learning environment

The teaching and learning environment in Nigerian universities varies just as the quality of the staff varies. The environment in Nigerian universities is conditioned by a host of factors all revolving around the economic situation in the country and the Government's attitude towards higher education and meaningful dissent.

Nigeria's economy has been on the decline for some time as a result of the depression in the oil sector, which is Nigeria's major revenue source. As a result, the university system has not been receiving the funds due to it. The allocation to universities has not only been declining, but a great degree of uncertainty has surrounded the release of the funds and the amount eventually released (see Tables 3.11 and 3.12). Even though total capital allocations increased in 1987, the amount was still much lower than that in 1981. When both recurrent and capital expenditures are converted to real terms, as can be seen from the con-

sumer price index, the rate of decline is even more obvious.

Table 3.11 Total capital allocations in all Nigerian federal universities, 1981–1986

Year	Amount (Nm)	Consumer prices 1980 = 100
1981	253.8	120.8
1982	250.4	130.1
1983	347.2	160.3
1984	54.9	223.8
1985	48.7	236.1
1986	42.2	248.8
1987	81.5	274.2

Sources: 1. NUC, Twenty-five years of centralized education in Nigeria.

2. Consumer prices from IMF, IFS Year Book 1988.

Table 3.12 Recurrent appropriations of Nigerian federal universities

Year ———	Amount (Nm)	Consumer prices
1981	333.9	120.8
1982	343.7	130.1
1983	381.3	160.3
1984	439.9	223.8
1985	432.5	236.1
1986	395.0	248.8
1987	304.5	274.2

Sources: 1. NUC, Twenty-five years of centralized education in Nigeria.

2. Consumer prices from IMF, IFS Year Book 1988.

Furthermore, it has not been possible to meet the universities' foreign exchange needs for purchase of equipment and journals.

Facilities

22

As a result of these financial conditions, many departments of economics lack the basic facilities needed for effective teaching and research. Few departments have computers of their own. The largest concentration of computers seen during my visits was in the Department of Economics at Ibadan which has five computers in the Department's Centre for Econometric and Allied Research and a multi-user system with four newly installed PCs in a research room. Most

other economics departments are dependent on their university's central computer facilities. These computers are not easily accessible to all students because of overcrowding and frequent breakdowns, both of which pose serious problems for researchers. The standard social sciences software packages are either not available or are not installed. With the non-availability of spare parts in the country and their exorbitant cost in terms of foreign exchange requirements, some universities go for months without access to computers. Staff, researchers and students all suffer from these problems.

Over the last few years, the number of universities in Nigeria has increased. This has not helped the situation given the fact that declining resources are being shared between the many universities with each one receiving much less than it requires for its own needs. Total enrolments have also increased, as shown in Table 3.13. Between 1979/80 and 1980/81 the total increase in enrolment was about 35%. Between 12% and 14% of the enrolments are in the social sciences and economics is popular both as a major and subsidiary subject.

Facilities in terms of lecture theatres and rooms and staff offices have not increased in proportion to the increases in enrolment. In some universities these problems have been exacerbated by the abandonment of on-going building projects. Uncompleted buildings dotted the campuses that I visited.

Table 3.13 Total enrolment in Nigerian universities, 1980/81–1985/86

Year	Number	Growth (%)
1979/80	57,742	34.7
1980/81	77.791	34.7
1981/82	90,751	16.7
1982/83	104,774	15.4
1983/84	116,822	11.4
1984/85	126,285	8.1
1985/86	135,785	7.5

Source: NUC, Twenty-five years of centralized university education in Nigeria.

Journals and books

There are two major problems with journals. The first is that most locally produced journals have either ceased publication or are not up-to-date, primarily because of the unavailability of funds for producing them. Therefore, research work which would be of interest to both students and policy makers does not get published. Secondly, the number of journal subscriptions in most of the universities has fallen, partly because of the reduction in general fund allocation to universities relative to their needs and partly because of the shortage of foreign

24 SPECIAL PAPER 6

exchange. From the mid-1960s to the early 1970s the University of Ibadan subscribed to over 5,000 journals. Today, it subscribes to slightly over 300. Most of the universities visited have some issues of the standard economics journals but in most cases they are out of date. In some cases the number of copies received is too small for them to be used for teaching and research.

The shortage of books is another problem affecting the quality of research and training in most of the Nigerian universities. Books published abroad are difficult to find and very expensive.

Benefits

The harsh conditions described above have affected both teaching and learning. In addition to the inadequacy of infrastructural facilities, the real wages of all workers have been declining. Until about three years ago, the university salary structure was said to be generous, but with the civil service reform and the introduction of an elongated salary structure, the universities' advantage has disappeared. Attempts by the University Teacher's Association (ASUU) to point out the anomaly in the new salary structure, and other factors impinging on the quality of education, incurred the wrath of Government and led to the banning of the Association. While their counterparts in the Civil Service enjoy the use of an official car, university professors are not so privileged. In addition, a number of perquisites which were once taken for granted, such as car loans, free medical care, and staff housing loans, have disappeared in most universities. Only a few members of staff are housed on campus. Nowadays, no one dependent on a salary in the university system can hope to be able to afford a car as prices of cars have gone out of the reach of the ordinary wage-earner since the adoption of the structural adjustment programme by Nigeria.

Other environmental factors

Another factor affecting the quality of teaching and research in universities is the general uncertainty surrounding the Nigerian university system. Student unrest precipitated by economic conditions has led to several closures in recent times. In the past, university senates had the power to close and open universities. These days universities are closed generally by the Government and many aspects of the autonomy of the universities has been eroded by Government intervention. All these elements of uncertainty, and often unwarranted interference, cannot but affect the morale of staff and hence the quality of teaching and research.

Despite all these hardships, however, the intellectual culture characterized by high-quality publications and regular seminars has been sustained in many institutions. Some of economics departments have regular weekly or fortnightly seminars which are attended by both staff and postgraduate students. In some cases, postgraduate students also have their own seminars which are attended by staff members. In a few cases, however, the tradition of weekly seminars is not well entrenched.

The graduate training programme

A thorough examination of the content of the different postgraduate training programmes reveals the following:

- That all the relevant core courses are taught at both the undergraduate and graduate level;
- The quality of the programmes, in terms of analytical-skill development, is very high;
- The programmes have contextual relevance.

In addition to the traditional core economics course, some topics of special relevance are introduced at undergraduate or postgraduate level.

Opinion is divided on the issue of relevance of syllabi or course content. There are those who hold the view that economics in Africa should first be taught as in any other country since there is a core of knowledge which is required universally. Thereafter, economics which is relevant to the problems of Third World economics should be dealt with. There are those, on the other hand, who believe that classical Keynesian economics, as taught to postgraduate students, is irrelevant and that all received doctrines should be thrown overboard. This latter view is considered extreme by some scholars. What is generally accepted, however, is that a good postgraduate training should equip students with the skills necessary for solving the economic problems of their societies.

Therefore, narrow mindedness should be avoided. In fact, the need for exposure to different schools of thought in order to develop the required analytical skills cannot be overemphasized. The issue of the relevance of syllabi is one that should be addressed at a larger forum of African economists.

An examination of the various undergraduate programmes in Nigeria reveals that most are adequate for postgraduate training, not only in Nigeria but anywhere in an English-speaking university. A typical programme is shown in Table 3.14.

The character of students who enter for postgraduate training has changed in recent times. In the 1960s and early 1970s most students who came for postgraduate studies did so for a reason: commitment to a university life of teaching and research. These students enjoyed the university fellowships and/or staff development awards that were available at that time. Those that went for overseas training came back to Nigeria on the completion of their courses.

Table 3.14 The four-year BSc degree programme at the University of Ibadan (economics courses)*

26

Year	Compulsory courses	Required courses
1	Introductory mathematics	Introductory economics I
	for economics	Introductory economics II
		Nigerian economy in perspective
2	Principles of economics I	
	Principles of economics II	Applied economics
	Maths for economists	
3	Microeconomics	Structure of the Nigerian economy
	Macroeconomics	Introduction to statistics
	Project analysis	Introduction to accounting
		Principles of accounting
		Economic development theory
		Maths for economists
		Introduction to operations research
		Introduction to international economic
		Money and financial institutions
1		Elements of public finance
4	Microeconomics	Social accounting
	Macroeconomics	Economic planning
	Original essay	Operations research
	Project analysis	Theory of international trade
		Monetary theory and policy
		Public sector economy
		History of economic thought
		Comparative economic systems

^{*} Other elective courses do exist.

Since the early 1980s, Nigeria's economic conditions began to change. With the university expansion, but limited capacity of the economy to absorb this expansion, a large number of students who graduated could not find employment after the national service year. In the absence of anything else, some of these students who made appropriate grades came to graduate school. During the course of the year, many of them spent a considerable amount of time either looking for a job or combining a part-time job with their studies. Among these students the sense of dedication and commitment to postgraduate studies is negligible. Many who could have done better ended up with only a master's degree. A few lucky ones found employment while they were still in the programme and left the university. The hope of a meaningful career after graduation cannot be guaranteed, especially in a situation where job vacancies in the public sector are frozen for lack of funds. The increasing erosion of the status of the once-

prestigious academic career through interference in the autonomy of the institutions by successive governments and the unattractive incentive structure in the university system, have not helped the situation. In spite of the excellent programmes, the calibre, perspective and character of students entering them have changed with the economic conditions and perceived priorities of government.

The demand for economics graduates

Without a comprehensive manpower survey, it is difficult to obtain an accurate indication of the demand for economists. This is particularly true during this period when there is a freeze on Government employment. It is certain, however, that there is a demand for economists.

More economists with higher degrees are required as the number of universities increases. But it has been difficult for most departments to recruit staff because of the salary and incentive structure mentioned earlier.

Economists are being increasingly sought for policy analysis and macroeconomic management in financial institutions and private organizations. The recent reduction in such vacancies, and the high level of graduate unemployment, have led to stiff competition such that those with higher degrees and other additional talents or qualifications have the edge over those with first degrees in economics.

Recently, the type of specialization required is mostly in the quantitative area to work as statisticians, planning officers, etc. In Nigeria, emphasis is increasingly being placed on capability in econometrics and computer analysis. Most of our universities teach the former but are very ill-equipped for the latter except in pure departments of computer science. There are very few students who combine computer science with economics.

In order to assess the demand for economists, I spoke to the Manpower Board where I had access to the 1986 survey covering some 5,000 establishments throughout the Federation. From this survey, it is very difficult to pinpoint the exact number of economists working in Nigeria because they are very versatile. Economists may be employed as economists, statisticians, planning officers and even as administrators and bankers, to mention a few job categories. Using the number of those employed as economists, statisticians, planning officers, and budget officers, there was a total of 1,742 in 1986. This is an underestimate of the demand for economists since, at the senior level, there were about 13,000 administrative officers, and about 20,000 general managers and deputies. Many people in these categories are economists.

Some firms require graduates and offer them on-the-job training, while others require postgraduates, but overall there is a wide gap between the demand for and supply of economists.

Funding of local and overseas training

There are a number of local sources of funding for postgraduate studies in Nigeria, including:

- Federal or State Government scholarships;
- Postgraduate scholarships or graduate assistantships;
- Individual training awards;
- Staff development fund.

In recent times, both Federal and State Government scholarships have been negligible. The same is also true of postgraduate scholarships or graduate assistantships given by the university through the postgraduate school. Now only an insignificant number of postgraduate students benefits from these local sources of funding. The majority of graduate students are dependent on self-sponsorship.

À number of organizations and individual support research activities and/or endow professorial chairs in Nigerian universities. These include:

- A small number of well-off and patriotic Nigerians who see education and research as the vehicles for development;
- Financial institutions such as the International Bank for West Africa, the International Merchant Bank, United Bank for Africa, First Bank of Nigeria, the First City Merchant Bank, and the Union Bank of Nigeria.

As far as external sources of funds are concerned, the NUC lists 16, five of which are probably of greater relevance to students in economics. These are: the EEC; the British Council; the Ford Foundation; the Japanese International Cooperation Agency; and CIDA.

In addition to these, however, there are funds for graduate work from the World Bank and Codesria-the latter mostly for thesis writing. There are also Commonwealth scholarships. Recently, these scholarships have been few and far between and the future magnitude of such foreign assistance will be dependent on government policy.

Discussion with postgraduate students

I held discussions with a number of postgraduate students from Nigerian universities-drawn mainly from Ibadan and Lagos. The major problems facing them in the course of their postgraduate training and research were:

- The shortage of relevant and up-to-date books and journals in the library;
- The high cost of books;
- The insufficiency of finance for living expenses. Many students are financed by parents and/or relatives, and many find that they cannot afford three square meals a day.

- Reading space in the library is inadequate and some areas are badly ventilated. Also the halls of residence are in a very poor physical state. The completion of some of the abandoned building projects in some universities would alleviate some of these problems.
- Lack of access to computers and of the relevant software.

IV. Summary of basic issues

In this section, I summarize the problems of graduate training in economics in Ghana and Nigeria. Even though the conditions of graduate training in the two countries, as indicated in Sections II and III, are not the same, several common themes have emerged as factors affecting the quantity and quality of graduate training in economics.

The first common theme is that the system of education has been particularly hard hit by the changes in economic fortunes of these countries. Over the last decade or two, the two countries have not only experienced severe political and economic instability but have also faced increasingly complex economic difficulties. Many of the problems had been brought about by poor domestic policies (internal factors) exacerbated by external factors. The internal factors include poor fiscal management resulting in high inflation rates and misaligned exchange rates. The external factors include deterioration in terms of trade against these countries, the collapse of the international Bretton Woods monetary arrangements in the 1970s, and the sluggish world economic growth thereafter. Consequently, the gross domestic product grew at a declining rate in one case and negatively in the other, with oscillations over the years. Government revenue fell in both countries. Since the 1980s, the two countries have adopted varying macro-economic adjustment policies to stem the declining trend in the economy.

With declining revenue, and the squeeze brought about by macro-economic adjustment, the allocation of grants from government to universities has fallen substantially. With the university expansion in Nigeria, this means that fewer resources have to be shared by more universities. Grants to universities are overstretched and grossly inadequate. Consequently, office and classroom space is inadequate. Budget constraints have further led to the lack of maintenance of basic facilities such as computers and buildings. Foreign-exchange constraints mean that needed books, journals, photocopiers, computers, etc., cannot be bought. Back issues of several journals are not available, those that are available are not up to date, and support for local journals has ceased. Research reports which are important for local institutions do not get published. Books are very expensive, so few can be purchased by students or libraries.

Few universities make allocations for research and conferences. Most local sources of funds which are basic for the quality of postgraduate training and re-

search have dried up. In most institutions, the little research being carried out or conferences attended are externally financed. More often, universities have been told to go out and generate their own money. One often suggested way of doing this is to set up consultancies.⁴ While consultancies may be useful because of the practical experience gained by the individual researcher, little funding for universities can be expected from this source.

The second common theme is the relatively low salaries, poor incentive structure and promotion prospects in the university system. The total remuneration package, which is not as attractive as for personnel with identical professional qualifications in other sectors, has contributed to the demoralization of academic staff and led to a high degree of cynicism. As a result, the attrition rate from economics departments is high. The poor quality and instability of staff have led to the demise of graduate programmes in some cases, and affected the diversity and quality of programmes others. This is particularly true in Ghana. Unless remuneration is made equivalent to that in the public sector, and adequate provision made for security on retirement, many more academic staff will leave the university system.

Third, geographical mobility between regions is low. While there is some degree of intra-country university staff mobility, there is virtually no such mobility between countries. Members of staff in the Department of Economics at Ibadan do not spend their leave at the University of Ghana, or vice-versa. This may be due to lack of sponsorship or the remunerative structure in such places relative to what can be obtained elsewhere.

The fourth common theme, which is not unrelated to the issue of the economic situation, is the calibre of entrants into the postgraduate schools and the incentives for them to obtain a qualitative degree in economics. It is known that many students enter postgraduate training because of the depression in the economy which has led to scarcity of jobs. Given the absence of scholarships, or the low level of grants where they exist, students do not devote themselves fully to postgraduate training. Where student accommodation exists it is poor.

The fifth common theme is the existence of a potential demand for economists in these two countries. In both countries, economists with higher degrees, preferably at the doctoral level, are needed for university teaching and research. Given the economic plight of the two countries at the present time, it is also very important to have sufficient capacity in the areas of policy analysis and macro-economic management. It is necessary for the skills to be available in sufficient quantity and to be utilized in an efficient manner. It is clear, from the assistance being sought from abroad currently, and in particular technical expertise from multilateral institutions, that Ghana and Nigeria suffer from a lack of expertise for economic analysis and/or macro-economic management.

The sixth problem is one specific to the universities in the two countries. This is a lack of appreciation of what universities stand for: teaching, research and service. Unlike other training institutions, "Universities permit a large measure of reflection and exist for the production of knowledge, the encouragement of original thought and the exercise of imagination". ⁵

Successive military governments in Nigeria and Ghana have not sufficiently appreciated these roles. Over the last few years, the governments of the two countries have stressed the need for universities to solve national problems and challenged them to put more emphasis on national policies. Consequently, when immediate solutions are not found to issues such as food shortages and urban/rural poverty, the universities are dubbed idle ivory towers of no relevance. Yet, universities in these places are not given the means to perform. The development of new ideas and technology requires time and money. Perhaps more will be achieved when it is seen that, indeed, "the university is as much a measure of development as a vehicle for it."

V. Recommended measures

There is no single solution to the problems of postgraduate training in economics in Nigeria and Ghana. A multi-dimensional approach to the problem will have to be adopted. Nevertheless, one can divide the solutions into a number of areas.

Policies and activities to be undertaken by local and regional entities

- 1. In order to maintain the quality of postgraduate training, it is necessary that adequate funds be made available for the maintenance of infrastructures. This cannot be done in a situation of proliferation of universities as the resources will become too thinly spread. It is, therefore, important that local and regional bodies examine the issue of the optimum number of universities for these countries.
- 2. An economics degree is in real sense a professional qualification. In order to maintain standards, therefore, there is a need to set up a body to give accreditation to universities before they embark on MSc and PhD degree programmes. The body responsible for higher education can form an accreditation panel consisting of reputable senior academics to assess the necessary criteria and embark on visitation.⁷
- 3. It is important that the pay of university personnel is good enough to attract and retain the required staff. In this regard, the conditions of service need to be strictly examined with a view to making them competitive. Both the financial and the non-pecuniary package must be comparable to that in other sectors of the economy.
- 4. Other incentives for remaining in academia must be provided. These are research and conference funds which should be made available to academic members of staff. Attendances at conferences and seminars is extremely beneficial to academic productivity and the quality of training at both undergraduate and graduate levels.
- 5. There is a need to make provision for incentives for postgraduate training.

This can be done within the framework of manpower planning. Postgraduate students must therefore receive some form of loan scheme or bursary since their services will be beneficial to society in the long run.

6. There is a need for a body to articulate the development of research and training in each country, with specific reference to skill development in economics.

Activities leading to better rationalization of effort at the subregional and regional levels

1. Creation of centres of excellence

Not all the departments of economics in the countries examined are equipped to cope with postgraduate training in economics. There are, however, some institutions with considerable potential for graduate training. These could be developed into centres of excellence (see below). The identification and development of such centres will be useful for rationalization at the sub-regional and regional levels and allow for sharing of benefits at the regional level.

- 2. Sponsorship of scholars on sabbatical leave to other African institutions to provide leadership for a year and assist in teaching and research is another method of rationalizing regional and sub-regional efforts.
- 3. Sponsorship of fellows to give lectures at other African universities for short periods of time.
- 4. Sponsorship of graduate students to other African centres to undertake short courses that are unavailable in their home institution.

Activities that can be effectively pursued by AERC

There are a number of activities that can be effectively pursued by AERC, consistent with its mandate and resources. Some of these activities will lead to a better rationalization of effort at the sub-regional and regional levels.

Innovative forms of postgraduate training

There is a need to improve the long-term local capacity in each of the home countries. Awards to graduate students, either in their home institution or elsewhere, would go a long way towards alleviating the problem of financing postgraduate work. Similarly, postdoctoral training of up to six months is desirable.

Support for basic necessities

In order to maintain the quality of training and research, AERC should support the purchase of equipment, books, and subscriptions to the major journals. Computers and photocopying machines are also needed.

Strengthening the links between African universities

There is a need for exchange between African universities in order to take maximum advantage of the range of expertise available. Such exchanges could take the form of sponsorship of short periods of leave or sabbaticals to other African universities. Another would be the sponsorship of African scholars with expertise in specific areas or fields to give a series of courses for up to a semester in other African countries.

Sponsoring research networks

One of the best ways of maintaining quality is to allow networking between African scholars. In such a forum, African scholars would be able to present the results of their research to other scholars in an atmosphere of objective criticism. These research for should be open to both junior and senior African scholars so that transfer of knowledge and skills can be fostered.

Creation of centres of excellence8

Attention should be focused on the strengthening of institutions which have special potential. The identification and support of such centres of excellence would go a long way towards serving the current demand for economics training. Given the urgent need to develop local capacity, the need to strengthen existing high-quality institutions becomes all the more necessary.

Sponsoring outstanding African professionals

Funds should be made available for outstanding African scholars to undertake training and research, ideally at the proposed centres of excellence but also overseas.

Fostering research on domestic issues and textbook writing

There is a need to provide funds for scholars to work on their home economies by providing stipends. Another important element is the sponsorship of textbook writing in order to encourage the production of textbooks that are relevant to Africa. The importance of this suggestion cannot be over-emphasized given the paucity of textbooks authored by Africans on African economic issues.

Sponsoring national workshops

The hostility or skepticism that exists between research analysts and policy-makers is a result of a communication gap. Sponsorship of national workshops

at which the results of research findings on national issues are disseminated would help alleviate policy-makers' fears and foster the necessary links between the two groups.

Curriculum development

The issue of relevance of economics curricula is more relevant today than ever before. We need to examine the extent to which the economics we teach is simply a replica of what obtains in foreign institutions. The AERC could play an important role in bringing together African scholars to discuss and analyse the issues of relevance in economics training.

Conference support funds

Attendance at national and international conferences allows for cross fertilization of ideas. It would therefore be useful to support selected international conferences that would foster the acquisition of skills and/or allow for intellectual renewal.

Mobilization of funds from donors for postgraduate training and research

AERC can serve as a vehicle for mobilizing funds in order to achieve the objectives of postgraduate training and research discussed in different sections of this report.

Sponsoring overseas PhD studies

AERC should sponsor PhD candidates to overseas institutions to complement domestic training efforts.

Activities of other external or international agencies

International organizations have played an important role in university education in the past. Disenchantment arose in the 1970s as a result of student turmoil and the closures of the universities and, more importantly, because of the changing emphasis on education by government.

As it turned out, the spillover expected in terms of transfer of skills and knowledge from one generation to the next at the PhD level has not occurred. The magnitude of the problem now is similar to that in the 1960s, at least in some departments. The international agencies, therefore, have a role to play in helping to solve some of these problems.

Thus the most important problems in the context of this study are training and research, which are important for capacity building. First, donors require an appreciation of the diversity of circumstances across the countries and institutions involved and to be receptive to local conditions. Second, donor activities will

have to be prioritized and co-ordinated in order to achieve the necessary economies of scale. For such co-ordination to be effective, there will be a need to pool resources. Third, there is need not only for funding but also for institutional links. Fourth, because it would be difficult to try to endow each country with identical first-class institutional resources, it is important to foster an intra-African exchange of ideas and the sharing of institutional resources. Centres of excellence would be important in this regard.

As long as the acquisition of a PhD degree is necessary for a university career, external donor assistance will be a high priority in the short-run. A two-pronged approach is desirable. There is a need to supplement domestic capacity-building with overseas PhD training. International donors should still sponsor candidates for overseas training within the framework of the long-term objective of providing these facilities domestically.

There are four other areas where international organizations would be useful. The first is in staff recruitment to augment the present staff complement where needed, while the second is to make grants to universities for direct recruitment. The third is making grants for the provision of infrastructural facilities. In order to carry out the assignments mentioned above, there may be a need for the creation of an international fund to be disbursed on the basis of the priorities of the African countries concerned. Lastly, twinning arrangements can be undertaken with other international bodies.

Issues meriting further study

It was not possible to deal exhaustively with a number of issues which are of importance to the whole process of postgraduate training in economics. Some of the issues which I believe merit further study are:

- 1. An exhaustive study of the number of staff that have benefited from scholarship training in the past, either from local or foreign sources, and their career profile. This would include an examination of the role and impact of external funding in the past.
- 2. The patterns of remuneration in the universities relative to the remuneration in other areas-public and private-need to be examined.
- 3. An examination of factors contributing to good training in economics, apart from good teachers and an adequate syllabus.
- 4. An examination/assessment of potential centres of excellence in Africa, and the development of appropriate criteria for them.
- 5. The impact of frequent university closures on the quality of training in Nigeria and Ghana.
- 6. The effect of university expansion on the quality of output.
- 7. An assessment of the number of economists in Ghana and their places of employment in order to determine the number available to man the

Department of Economics, and find out what incentives they would need to enter the university system.

- 8. Explore the impact of university consultancy on the quality of teaching and research in the universities where consultancy services exist. There is a need also to examine the sharing arrangements for consultancy and the effects on staff in terms of availability for teaching, research, etc.
- 9. An examination of the internal structure of government and why bottlenecks exist in training.
- 10. An examination of the incentive structure for higher degree holders in economics in terms of entry points, career prospects, etc.
- 11. An objective assessment of university linkage programmes.
- 12. An assessment of the potential and actual demand for graduates in economics by private and public sectors, including universities, and in particular the demand for economists as policy analysts and macro-economic management analysts.

Appendix 1

List of participants in AERC's Nairobi Workshop, 26 and 27 August 1989

TANZANIA

Dr. Haidari Amani

Head, Economics Department University of Dar es Salaam, P.O. Box 35045, Dar es Salaam, Tanzania

Tlx: 41327/41561 Tel: 48338

Prof. Robert Mabele

Director, Economic Research Bureau University of Dar es Salaam, P.O. Box 35059, Dar es Salaam, Tanzania Tel: 48277

Mr. Salmon Odunga

Commissioner,
National Economic Policy
Division,
Planning Commission,
P.O. Box 9242,
Dar es Salaam, Tanzania

Tlx: 41651 DEPLAN TZ Tel: 29411

ETHIOPIA

Dr. Teshome Mulat

Director, Institute of Development Research (IDR), Addis Ababa University, P.O. Box 1176, Addis Ababa, Ethiopia

Tlx: 21205

Tel: 123230 or 550844 ext. 100

Dr. Assefa Tefferi

Head, Economics Department, Addis Ababa University, P.O. Box 1176, Addis Ababa, Ethiopia

Tlx: 21205 Tel: 117827

Mr. Berihun Alemahu

Assistant Director of Planning, Ethiopian Management Institute, P.O. Box 51, Addis Ababa, Ethiopia

Cable: INTERLAB ADDIS Tel:155863

ZAMBIA

Dr. Manenga Ndulo

Dean, Humanities and Social Sciences, University of Zambia, P.O. Box 32379, Lusaka, Zambia

Tlx 44370 Tel: 25387

Prof. Venkatesh Seshamani

Head,
Department of Business and
Economic Studies,
University of Zambia,
P.O. Box 32379,
Lusaka, Zambia

Tlx: 44370 UZALU ZA Tel: 213221

UGANDA

Mr. Firimooni Banugire

Head, Department of Economics, Makerere University, P.O. Box 7062, Kampala, Uganda

Tlx: 61430 Tel: 234477/545040 (o)

ZIMBABWE

Mr. Logan Pakkiri

Chairman, Economics Department, University of Zimbabwe, P.O. Box MP 167, Harare, Zimbabwe

Tel: 303211 ext. 1301

MALAWI

Prof. Chinyamata Chipeta

Head, Department of Economics. Chancellor College, University of Malawi, P.O. Box 280, Zomba, Malawi

Tlx: 44742 CHANCOL MI

Tel: 522-222

RWANDA

Dr. Gaetan Rusibane

Dean, Faculte des Sciences Economiques Sociales, et Gestion Université National du Rwanda B.P. 117, Butare, Rwanda

Tlx: 22605 UNE PW Tel: 30272 (o) 30479 (h)

Dr. Augustin Nigirabatware

Directeur General, Ministere de l'industrie et de l'Artisanat, P.O. Box 73, Kigali, Rwanda

Tel: (250) 76608

SENEGAL

Mr. Joseph Van Denreysen

Officer-in-Charge, Institute for Economic Development and Planning (IDEP), B.P. 3186, Dakar, Senegal

Tel: 22-10-20

GHANA

Dr. Nii K. Sowa

Acting Head, Department of Economics, University of Ghana, P.O. Box 57, Legon, Ghana

Tlx: 2164 RIPS GH Tel: 775381 ext. 9931

SWAZILAND

Dr. Michael Matsebula

Head, Department of Economics, University of Swaziland, P. Bag 4, Kwaluseni, Swaziland

Tlx: 2087WD Tel: 84011

NIGERIA

Dr. Michael Kwanashie

Head, Department of Economics, Ahmadu Bello University, Samaru-Zaria, Nigeria

Tel: 69-50744

Prof. S. Ibi Ajayi

Head, Department of Economics University of Ibadan, Ibadan, Nigeria

Tlx: 31233, IBALIB NG Tel: 400550 ext. 1404 (o) ext. 1950 (h)

COTE D'IVOIRE

M. Adama Bakayoko

Dean, Faculty of Economics, University of Abidjan, BP V 43, Abidjan, Cote d'Ivoire

Tel: (225) 44 40 62

M. Paul Bah

Deputy Director,
Ministry of Scientific Research,
B.P. V 151, Abidjan, Cote d'Ivoire

Tel: 210600/226302

KENYA

Mr. Njuguna Mwangi

Deputy Chief Economist, Ministry of Finance, P.O. Box 30005, Nairobi, Kenya

Tel: 338111 ext. 281

Prof. Mohamed Mukras

Chairman, Department of Economics, University of Nairobi, P.O. Box 30197, Nairobi, Kenya

Tel: 334244 ext. 2122

Dr. Germano M. Mwabu

Chairman, Dept. of Economics, Kenyatta University, P.O. Box 43844, Nairobi, Kenya

Tlx: 25483 Tel: 810901 Prof. Terry C. Ryan Economic Secretary,

Ministry of Finance, P.O. Box 30007, Nairobi, Kenya

Tel: 338911 ext. 310

OBSERVERS

Dr. Dennis de Tray Research Administrator, World Bank, 1818 H Street, N.W. Washington, D.C. 20433,

Tlx: 248423 RCA Tel: (202) 473–3480

Dr. David Court Regional Representative, Rockefeller Foundation, P.O. Box 47543, Nairobi, Kenya

Tlx: 25269 Tel: 28061/2 Fax: 721318

Mr. Thomas Bayard

Deputy and Research Fellow, Institute for International Economics, 11 Dupont Circle, N.W. Washington, D.C. 20036, USA

Tlx: 261271: ILE UR Tel: (202) 328–9000 Fax: (202) 328–5432

Appendix 2

List of organizations, universities and persons visited or interviewed

The following are the names of organizations, universities or individuals visited or interviewed in Nigeria and Ghana. In some cases individuals asked for anonymity, in which case I have omitted their names but identified the ministries they represent. In some cases (Nigeria), the individuals or groups spoken to were too numerous to list by name, in which case they have been identified as groups. One university in Nigeria was sent the questionnaire, but the Head of Department was not interviewed because of a lack of time. Therefore this university was excluded from the analysis.

NIGERIA

- 1. Colleagues, Department of Economics, University of Ibadan
- 2. Head, Department of Economics, University of Jos
- 3. Head, Department of Economics, University of Nigeria, Nsukka
- Head, Department of Economics, University of Ilorin
 Head, Department of Economics, Obafemi Awolowo University, Ile-Ife
- 6. Head, Department of Economics, University of Lagos
- 7. Dr. E. Ndekwu, NISER, Ibadan
- 8. Dr. Olu Ajakaiye, NISER, Ibadan
- 9. Ministry of Education, Lagos
- 10. Prof. Fajana, Department of Economics, University of Lagos
- 11. Prof. S. Tomori, Dean, Faculty of Social Sciences, University of Lagos
- 12. Prof. Okusanya, Dean, Postgraduate School, University of Lagos
- 13. Estabishment Officer, University of Ibadan
- 14. Prof. E.L. Inanga, Dean, Faculty of Social Sciences, University of Ibadan
- 15. Rev. W. Ukpe, Union Bank of Nigeria Ltd., Lagos
- 16. Manpower Board, Lagos
- 17. Ministry of National Planning, Lagos
- 18. Postgraduate economics students, Lagos and Ibadan

GHANA

- 1. Dr. Nii Sowa, Head, Department of Economics, University of Ghana
- 2. Dr. Tutu, Department of Economics, University of Ghana
- 3. Academic staff, University of Ghana
- 4. Mrs. Esi Sutherland, Under-Secretary, Ministry of Education and Culture
- 5. Ministry of Finance and Economic Planning

GRADUATE TRAINING IN ECONOMICS IN NIGERIA AND GHANA

- 6. Research Department, Bank of Ghana7. Mr. Boahene, Director of Postal Services
- Postgraduate economics students
 Dr. Buxton, Department of Economics, University of the Cape Coast
 Dr. Asante, Department of Economics, University of the Cape Coast

Notes

- 1. Ministry of Education and Culture, *University Rationalization Study*, Vol. II, Final Report, Acera, Ghana, 1988, p. 3.
- 2. Ibid., p. 4.
- 3. Federal Republic of Nigeria, *National Policy on Education*, Federal Government Press, Lagos, 1981.
- 4. The need to set up consultancies has been stressed by governments in the two countries. The Head of State in Ghana, for example, stressed the need to embark on income-generating activities in the 23rd Convocation address at the University of Science and Technology on 12 August 1989 (People's Daily Graphic, Monday 14 August 1989).
- 5. Court, D. 1988. Institution building in Africa: Reflections on the University Development Program of the Rockefeller Foundation. Paper presented at the ICIPE symposium on African Scientific and Technical Institution Building and the Role of International Cooperation, Bellagio, Italy, 14–18 March 1988, p. 18.
- 6. Ibid., p. 18.
- 7. In Nigeria, Decree 16 of 1985 conferred powers on the National Universities Commission to lay down minimum standards for all universities and to accredit their degrees and other academic awards. Recently the Commission has set these minimum standards.
- 8. At the August workshop in Nairobi, where the preliminary version of this report was discussed, it was clear that some participants were afraid of the term "centres of excellence". It was clear from the discussion, however, that this aversion was due to an absence of complete information. It is not the intention that various departments of economics surrender their autonomy, or that countries just starting their postgraduate programmes should abandon them. The existence of a centre of excellence, or a series of them, in specialized areas will be useful for all departments of economics in Africa provided that the scope and consultation required are carefully worked out. Not all departments can turn into centres of excellence, but the potential exists in some of them now.

References

Court, D. 1988. "Institution building in Africa: Reflections on the University Development Program of the Rockefeller Foundation." Paper presented at the ICIPE symposium on African Scientific and Technical Institution Building and the Role of International Cooperation, Bellagio, Italy, 14–18 March 1988.

Government of Ghana. 1988. *University Rationalization Committee*, Vol. 1. Interim Report. Accra: Ministry of Education and Culture.

Federal Republic of Nigeria. 1981. National Policy on Education. Lagos: Federal Government Press.

NUC. 1985-87. NUC Annual Reports. Lagos: NUC.

NUC. 1988. Twenty-five Years of Centralized University Education in Nigeria. Lagos: NUC.

World Bank. 1988. Financing Education in the Developing Countries: An Exploration of Policy Options. Washington, D.C.: The World Bank.